# MINUTES OF DISCUSSION IN 64<sup>th</sup> POWER SYSTEM OPERATIONAL COORDINATION MEETING HELD ON 27.06.2011 AT POWER TRAINING CENTRE, CHANDAKA, BHUBANESWAR

List of participants enclosed at Annexure-A

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

Sr. G.M (PS) welcomed all the participants to the 64<sup>th</sup> Power System Operational Coordination meeting.

GM (SLDC) took the agenda items for discussion.

The review proceeded as follows:

# Item No.1-Confirmation of the minutes of 63<sup>rd</sup> PSOC meeting held on 23.04.2011 at PTC, Chandaka, Bhubaneswar.

Since Members have no comments on the minutes of 63<sup>rd</sup> PSOC meeting, the minutes of the meeting was confirmed.

#### Item No. 2- Review of Grid performance for the month of April & May 2011.

#### Item No. 2 (A) – Frequency

The one-minute instantaneous System frequency for the month of May'11 was reviewed. It was noticed that 91.44% of times the frequency remained in the band of 49.50 Hz – 50.20 Hz (IEGC band) in comparison to 91.53 % during the month April'11. The maximum and minimum System frequency during the month of May'11 was 50.93 Hz & 48.98 Hz respectively. The monthly frequency profile & Standard Deviation for the month of May'11 was reviewed.

#### Item No. 2 (B) – Grid demand

Grid demand for the month of **May'11** was reviewed. The maximum System demand of **3149 MW** occurred on **18.05.11** at **20:00 Hrs** and minimum demand of **1262 MW** occurred on **20.05.11** at **05:00 Hrs**. The hourly demand profile for the month of **May'11** was reviewed. It is observed that, the peak demand during the month of **May' 11** has been decreased by **167 MW** and energy drawal has been increased by **8 MU** in comparison to **April'11**. The energy drawal has been increased by **129 MU** in comparison to **May'10**. Director (Engg.) suggested to take a snapshot of the peak demand (3381MW) occurred on 31.03.2011. The minimum demand during the month of May 2011 occurred due to system disturbances due to thunderstorm.

#### 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 of **May'11** was reviewed. It is noticed that **Jayanagar** 220 kV bus has experienced a maximum voltage of **251 kV** on 07.05.11 at 02:00 Hrs and minimum Voltage of **185 kV** has been experienced by **Bhadrak** 220 kV bus on 06.05.11 at 19:00 Hrs. The maximum voltage at Jaynagar was occurred due to under loading of long transmission lines & VAr flow from Jeypore PG end.

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

Representative of M/s JSL stated that New Duburi sub-station is experiencing high voltage in the range of 223kV to 237kV which creates problem to their Generator. After connecting Duburi with Meramundali Sub-station at 400kV, the bus voltage may further increase. SLDC stated that the voltage fluctuation at New Duburi might be due to tripping of Duburi- New Duburi link or disturbances in Duburi / Balasore command area. In case of high voltage in the system, the Generators are being asked to absorb VAr on real time basis. In case of persistent high voltage the matter is being reported to ERLDC for voltage management.

#### Item No. 2 (D) – Energy Generation / import during the month of May'11

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) – DISCOM Drawal during the month of May'11

The quantum of energy drawn by Discoms for the month of **May 2011** was reviewed. It is noticed that the drawal by **CESU & NESCO** have under drawn and **WESCO & SOUTHCO** have over drawn in comparison to the ARR approved quantum.

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

Representative of CESU requested to incorporate the maximum demand during the month in the table. G.M. SLDC assured to include the same in the table.

#### Item No. 2 (F) – Major Events in the month of April & May 2011

12:04.11: # 1 (135 MW) of JSPL, Meramundali synchronized and connected to OPTCL system at 00:42 Hrs through 400kV DC line at Meramundalui.
25.05.11: Balasore 'B' switching sub-station at Somanathpur was charged at 10:23 Hrs.

#### Item No. 2 (G) – UFR Operation in OPTCL System in the month of May'11

There was no UF Relay operation occurred during the month of May'11.

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

Major grid incidents for the month of May'11 were reviewed.

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

The provision of busbar protection at 220kV Sub-stations in OPTCL system and their current status is to be ascertained by O&M wing. The disturbance at Jaynagar grid sub-station was discussed. The representative of NALCO stated that tripping of any feeder at Jaynagar Sub-station results in cascade tripping of other feeders. Director (Engg.) suggested that E & M.R. may examine the issue and proper relay co-ordination is to be done.

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

#### Item No. 2 (I) – Major Transmission Lines / Elements Outage during the month of May'11.

Outage of major Transmission Lines / Elements during the month of May'11 was reviewed. It was noticed that most of the tripping were due to failure of insulators and snapping of jumpers.

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

C.G.M. (O&M) stated that insulator & LA failure is due to heavy thunderstorm occurred during the month. However, action has been taken for checking of LA, insulators, jumpers etc.

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

The hourly drawal of Machhakund power during the month of May'11 is annexed herewith as Annexure-IV. The average drawal during MAY'11 was 29 MW. Present drawal from Machhkund is to the tune of 21 MW in average. At present two nos. of Machhakund units are available in the bus, generating 34 MW.

#### **Display of Machhkund generation:**

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

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

Representative of OHPC stated that APGENCO shall procure & install RTU at Machhakund PH. A letter in this regard has been issued by OHPC. OHPC has been requested to forward a copy of this letter to SLDC. It is learnt that the equipments installed for Railway Traction feeder at Machhakund PH switchyard have been removed. It was decided in the meeting to make correspondence with APGENCO for restoration of the railway traction feeder. Sr. G.M. (PS) shall initiate a letter on behalf of OPTCL.

# Item No. 4 – Review of Outage Programme of State Generators / Transmission elements for the month of June & July'11.

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

The Annual Maintenance programme of EHT lines and sub-stations for the year 2011-12 has to be finalized by O&M wing of OPTCL. O&M wing may collect the soft copy of the proposed programme from SLDC.

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

In response to OHPC representative's statement regarding non-availability of maintenance staff beyond office hours, Director (Engg.) suggested that OHPC may be requested to deploy emergency staff for attending emergency breakdown at all Power House Switchyards along with required materials.

# {Action:-Sr. G.M. (PS)}

Representative of OHPC agreed to communicate the outage programme of generating units for the month of July'11 to SLDC.

# {Action:-OHPC}

# Item No. 5 – Generation Program for the month of June'11 & July'11.

#### Deliberation in the meeting

Representative of OHPC agreed to communicate the generation programme for the month of July'11 to SLDC. It was suggested by SLDC to examine the date of attaining the MDDL of different reservoirs in the present situation and intimate the generation programme to SLDC. OHPC agreed to examine the same.

# {Action:-OHPC}

# Item No. 6 - Analog Triggering of Disturbance Recorders.

# **Deliberation in the meeting**

Sr. G.M. (O&M) intimated that none of the Disturbance Recorder installed at Chandaka, Jaynagar, Tarkera, Joda & Meramundali are functioning at present. Correspondences have already been made with the supplier to take up the work early. A case has already been filed against the supplier for rectification of defects. However, O&M wing may give latest status in the next meeting.

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

#### Item No. 7 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 C.G.M. (Const) are as tabled

Details of project	Status
132 kV Burla-Sambalpur	The work is to be completed by 15 <sup>th</sup> July 2011.
SC line LILO at Katapali	

#### Item No. -8 Communication issues

#### (I) Installation of RTU and associated equipments for RSP.

In the last meeting it was stated by DGM (Telecom) that, installation of RTU at RSP will be completed by June 2011.

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

D.G.M. (Telecom) stated that, installation of RTU along with cabling work has been completed. Integration of the RTU is programmed to be done by end of July 2011.

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

The real time data from the following major CGPs / Industry are yet to be displayed at SLDC control room.

- 1. M/s Hind Metals, Meramunduli
- 2. M/s Emami Paper Mills, Balasore
- 3. M/s Sterlite Energy Limited, Jharsuguda

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

D.G.M. (Telecom) stated that equipment installed at M/s Hind Metals found to be defective. The above firm has already been informed to replace the defective equipment.

He also stated that the data of M/s Emami is available at their terminal. He assured to display the data in the VPS screen of the SLDC control room.

It was decided in the meeting that D.G.M. (Telecom.) shall pursue M/s SEL to install and provide the data communication facility to SLDC.

#### (III) Displaying of Jindal Stainless Ltd & Aarati IPP data

It is noticed that the injection data of M/s Jindal Stainless Ltd, Duburi and Aarati Steel (IPP & CGP) are not being displayed in the control room since long.

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

D.G.M. (Telecom) stated that data of JSL, Duburi is not being displayed due to low signal level between Duburi & New Duburi sub-station. However, ABB Engineers will come within a week to rectify the defect. He also stated that JSL data can be made available from our RTU data.

He also stated that the ABB make RTU installed at Aarti is defective which has been intimated to concerned CGP / IPP.

#### (IV) Updating of MIMIC diagram displayed in the control room of SLDC.

In view of changed of network configuration, the present MIMIC diagram need to be updated.

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

D.G.M. (Telecom) agreed for updating the MIMIC diagram.

#### Item No. –9 Operational Constraints.

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

In the last meeting Sr. G.M (O&M) stated that the work is in progress and will be

completed before monsoon.

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

Sr. G.M. (O&M) stated that the shutdown was not availed due to Puri Car Festival and

the work will be taken up after the festival.

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

#### (II) Evacuation of Power from Balimela PH

In case of outage of a 220kV Balimela-Jaynagar circuit, Balimela PH so muto reduces its generation even if transmission capacity is available. On 23.06.11 Balimela maintained only 50 MW generation with one available circuit. This resulted in over drawal from the Grid under low frequency condition. The same situation also occurred on 22.06.11 during evening peak hours.

#### (III) Non-compliance of direction of SLDC by Chiplima PH.

Chiplima PH did not synchronize its machine even after instruction issued by SLDC during disturbance in Burla Command area on 13.06.11.

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

It was decided to communicate the matter to M.D., OHPC.

{Action:- Sr. G.M. (PS)}

#### Item No. 10- Mock Black Start exercises for Balimela PH.

It was decided in the 63<sup>rd</sup> OCC meeting of ERPC that mock black start exercise for Balimela PH by availing power from Meenakshi HEP is to be carried out during 1<sup>st</sup> week of June'11. It was learnt that there is no provision to avail start up power from the 250 kVA DG set available at Meenakshi PH. In the 64<sup>th</sup> OCC meeting it was decided that SLDC and OHPC shall discuss the issue with Meenakshi and peruse them to make necessary arrangement for availing start up power from their DG set.

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

It was decided to communicate M/s Meenakshi regarding extension of start up power to Jaynagar sub-station for giving auxiliary power supply for black start of Balimela PH with a copy to OERC.

{Action:- Sr. G.M. (PS)}

#### Item No. 11 Other Issues

# (i) Temporary utilization of 132kV feeder bay of JSEB at Baripada PG sub-station Deliberation in the meeting

Sr. G.M. (O&M) stated that OPTCL was using this 132kV feeder bay at PGCIL substation. OPTCL has planned to replace the existing two numbers of 100MVA transformers by 160 MVA transformers in a phased manner. During shutdown of one AT, this bay of PGCIL sub-station shall be utilized to avoid load shedding in Balasore command area. The replacement work will be completed by 31<sup>st</sup> October 2011. The 100MVA transformer will be installed at Tarkera sub-station replacing the existing 100MVA transformer No.-4. The 100 MVA transformer from Tarkera will be shifted to Joda for installation there by increasing the existing capacity.

# {Action:- C.G.M. (O&M)} (ii) Enhancing of over current plug setting of 132kV Jaynagar-Damanjodi ckt.

### **Deliberation in the meeting**

Representative of NALCO requested to increase the plug setting of 132kV Jaynagar-Damanjodi ckt. at Jaynagar sub-station in order to save the feeder from tripping on over current in case of increase of drawal by Damanjodi due to failure of their own generation. It was decided that, NALCO shall move a proposal on this issue to OPTCL and Corporate Planning branch shall conduct a System Study to decide enhance the plug setting.

### {Action:- NALCO / Sr. G.M. (CP)}

# (iii) Real Time 15 minutes data display of DISCOMs

# **Deliberation in the meeting**

CESU & WESCO complained regarding non-display of real time data on the SLDC website.

In reply, SLDC stated that the matter has been reported to M/s ADDSOFT.

{Action:- Sr. G.M. (PS)}

# (iv) Preparation of Reactive Energy bill

# **Deliberation in the meeting**

SLDC stated that the reactive energy billing can be prepared only after receipt of datafrom STU.{Action:- C.G.M. (O&M) / Sr. G.M. (PS)}

# (v) Frequent Tripping of 132kV Meramundali-ICCL circuit

# **Deliberation in the meeting**

Representative of IMFA stated that frequent tripping occurs from Meramundali / Dhenkanal / Maheswari ckt., thereby forcing their CGP to operate in islanding mode. He requested to examine and take remedial measures to over come this difficulty. It was decided that C.G.M.(O&M) shall examine the above and take necessary action in this regard.

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

# Item No. 15: Date and venue of the 65<sup>th</sup> PSOC meeting will be intimated.

The meeting was ended with vote of thanks conveyed by G.M, SLDC to all the Members.

# ANNEXURE-A

GT NIO		RS PRESENT
SL.NO.	NAME	DESIGNATION
1	Er K.K. Nath	Director (Engineering), OPTCL
2	Er. K. M. Parida	C.G.M. (O&M), OPTCL
3	Er. J. K. Dash	Sr. G.M. (PP), GRIDCO
4	Er. Ranjit Dash	Sr. G.M.(TP&C), OPTCL
5	Er. B.R. Mishra	Sr. G.M., SLDC, OPTCL
6	Er. B. K. Tripathy	Sr. G.M. (T&D / O&M), OPTCL
7	Er, A. K. Mohanty	G.M. (R&T), OPTCL
8	Er. P. K. Das	G.M., SLDC
9	Er. S.K. Das	G.M., SLDC
10	Er. P. K. Mishra	A.G.M., SLDC
11	Er. S. K. Choudhury	A.G.M., GRIDCO
12	Er. Umakanta Sahoo	Manager, GRIDCO
13	Er. J. P. Mohanty	Manager, SLDC
14	Er. P. K. Das	Manager, SLDC
15	Er. Archana Sahoo	A.M., SLDC
16	Er. S. K. Das	D.M. (O&M), OPTCL
17	Er. A.C. Patra	D.G.M., Telecom, OPTCL
18	Er. R. K. Das	A.G.M., Telecom, OPTCL
19	Er. Daitari Sethi	D.G.M., OHPC
20	Er. P. K. Sahoo	S.E. (R &A), WESCO
21	Er. P. K. Padhy	D.G.M., CESU
22	Er. Rabindra Nath Swain	A.G.M., NALCO
23	Er. Dibakar Behera	G.M., IMFA
24	Er. Ramesh Kumar Sharma	A.G.M., JSL

# **MEMBERS PRESENT**