### MINUTES OF DISCUSSION IN 60th POWER SYSTEM OPERATIONAL COORDINATION MEETING HELD AT 11.30 HRS. ON 30.12.2009 AT PTC, OPTCL, CHANDAKA

List of participants enclosed at Annexure-A

No representative from CESU, ICCL, NALCO, BHUSHAN, VEDANTA and Machhakund PH has attended the meeting.

The meeting was chaired by Director (Engineering), OPTCL.

Director (Engineering), OPTCL welcomed all the participants to the 60th Power System Operational Coordination meeting. He also briefly described the action taken by OPTCL for induction of new Substations and transmission elements in the system for strengthening the network.

Sr. G.M (PS) gave a brief overview of system performance such as Voltage & Frequency profile, State's maximum & minimum system demand, important events and major incidents occurred in OPTCL system during the month of November 2009.

DGM (SLDC) took the agenda items for discussion.

The review proceeded as follows:

### Item No.1-Confirmation of the minutes of 59th PSOC meeting held on 24.09.2009 at PTC, Chandaka, Bhubaneswar.

Since Members have no comments for the minutes of 59th PSOC meeting, the minutes of the meeting was confirmed.

#### Item No. 2- Review of Grid performance for the month of November 2009.

#### Item No. 2 (A) – Frequency

The one-minute instantaneous System frequency for the month of November'09 was reviewed. It was noticed that 94.82 % of times, the frequency remained in the band of 49.2Hz – 50.3Hz (IEGC band) during the month as compared to 94.09% during October'09. The maximum and minimum System frequency during the month of November'09 was 50.64 Hz and 48.86 Hz respectively. The monthly frequency profile, FVI & Standard Deviation for the month of November'09 was reviewed. The frequency profile during the month of November'09 is noticed to be improved in comparison to the month of October'2009.

#### Item No. 2 (B) – Grid demand

Grid demand for the month of November'09 was reviewed. The maximum System demand of 2897 MW occurred on 13.11.09 at 19:00 Hrs and minimum demand of 1540 MW occurred on

30.11.09 at 02:00 Hrs. respectively. The hourly demand profile for the month of November'09 was reviewed. It is observed that, the peak demand during the month has decreased by 124 MW during the month of' November'09 in comparison to October'09. The energy consumption has decreased by 182 MU comparing to October 2009 and decreased by 7 MU comparing to November 2008.

#### Item No. 2(C) – Voltage Profile of important Sub Stations in OPTCL System.

The Voltage profile at different 220 kV buses in OPTCL system during the month was reviewed. It is noticed that Narendrapur 220 kV bus has experienced a maximum voltage of 259 kV and minimum Voltage of 190 kV has been experienced by Bhadrak 220 kV bus.

#### Item No. 2 (D) – Energy Generation/import during the month of November'09

Energy generated by the State generating stations such as OHPC stations, IbTPS, TTPS (NTPC) and CGP support and import from ISGS station during the month was reviewed.

#### Item No. 2 (E) – DISCO Drawal during the month of November '09

The quantum of energy drawn by Discos up to the month of November 2009 was reviewed. It is noticed that the cumulative drawal by the Discos up to the month ending November'09 have been increased in comparison to the ARR approved quantum.

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

It is noticed that there is substantial increase in drawal by WESCO, CESU & SOUTHCO comparing to their approved quantum.

#### Item No. 2 (F) – Major Events in the month of October & November 2009

- 06.10.09- 3rd 130 MW unit of M/s. Bhusan Power & Steel Ltd., Thelkoloi, Sambalpur synchronised with OPTCL system through the existing 220 kV S/C line on D/C tower between Budhipadar Grid S/S and M/s. BPSL at 16:40 Hrs..
- 07.10.09- 132 kV Railway feeder from Hind Metal Switching station of OPTCL charged at 1:25 Hrs. after disconnecting from Grid Sub-station.
- 28.10.09- 24 MW CGP of Orissa Sponge Iron & Steel Ltd. Synchronised with OPTCL system at Polasponga grid S/s. at 20:30 Hrs.
- 06.11.09- 2<sup>nd</sup> 40 MVA, 132/33 kV transformer of Alstom make repaired by Aditya Vidyut make is commissioned and idle charged at 18:27 hrs in place of 20 MVA transformer at Dhenkanal grid S/S.

#### Item No. 2 (G) – UFR Operation in OPTCL System in the month of November'09

There was no UF Relay operation occurred during the month of November'09. The installation of df/dt Relays in the OPTCL network is yet to be taken up

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

The location for installation of df/dt relay has to be finalized by C.G.M, (O &M).

{Action:- C.G.M. (O & M)}

#### Item No. 2 (H) – Important Grid incidents

Major grid incidents for the month of November'09 were reviewed.

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

Representatives of SLDC stated that item no. 1,2 & 3 has already been discussed in OCC meeting of ERPC, Kolkata. The comments of ERPC is awaited.

Sr. G.M. (PS) stated that as per the recommendation of the Committee constituted by ERPC for analysis of disturbance in South Orissa, OHPC has to replace the defective CVT at Indravati 400 kV Bus. OHPC may deliberate the status of the same. It was decided to furnish the compliance report in next meeting.

{Action:- OHPC}

C.G.M. (O & M) stated that 6 no.s of Thermo vision camera will be procured to ascertain the anticipated insulation failure and Red hot of jumper points so that preventive remedial measures can be taken up to avoid disturbance.

It was also proposed to provide 10 KVA DG set at important Grid Sub stations for building of air pressure in the circuit breakers at the time of failure of station supply. O & M representatives stated that requisition for procurement of DG set for Narendrapur grid Substation has been placed.

It was decided to ascertain the functioning of DG set available at different Grid Substations. Report in this regard shall be placed in next meeting.

It is also decided that in case any problem noticed in the existing DG set, the same shall be rectified within 15 days.

{Action:- C.G.M. (O & M)}

### Item No. 2 (I) – Major Transmission Lines/ Elements Outage during the month of October & November'09.

Outage of major Transmission Lines/ Elements during the month of October & November'09 was reviewed. It was noticed that most of the trippings are due to failure of insulators and jumper snapping and CT bursting.

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

C.G.M. (O & M) stated that CPRI has already started diagnostic study of the CTs in Grid S/s.

Necessary remedial Measures will be taken up after completion of testing.

He also stated that action has already been taken for replacing the normal insulators with anti fog and long rod insulators to avoid failure of insulators at different Grid S/ss.

#### Item No. 3 - Drawal of Machhakund Power.

Power drawal from Macchakund PH during the month of November'09 was reviewed.

#### Commissioning of Breaker at Machhakund PH:

#### **Deliberations in the meeting**

Sr.G.M.(PP) stated that breaker at Machhkund PH is not commissioned till now.

It was decided that OHPC shall explore the commissioning of breaker at Machhkund PH by pursuing the matter with Machhkund authority.

#### **Installation of new RTU at Machhakund PH:**

Installation of RTU for display of Machhkund drawal has been discussed.

#### **Deliberations in the meeting**

OHPC stated that procurement of RTU for Machhkund PH is under process.

# Item No. 4 – Review of Outage Programme of State Generators / Transmission elements for the month of December & january'10.

Outage programme of EHT lines and S/S for the year 2009-10 has already been finalized and will

be implemented as per the programme.

Sl.	Station	Unit	December'09		January'10	
1	Burla	# 3	03.12.09 to 17.12.09	Annual Maintenance	-	-
		#7	-	-	06.01.10 to 20.01.10	Annual maintenance
2	Chiplima	# 1	-	-	16.01.10 to	Annual
		# 3	24.11.09 to 15.12.09	Annual Maintenance	01.02.10	Maintenance
3	U.kolab	# 3	10.12.09 to	Annual	04.01.10 to	Annual
			28.12.09	Maintenance	20.01.10	Maintenance
		#4	-	-	28.01.10 to 31.03.10	Capital Maintenance
4	Rengali	# 1	18.08.08 to	Generator	18.08.08 to	Generator fault
			Continue	fault	Continue	
		#2	-	-	25.01.10 to	Annual
					25.02.10	maintenance
			17.11.09 to	Annual	-	-

#5	16.12.09	maintenance		
#4	17.12.09 to 23.01.10	Annual maintenance	17.12.09 to 23.01.10	Annual maintenance

#### Item No. 5 – Generation Program for the month of December'09 & January'10.

Generation schedule for the month of Dec & January'09 furnished by OHPC are given below.

Name of Hydro Gen. Station	Generation Programme (MW)		Reservoir Level as on 01.11.09	Reservoir Level as on 01.12.09	MDDL	High Flood Reservoir Level
	Dec-09	Jan'10				
HPS, Burla	10+5	15+10	626.02 ft	625.52 ft	590 ft.	630 ft.
U.Indravati	10	165	637.52mtr	637.09 mtr	625mtr	642 mtr
Balimela	10	90	1467.80ft	1471.50 ft	1440 ft.	1516 ft.
U.Kolab	10	30	849.64mtr	849.46 mtr	844 mtr	858 mtr.
Rengali	10	05	120.46mtr	120.05 mtr	109.2mtr	123.5 mtr.
MKD (O/D)	30	30	2735.35ft	2732.20 ft	2685 ft.	2750 ft.
TOTAL	85	345				

## Item No. 6 –Status of New lines funded by WB/ADB/Deposit work/OPTCL's own funding Deliberation in the meeting

The status of the new lines & S/Ss as deliberated by Director (Engg.) are as tabled

Sl. No	Details of project	Status as on last meeting		
1	132 kV Burla-Sambalpur SC	All works for LILO arrangement has		
	line LILO at Katapali	been completed. OHPC may be		
		required for allowing shut down of		
		HINDALCO feeder for stringing work.		
2		All most all works for the line has been		
	and 220 kV Katapali –	completed except dispute for one		
	Bolangir SC line	location. The line is expected to be		
		charged by January'2010.		

#### Item No. –7 Communication issues

# (I) Integration of NALCO & RSP CGPs with OPTCL –Present status May be intimated. $\underline{\text{NALCO}}$

In the last meeting NALCO had stated that procurement action for RTU has been taken by them

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

Telecom representative stated that no procurement action has been taken by NALCO till yet.

#### **RSP**

RSP representative was not present to deliberate the issue.

#### (II) Installation of communication equipment by CGPs/ Industries.

M/S. Bhusan steel & Power, Jharsuguda

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

D.G.M (Telecom) deliberated the present status

Sl. No	Name of CGP	Status of procurement of RTU and equipments			
1	M/S Bhusan, Meramunduli	All equipments commissioned. Data is not			
		displaying due to problem in digital system. Breaker			
		status is yet to be displayed.			
2	M/S Hind Metals, Meramunduli	The matter has to be taken up to OERC.			
3	M/s Bhushan Power & Steel	Order has already been placed for procurement of			
	Ltd, Jharsuguda	new RTU.			
4	M/S EMAMI	Already commissioned, but still under observation			
		due to erratic display.			

(III) At present 22 Nos. of CGPs have been allowed connectivity with OPTCL system at different Voltage levels. Out of them only a handful of CGPS 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.

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

Telecom representatives stated that the CGPs have been asked to take necessary action for providing RTU & associated communication equipment for real time data transfer to the SLDC control room.

It was decided to take up the matter with OERC in case they fail to comply the above process.

#### (III) Non-displaying of data for transmission elements / generating units

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

G.M.(Telecom) stated that MoU has already been signed with PGCIL for AMC and coverage of remaining S/Ss under SCADA.

[Action- G.M (Telecom)]

#### Item No. 8- JSL issues:

Representative of M/S JSL stated that,

(1) On 29.11.2009 at 19:45 hrs 220 kV Baripada(PG)-Balasore line tripped due to over load and subsequently Duburi (old)-Duburi(new) pulled out.

On 12.12.2009 at 21:37 hrs 220 kV Duburi-Balasore line tripped on E/F relay indication followed by tripping of Duuburi(Old)-Dubuti (new) line.

Due to the above tripping Generators of M/S JSL got islanded. It is suggested by JSL to review the relay co-ordination at Duburi command area.

Such disturbances are due to over loading of single ckt line between old Duburi-new Duburi, as restoration of 2<sup>nd</sup> ckt is not possible due to local resistance.

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

C.G.M.(O&M) suggested JSL to provide two numbers of over current relays for immediate installation.

JSL representative expressed their inability to provide such relays, as they do not have the same and requested OPTCL to provide the above relays.

Director (Engg.) agreed to procure two numbers of O/C relays for installation at Balasore Grid S/S in 33 kV feeders..

(2) Metering of 220 kV JSL-I & II feeders through summation CT arrangement.

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

Sr.G.M.(PS) stated that summation CTs are not accurate enough for the above metering and NESCO may be advised to install the same at JSL end as per the present practice followed by WESCO in Vedanta, Jharsuguda JSL has agreed to the above and they will convince NESCO authorities for the above installation.

(3) M/S JSL is likely to enhance their drawal to 50 MW during 2011. For better stability, Baripada (PG)-Balasore and Balasore-Duburi may be made double circuit.

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

Director (Engg.) stated that after commissioning of 400kV Meramundali-New Duburi line the above issue will be solved. He also assured that, the above will be completed within six to seven months as much of the RoW problems have been settled.

He further stated that:

- 2<sup>nd</sup> Auto will be installed at Kuchei soon.
- Installation of 3<sup>rd</sup> Auto at 160 MVA at Balasore has been proposed.

#### Item No.:9: Issue of planned outage.

It is noticed that, permission for planned outages of important elements, effecting power supply to the State Capital Bhubaneswar and prolonged outages are being sent to SLDC without the knowledge of CGM (O&M) / Director (Engg). SLDC is forwarding the proposal again to Director (Engg) for approval for which, a lot of time is being consumed. It is

suggested that all such proposals may be routed through CGM (O&M), OPTCL so that, SLDC may not forward the proposal again.

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

CGM (O&M) stated that instruction will be issued to the respective G.M/ A.G.M. accordingly.

#### Item No:10: Over drawal by Discoms.

It is noticed that instead of repeated instructions the Discoms are not limiting their drawals as per the schedule, which causes over drawal from the Grid at adverse frequency conditions.

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

Representative of Discoms stated that, in absence of notification from Govt, power Regulation shall cause public unrest.

#### Item No. 11: TTPS Issues:

TTPS representative has proposed for availing shutdown of Auto-II at TTPS for a period of 35 days for renovation and modernization..

The above shut down proposal was agreed by Sr.G.M (Power System)

#### **Other Issues:**

SLDC stated that during discussion in OCC meeting of ERPC, it was decided to incorporate the quantum of load regulation imposed in the State in the daily grid report to ascertain the State's actual demand. Since the DISCOMs are imposing load regulation in their respective areas, the above data may be furnished to SLDC daily by DISCOMs.

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

It was decided that SLDC shall write a letter to all the DISCOMs to furnish the above data daily.

[Action- G.M (Telecom)]

#### Item No. 12: Date and venue of the 61st PSOC meeting will be intimated.

The meeting was ended with vote of thanks conveyed by D.G.M.(SLDC) to all the members.

### **ANNEXURE-A**

### MEMBERS PRESENT

SL.NO.	NAME	DESIGNATION	
1	Er K.K. Nath	Director (Engineering), OPTCL	
2	Er. K.M. Parida	Sr.G.M.(CPC), OPTCL	
3	Er. P.K. Behura	Sr.G.M.(PS), SLDC, OPTCL	
4	Er. R.K. Mohanty	Sr.G.M.(TP & C), OPTCL	
5	Er. S.K. Hazra	Sr.G.M.(CP), OPTCL	
6	Er. J.K. Das	Sr.G.M.(PP), OPTCL	
7	Er. B.N. Mahapatra	Technical Consultant, SLDC	
8	Er. B.R. Mishra	G.M., SLDC	
9	Er. N.R. Mandhata	G.M.(R&T), OPTCL	
10	Er. R.K. Mahapatra	G.M., Telecom, OPTCL	
11	Er. S.K. Das	D.G.M., SLDC	
12	Er. S.C. Naik	D.G.M.(O&M), TTPS, NTPS	
13	Er. A.C. Patra	D.G.M., Telecom, OPTCL	
14	Er. A.K. Mohanty	D.G.M.(CP), OPTCL	
15	Er. K.B. Ray	D.G.M., OPTCL	
16	Er. K.B. Choudhary	D.G.M., SOUTHCO	
17	Er. P.K. Sahoo	S.E.(RA), WESCO	
18	Er. R.K. Sharma	Sr. Manager, JSL	
19	Er. A.D. Choudhary	Consultant, JSL	
20	Er. S.N. Mishra	Consultant, JSL	
21	Er. S.S. Nayak	Manager, GRIDCO	
22	Er. S.K. Mohanty	Manager, GRIDCO	
23	Er. Umakanta Sahoo	Manager, GRIDCO	
24	Er. J.K. senapati	Manager(SO), OPTCL	
25	Er. J. P. Mohanty	Manager., SLDC	
26	Er. A.K. Panda	D.M.(Commercial), WESCO	
27	Er. B.P. Gantayat	Dy. Manager, OHPC	
28	Er. S.K. Padhi	A.M., NESCO	
29	Er. A. Sahoo	A.M., SLDC	

#### ORISSA POWER TRANSMISSION CORPORATION LTD.



OFFICE OF THE Sr. GENERAL MANAGER (POWER SYSTEM)

GRIDCO Colony, P.O.- Mancheswar Rly. Colony, Bhubaneswar-17, FAX-0674-2748509

No.	SGM(PS)-PL-15/2007(	(VOLV)/	Dated: 12.04.2010
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From:

Sr. G.M (Power System) OPTCL, Bhubaneswar.

To:

	·	
The Director (Commercial),	The Director (Engineering),	The Director (Operation), OHPC,
Gridco, Bhubaneswar	OPTCL, Bhubaneswar	Bhubaneswar
The CGM (O & M),	The CGM (Const.),	The CGM (IT),
OPTCL, Bhubaneswar	OPTCL, Bhubaneswar	OPTCL, Bhubaneswar
The Sr. G.M (C.P),	The Sr. G.M (TP),	The Sr. G.M., (R&T),
OPTCL, Bhubaneswar	OPTCL, Bhubaneswar	OPTCL, Bhubaneswar
The Sr. G.M. (CPC),	The Sr. G.M (PP),	The G.M. (Telecom)
OPTCL, Bhubaneswar	GRIDCO, Bhubaneswar	OPTCL, Bhubaneswar
The Vice President (O), ICCL,	The D.G.M (Electrical),	The G.M. (O &M),
Choudwar	IbTPS, OPGC, Banharpali	CPP, NALCO, Angul
The DGM (O & M),	The D.G.M,	The D.G.M (Power Ditribution),
NTPC (TTPS), Talcher	HINDALCO, Hirakud	RSP, Rourkela
The Manager(Elect.),	The G.M,	The G.M.(Elect.),
JINDAL, Duburi	VEDANTA, Jharsuguda	BHUSAN, Budhipadar
The Member Secy., (GCC),3 <sup>rd</sup>	The C.E.O.,	The C.E.O.,
Floor Bidyut Bhaban,OPTCL	SOUTHCO, Berhampur	CESU, Bhubaneswar
The C.E.O.,	The C.E.O.,	The S.E, Machhakund
NESCO, Balasore	WESCO, Burla	

Sub: Minutes of 60<sup>th</sup> Power System Operational Co-ordination meeting held on 30.12.09 at PTC, Chandaka.

Sir,

Please find enclosed herewith the minutes of 60<sup>th</sup> Power System Operational Co-ordination meeting held on 30.12.09 at PTC, Chandaka. This is for your information and necessary action.

Yours faithfully;

Encl.: As above

Sr. General Manager (PS)

**<u>CC</u>**: The Executive Asst. to C.M.D., OPTCL along with a copy of enclosure for kind information of C.M.D.