# MINUTES OF DISCUSSION IN 61st POWER SYSTEM OPERATIONAL COORDINATION MEETING HELD ON 28.05.2010 AT MANAGEMENT TRAINING CENTRE, KALAYANI COMPLEX, BHUBANESWAR

List of participants enclosed at Annexure-A

No representative from BHUSHAN, VEDANTA and Machhakund PH had attended the meeting.

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

Director (Engineering), OPTCL welcomed all the participants to the 61st 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 April 2010.

GM (SLDC) took the agenda items for discussion.

The review proceeded as follows:

## Item No.1-Confirmation of the minutes of 60th PSOC meeting held on 30.12.2009 at PTC, Chandaka, Bhubaneswar.

Since Members have no comments on the minutes of 60th PSOC meeting, the minutes of the meeting was confirmed.

## Item No. 2- Review of Grid performance for the month of April 2010.

## Item No. 2 (A) – Frequency

The one-minute instantaneous System frequency for the month of April'10 was reviewed. It was noticed that 59.12 % of times, the frequency remained in the band of 49.2Hz – 50.3Hz (IEGC band) during the month as compared to 88.98% during March'10. The maximum and minimum System frequency during the month of April'10 was 51.48 Hz and 48.24 Hz respectively. The monthly frequency profile, FVI & Standard Deviation for the month of April'10 was reviewed. The frequency profile during the month of April'10 has been deteriorated substantially, in comparison to the month of March'10.

### Item No. 2 (B) – Grid demand

Grid demand for the month of April'10 was reviewed. The maximum System demand of 2997 MW occurred on 14.04.10 at 21:00 Hrs and minimum demand of 1631 MW occurred on 30.04.10 at 10:00 Hrs. respectively. The hourly demand profile for the month of April'10 was

reviewed. It is observed that, the peak demand and energy drawal during the month have been decreased by 47 MW and 31 MU respectively in comparison to March'10. The energy drawal has been decreased by 1 MU in comparison to April'09.

## 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 **Jayanagar** 220 kV bus has experienced a maximum voltage of **252 kV** and minimum Voltage of **186 kV** has been experienced by **Chandaka** 220 kV bus. CGM (O&M) stated that the low voltage at Chandaka might have occurred due to system disturbance, which is to be ascertained.

It was decided in the meeting that the date & time of occurrence of maximum / minimum voltage shall be mentioned along with the system condition at that time.

CGM (O&M) also stated that monthly average of bus voltages at 5 nos grid sub-stations e.g. Chandaka, Jaynagar, Theruvali, Balasore & Bhadrak shall be recorded and placed in the future meetings. He also suggested that in case high voltage persists at Jaynagar, the matter is to be reported to ERLDC to take action for reducing the same. The VAR flow at Jaynagar PG substation and hydro power station e.g. Balimela & Upper Kolab are to be monitored.

{Action:- SLDC}

## Item No. 2 (D) – Energy Generation/import during the month of April'10

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. Sr. G.M. (PS) stated that some of the OHPC units are unable to synchronize their units due to technical constraints. OHPC may take a note of it.

{Action:- OHPC}

## Item No. 2 (E) – DISCOM Drawal during the month of April '10

The quantum of energy drawn by Discoms for the month of **April 2010** was reviewed. It is noticed that the drawal by the **CESU** for the month **April'10** has been increased in comparison to the ARR approved quantum where as the drawal by the **NESCO**, **SOUTHCO & WESCO** for the month **April'10** has been decreased in comparison to the ARR approved quantum.

### **Deliberation in the meeting**

Representative of WESCO stated that the drawal by Power Intensive Industries has been reduced due to tariff hike.

### Item No. 2 (F) – Major Events in the month of April 2010

**28.04.10**- 220 kV Bus of 220 / 132 kV Bolangir (New) (Sadeipali) Grid S/S. was charged.

- **07.05.10** One number 100 MVA Auto transformer charged at 17:15 Hrs. at Bolangir (New) and loaded at 19:30 Hrs.
- 30.03.10- 132 / 33 kV Grid S/s Kesura (Badagada) has been charged through LILO of 132 kV Chandaka Nimapada Ckt. with charging of 1 X 20 MVA, 132/33 kV Power transformer..
- **30.03.10** 132 / 33 kV Grid S/s Basta has been charged through LILO of 132 kV Balasore Jaleswar line with charging of 2 X 12.5 MVA, 132/33 kV Power transformer.

## Item No. 2 (G) – UFR Operation in OPTCL System in the month of April'10

There was no UF Relay operation occurred during the month of **April'10**.

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

Major grid incidents for the month of April'10 were reviewed. Most of the incidents are due to failure of CT & insulator.

## **Deliberation in the meeting**

- 1. C.G.M. (O & M) stated that composite polymer insulators are to be procured for replacement of insulator of the 132kV Chhatrapur-Ganjam ckt. action has already been initiated for the above procurement.
- 2. C.G.M. (O & M) stated that all CTs of Jaynagar were tested. The tan delta values were found low. Action has been taken for replacement of CTs having low tan delta value. Action has already been taken for functioning of 220kV Jaynagar-Balimela ckt.-2 breaker at Jaynagar end.
- 3. Sr. G.M. (PS) suggested to make double jumpering arrangements for the critical locations of 132 kV Chandaka-Mancheswar ckt. CGM (O&M) stated that double jumpering at some of the locations have been taken up. Due to low clearance between the132 kV Chandaka-Mancheswar ckt and HT line of CESU caused frequent tripping of the above line. CESU has been advised to maintain required clearance.
- 4. C.G.M. (O & M) stated that insulators at all the LILO points of 220kV Chandaka-Mendhasal line are being checked.
- 6. C.G.M. (TP & C.) stated that as the AAAC T clamps failed frequently, the use of same may be avoided in future.
- C.G.M. (O & M) stated that BHEL breakers at Meramundali Grid sub-stations are frequently
  mal-functioning. However the incidents shall be discussed in detail in the protection subcommittee meeting of OPTCL.

## Item No. 2 (I) - Major Transmission Lines/ Elements Outage during the month of April'10.

Outage of major Transmission Lines/ Elements during the month of April'10 was reviewed. It was noticed that most of the tripping are due to failure of insulators.

## **Deliberation in the meeting**

C.G.M. (TP & C) stated that normal insulators need to be replaced by with anti-fog insulators in some particular zone where there is frequent failure of insulators due to chemical / saline effect.

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

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

Power drawal from Macchakund PH during the month of April'10 was reviewed.

### **Display of Machhakund generation:**

## **Deliberations in the meeting**

It was decided that, OHPC shall pursue the matter with APGENCO for installation of RTU at Machhkund PH.

OHPC stated that R & M proposal for renovation of Machhakund PH has been moved by OHPC. C.G.M. (TP & C) stated that, as pet the provision in the agreement that after 25 years the control of Machhakund PH should have been handed over to Orissa. OHPC may verify and forward a copy of the agreement to C.G.M. (TP & C).

{Action:-OHPC}

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

Outage programme of EHT lines and S/S for the year 2010-11 has already been finalized and will be implemented as per the programme.

Outage Programme for State Generators for May & June-10 is as follows:

Sl.	Station	Unit	May'10		June'10	
1	Burla	# 4	14.05.10 to 30.05.10	Trash rack cleaning	-	-
2	Burla	# 6	03.05.10 to 31.05.10	Epoxy coating	-	-
3	Chiplima	# 2	15.05.10 to 31.05.10	Annual Maintenance	-	-
4	Balimela	#3	20.05.10 to 20.06.10	Annual Maintenance	20.05.10 to 20.06.10	Annual Maintenance
5	U.kolab	# 4	28.01.10 to 24.06.10	Replacement of stator	28.01.10 to 24.06.10	Replacement of stator
6	Rengali	# 1	18.08.08 to Continue 12.04.10 to	Generator fault Annual	18.08.08 to Continue	Generator fault
7	U. Indravati	#3	20.05.10 03.05.10 to 28.05.10	Maintenance Annual Maintenance	-	-

Item No. 5 – Generation Program for the month of May'10 & June'10.

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

Name of Hydro Gen. Station	Generation Programme (MW)		Reservoir Level as on 01.04.10	Reservoir Level as on 01.05.10	MDDL	High Flood Reservoir Level
Station	May'10	June'10	01.04.10	01.03.10		Level
HPS, Burla	40+25	20+10	612.95 ft	606.75 ft	590 ft.	630 ft.
U.Indravati	350	200	633.71mtr	630.85 mtr	625mtr	642 mtr
Balimela	230	150	1466.40ft	1460.70 ft	1440 ft.	1516 ft.
U.Kolab	55	45	848.23mtr	846.88 mtr	844 mtr	858 mtr.
Rengali	70	40	117.20mtr	114.94 mtr	109.2mtr	123.5 mtr.
MKD (O/D)	30	30	2704.85ft	2695.85 ft	2685 ft.	2750 ft.
TOTAL	800	495				

OHPC requested to maximize hydro generation to avoid spilling during monsoon. CGM (O&M) stated that any evacuation constraint for OHPC power may be intimated to OPTCL for necessary action.

## 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 & sub-stations 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. The line could not be
		charged due to breaker problem at
		Katapali, which is to be completed
		before monsoon.

## Item No. –7 Communication issues

## (I) Integration of NALCO & RSP CGPs with OPTCL –Present status May be intimated. NALCO

## **Deliberation in the meeting**

Inspite of repeated pursuation NALCO authority are not responding for installation of RTU at their end. CGM (O&M) suggested that G.M. (Telecom.) may serve a seven days notice to NALCO for installation of RTU at their end failing which the matter may be moved to OERC.

{Action:-G.M. (Telecom.)}

### **RSP**

RSP representative stated that optical fibre has already been laid up to Tarkera grid sub-station. Order has been placed on L&T for installation of end user equipment which will take three months time for competition.

## (II) Display of Meenakshi generation in the control room.

## **Deliberation in the meeting**

Representative of Telecom stated that RTU of Meenakshi generating station has already been integrated. The data will be displayed in the VPS within one week.

## (III) Display of TTPS generation (# 5 & # 6) in the control room.

## **Deliberation in the meeting**

TTPS representative stated that transducer output is available at their end. Representative of Telecom stated that it will take one month time for display of # 5 & # 6 data in the control room of SLDC.

## (IV) Installation of communication equipment by CGPs / Industries. Deliberation in the meeting

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

Sl. No	Name of CGP	Present Status	
1	M/S BSSL, Meramunduli	There was a problem in digital system, which has	
		been rectified.	
2	M/S Hind Metals, Meramunduli	The CGP is not responding for installation of RTU.	
3	M/s Bhushan Power & Steel	The existing RTU is to be replaced.	
	Ltd, Jharsuguda		
4	M/S EMAMI	Already commissioned, but still under observation	
		due to erratic display.	

Representative of Jindal stated that carrier inter tripping scheme is not functioning. It was decided that G.M. (Telecom.) shall coordinate the AGM, E & MR Dhenkanal to sort out the problem within a week.

D.G.M (Telecom) stated that 220kV Bhadrak sub-station will be integrated within a month.

[Action- G.M (Telecom)]

(V) 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.

[Action- G.M (Telecom)]

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

### **Deliberation** in the meeting

Approval of the proposal for integration of the remaining transmission element in SCADA system is pending with OERC.

[Action- G.M (Telecom)]

CGM (O&M) suggested that a "SCADA Review Committee" may be constituted comprising one representative each from O&M, Telecom. & SLDC for review of SCADA problems. As decided in the meeting the representatives are:

- 1. Sri S. K. Panigrahi, Manager, O/o C.G.M. (O&M)
- 2. Sri P. L. Gouda, Asst. Manager, Telecom
- 3. Sri Sanjay Kumar Mishra, Deputy Manager, SLDC

[Action- G.M (Telecom)]

## **Item No. 8- Operational Constraints:**

## (i)Chandaka Command area

## Deliberation in the meeting

C.G.M.(O&M) stated that the 2<sup>nd</sup> 400kV Meramundali-Mendhasal ckt. cannot be charged due to legal dispute. 220kV Narendrapur- Mendhasal circuit is targeted for charging by 20.06.10.

## (ii)Over loading of Transmission Elements

## **Deliberation in the meeting**

Director (Engg.) stated that 14kms of 132kV Paradeep-Jagatsinghpur line has been completed and expected to be commissioned by November 2010. After charging of this circuit Jagatsinghpur load can be diverted to Paradeep auto. Further after commissioning of 220kV Bidanasi-Cuttack ckt the 132kV Chanda-Mancheswar ckt. can get relief. He also stated that CESU shall investigate the present status of 33kV Paradeep-Jagatsingpur feeder for diverting the load of Tirtol area to Paradeep sub-station.

[Action-CESU]

## (iii) Voltage fluctuation at Choudwar S/S- Islanding of ICCL units

## **Deliberation in the meeting**

Sr. G.M. (PS) stated that action should be taken for installation of 40MVA, 132/33kV transformer at Bidanasi. 132kV Bidanasi- Choudwar to be kept in synchronizing mode.

## (iv)Stringing of earth wire in 220 kV Theruvali-Bhanjanagar line

C.G.M. (O&M) stated that Tendering process has already been completed.

Director (Engg.) stated that

1. For replacement of 20MVA transformer at Kesinga by a 40MVA transformer twenty days shutdown is required. WESCO has to issue public notice for the same as load regulation at Kesinga area is required at that period

[Action-WESCO]

2. One 40 MVA transformer each for Nuapatna and Soro are under testing which are to be dispatched shortly.

## **Other Issues:**

### **Deliberation** in the meeting

### 1. IbTPS:

Representative of IbTPS stated that their units are being pulled out in high frequency at the time of disturbance in Budhipadar command area. M/s PRDC had been entrusted for analysis of disturbance and suggested remedial measures. They have prepared a islanding scheme for IbTPS considering some loads to be kept with IbTPS. The above scheme has already been submitted to CGM (O&M) for approval. CGM (O&M) suggested that the matter shall be discussed in PCC meeting of OPTCL.

IbTPS proposed for availing shutdown during July 2010. It was decided to examine the proposal by SLDC.

### 2. JINDALSTAINLESS LIMITED:

Representative of Jindal stated that on 28<sup>th</sup> April 2010 a system disturbance occurred in New Duburi command area, which caused black out at Jindal. CGM (O&M) suggested that the matter shall be discussed in PCC meeting of OPTCL.

### 3. **RSP**:

Representative of RSP stated to resolve the Metering issue of 3<sup>rd</sup> 132kV Tarkera-RSP ckt. Director (Engg.) suggested to resolve the matter jointly by convening a meeting between WESCO, GRIDCO, OPTCL & RSP. In case there is no consensus opinion, the matter may be moved to OERC by RSP.

[Action-RSP]

Representative of RSP requested to enhance the relay setting of 132kV Tarkera – RSP feeders. CGM (O&M) assured to take necessary action.

[Action-CGM (O&M)]

## **4. TTPS:**

Representative of TTPS stated that due to grid disturbance on 27.05.10, TTPS units were pulled out. CGM (O&M) suggested that the matter shall be discussed in PCC meeting of OPTCL.

### 5. OPTCL:

Director (Engg.) stated that in view of commissioning of Anandpur, Akhusingh, Basta, Badagada (Kesura) grid sub-stations the concerned Distribution Licensee may divert load to the above new sub-stations.

[Action-CESU / NESCO / SOUTHCO]

Director (Engg.) stated that one new 40 MVA transformer shall be installed at Chhend substation. WESCO may take necessary action for diversion of load to Chhend.

[Action-WESCO]

Item No. 12: Date and venue of the 62<sup>nd</sup> PSOC meeting will be intimated.

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

Sr. G.M. (Power System)

## MEMBERS PRESENT

SL.NO.	NAME	DESIGNATION
1	Er K.K. Nath	Director (Engineering), OPTCL
2	Er. A.C. Mallick	Director (Commercial), GRIDCO
3	Er. J.P. Das	C.G.M.(O&M), OPTCL
4	Er. D.K. Choudhury	C.G.M.(TP&C), OPTCL
5	Er. P.K. Behura	Sr. G.M.(PS), SLDC, OPTCL
6	Er. B.N. Mahapatra	Technical Consultant, SLDC
7	Er. S.K. Hazra	Sr. G.M.(T&D), OPTCL
8	Er. N.R. Mandhata	Sr. G.M.(CP), OPTCL
9	Er. P.K. Dash	G.M., SLDC
10	Er. S.K. Das	G.M., SLDC
11	Er. D. Sethi	D.G.M., OHPC
12	Er. B. P. Gantayat	D.M., OHPC
13	Er. S. K. Choudhury	AGM (PP), GRIDCO
14	Er. S. K. Mohanty	Manager (PP), GRIDCO
15	Er. A.C. Patra	D.G.M., Telecom, OPTCL
16	Er. S. A. Ali	A.G.M., Telecom, OPTCL
17	Er A. Pattanaik	D.M., Telecom, OPTCL
18	Er. P. K. Mahapatra	D.G.M., OPGC
19	Er. P. K. Satpathy	Manager, OPGC
20	Er. A. K. Singh	Sr. Manager.(OS), TTPS, NTPC
21	Er. R. V. Pattanaik	Sr. Manager.(OS), TTPS, NTPC
22	Er. D.K. Mangaraj	AGM (PD), RSP
23	Er. S. D. Bhanja	D.G.M., NESCO
24	Er. A. K. Panda	DM, WESCO
25	Er. N. Nayak	DM, CESU
26	Er. D. K. Rout	DM, CESU
27	Er. P. Pradhan	Manager, JSL
28	Er. S. K. Panigrahi	Manager (O&M), OPTCL
29	Er. K. K. Mishra	DM (O&M), OPTCL
30	Er. P. K. Das	Manager, SLDC
31	Er. J. P. Mohanty	Manager, SLDC
32	Er. A. Sahoo	A.M., SLDC



# STATE LOAD DESPATCH CENTER OFFICE OF THE Sr. GENERAL MANAGER (POWER SYSTEM) ORISSA POWER TRANSMISSION CORPORATION LTD.

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

No. SGM(PS)-PL-15/2007(VOLV)/ Dated: .0	: .06.2010
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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 61<sup>st</sup> Power System Operational Co-ordination meeting held on 28.05.10 at Management Training Centre, Kalyani Complex, Bhubaneswar.

Sir,

Please find enclosed herewith the minutes of 61<sup>st</sup> Power System Operational Co-ordination meeting held on 28.05.10 at Management Training Centre, Kalyani Complex, Bhubaneswar. 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.