



**STATE LOAD DESPATCH CENTRE**  
**OFFICE OF THE CHIEF LOAD DESPATCHER**  
**ODISHA POWER TRANSMISSION CORPORATION LIMITED**  
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CIN - U40102OR2004SGC007553

No. SGM (PS)-PL-15/2015/ 765(43)

Dt. 17.03.2016

To:

As per distribution list

Sub: Minutes of 94<sup>th</sup> Power System Operational Co-ordination meeting held on .

Sir,

Please find enclosed herewith the minutes of 94<sup>th</sup> PSOC meeting held on 23.02.2016 at OPTCL Power Training Center, Chandaka.

This is for your information and necessary action.

Encl: As above

Yours faithfully;

GM (System Support)

CC: Copy along with copy of enclosure forwarded to EA to CMD OPTCL for kind information of CMD.

## Distribution list

1. The Director (Commercial), GRIDCO, Bhubaneswar.
2. The Director (Operation), OHPC, Bhubaneswar
3. The CGM (O&M), OPTCL, Bhubaneswar.
4. The CGM (Const.), OPTCL Bhubaneswar.
5. The CGM (RT&C), OPTCL, Bhubaneswar.
6. The CGM (PP), GRIDCO, Bhubaneswar.
7. The CGM (IT), OPTCL, Bhubaneswar.
8. The Sr. G.M (Const)-I, OPTCL, Bhubaneswar.
9. The Sr. G.M (Const)-II, OPTCL, Sambalpur.
10. The Sr. G.M (CPC), OPTCL, Bhubaneswar.
11. The Sr. G.M (CP), OPTCL, Bhubaneswar.
12. The Sr. G.M. (O&M), Zone-I, Narendrapur.
13. The Sr. G.M.(O&M), Zone-II, Meramundali.
14. The Sr. G.M. (Telecom), OPTCL, Bhubaneswar.
15. The CEO, CESU, Bhubaneswar.
16. The A.O., WESCO, Burla
17. The A.O., NESCO, Balasore
18. The A.O., SOUTHCO, Berhampur.
19. The Member Secretary (GCC), OPTCL.
20. The ED, Power Grid Corporation of India, Bhubaneswar.
21. The Sr. G.M. (El.), BHEP, Balimela
22. The A.G.M. (El.), CHEP, Chiplima
23. The Sr. G.M. (El.), UIHEP, Mukhiguda
24. The Sr. G.M. (El.), RHEP, Rengali
25. The D.G.M. (El.), HHEP, Burla
26. The D.G.M. (El.), UKHEP, Bariniput, Koraput
27. The S.E. (O&M), Machhakund
28. The DGM (Elect.), IbTPS, OPGC, Banharpali.
29. The Vice President (O), IMFA, Choudwar.
30. The D.G.M. (O&M), NTPC (TTPS), Talcher.
31. The AGM (Elect.), JINDAL Stainless Ltd., Duburi
32. The G.M, HINDALCO, Hirakud.
33. The G.M.CPP, NALCO, Angul.
34. The Director, M/s. Jindal Steel & Power Ltd., Angul
35. The AVP-Vedanta Ltd (IPP), Jharsuguda
36. The G.M, Vedanta Ltd (CGP), Jharsuguda.
37. The DGM (Power Distribution), RSP, Rourkela.
38. Joint President, Aditya Aluminium Ltd., Lapanga, Sambalpur
39. The G.M.(Elect.), Bhusan Steel Limited. Meramundali
40. The G.M. (Elect.), Bhusan Power & Steel Ltd, Budhipadar.
41. The G.M.(Elect.), IFFCO Limited.
42. Director & COO, GMR Kamalanga Energy Limited, Satyanagar, Bhubaneswar.

**Minutes of 94<sup>th</sup> PSOC meeting held on 23.02.2016 at PTC, Chandaka**

List of participants is at Annexure.

Sr. G.M (Power System) welcomed all the participants to the 94<sup>th</sup> Power System Operational Coordination meeting and highlighted the system performance during the month of January'2016 and overall power scenario of the State. He also emphasized on the drawal by all the Discoms during the month.

The meeting was chaired by CGM (O&M), OPTCL.

D.G.M. (SS), SLDC took the agenda items for discussion.

**The review proceeded as follows:**

**1: Confirmation of minutes of 93<sup>rd</sup> PSOC meeting held on 30.01.2016**

The minutes of meeting was circulated vide letter No. SGM (PS)-PI-15/2015/466<sup>(42)</sup>, dated 19.02.2016 to all the members and also uploaded in the SLDC website. No comment has been received from any of the members.

**Deliberation in the meeting**

Since no comments have received from the members, the minutes of 93<sup>rd</sup> PSOC meeting was confirmed.

**PART A: List of items**

List of items to be discussed in the meeting are given in the subsequent parts

**PART B : SYSTEM PERFORMANCE**

**B1: Review of Grid Performance for the month of January'2016.**

**(A) Frequency**

It was noticed that, during the month of January' 16, **65.59%** of times the frequency remained in the IEGC band i.e. 49.90Hz - 50.05Hz in comparison to **66.27%** during the month of December'15. The maximum and minimum System frequency during the month was **50.20 Hz & 49.80Hz** respectively.

**(B) Grid demand**

Grid demand for the month of January'16 was reviewed. The energy average consumption during the month was 2816 MW. The maximum System demand of 3861 MW occurred on 28.01.2016 at 20:00 Hrs and minimum demand of 2117 MW occurred on 28.01.16 at 14:00 Hrs.

**Deliberation in the meeting**

It is observed that the average demand during the month of January' 16 was increased by 93 MW and the peak demand was increased by 48 MW from that of December'15. The average energy consumption during the month has been increased by 236 MW in comparison to January'15.

**(C) Voltage Profile of important Sub Stations in OPTCL System during the month of Jan'16.**

The Voltage profile at different 220 kV buses in OPTCL system during the month of **January'16** was reviewed.

**Deliberation in the meeting**

The maximum Voltage of 246.12 kV occurred at Jaynagar 220 kV bus while Narendrapur, 220 kV buses have experienced the minimum Voltage of **175.91** kV. Bus Voltages at Samgara and Lapanga could not be incorporated due to non availability of energy meter in those S/Ss.

[Action: CGM (O&M)]

**(D) Loading of 220/ 132 kV Auto at 220 kV S/Ss in OPTCL system for the month of January'15.**

Auto loading of all 220 kV S/Ss was reviewed. It was noticed that some of the ICTs have not been provided with energy meter.

**Deliberation in the meeting.**

It was deliberated that procurement of meters was under process.

[Action: CGM (O&M)]

**(E) DISCOM Drawal during the month of January'16**

The schedule and actual energy drawal by Discoms for the month of **January'16** was reviewed.

**Deliberation in the meeting**

It was noticed that WESCO & SOUTHCO had overdrawn 11.139 MU and 3.105 MU respectively during the month, while NESCO and CESU had drawn energy almost as per their schedule. All Discoms were requested to comply with their respective drawal schedule.

[Action: All Distribution Utilities / SLDC]

**(F) Energy Generation / import during the month of January'16**

Energy generation and exchange during the month of January'16 was reviewed. The total quantum of energy drawn from all the generation sources including Central Sector Share and CGP/IPP support during the month was **2095.149** MU.

**(G) Drawal of Machhakund Power during the month of January'16**

The drawal of Machhakund power during the month of January'16 was **27.415** MU against AP drawal of **21.077** MU.

In the last meeting it was deliberated:

- a. To issue necessary instruction to Jayanagar Grid for reducing Machhakund drawal in case of over drawal to avoid hand tripping from Machhakund end.
- b. Offer from M/s Chemtrol is awaited for RVDU at Jayanagar S/S control room.
- c. Rly. Authority to ask for availing power supply at 220 kV Voltage level for their traction S/Ss, proposed to be fed from Rayagada and Sunabeda S/Ss.
- d. Construction of 33 kV Gumuda-Akhusing feeder has been completed. Inspection is left.
- e. Although decided in the coordination committee meeting, Machhakund authority is not taking up the maintenance work for Jayanagar feeder at their end. OHPC may coordinate.

**Deliberations in the meeting**

Sr. GM (PS) stated that Shift in charge of Jayanagar S/S should be properly instructed to reduce load in case of over drawal, to avoid hand tripping of feeder from Machhakund end. OHPC may persuade Machhakund authority to make the 2<sup>nd</sup> bay functional for contingency requirement.

Southco may take follow up action for early inspection of newly constructed 33 kV Akhusing-Gumuda feeder.

CGM (O&M) stated that extension of power supply to Traction S/S from Sunabeda S/S has been diverted to 220 kV Laxmipur S/S.

Gridco may write Machhakund authority to compensate the quantum of energy not drawn by Odisha by allowing over drawal.

CGM (Telecom) stated that offer from M/s Chemtrol for providing RVDU at Jayanagar control room is awaited for want of OSI licenses.

**[Action: CGM (Const.) / CGM (O&M) / OHPC / Southco / Gridco / SLDC]**

#### **(H) Under Frequency relay operation in OPTCL System during the month of January'16.**

There is no UF Relay operation occurred during the month of January'16 as the frequency had never gone beyond 48.50 Hz.

### **PART C – Issues to be raised in 118<sup>th</sup> OCC meeting of ERPC to be held on 26.02.16**

#### **C.1: Charging of 220 KV Raigarh (PGCIL)- Budhipadar line**

In the 117<sup>th</sup> OCC, OPTCL being the owner of the line, was advised has to submit B1 to B5 formats to ERLDC and review the protection settings at Budhipadar end for charging the line.

OPTCL vide letter dated 06.02.2016 intimated that they have not received any communication from PGCIL regarding proposal of LILO of 220 kV Raigarh (CSPTCL)-Budhipadar line at 400/220 kV PGCIL Raigarh S/S. OPTCL maintains 61 Kms of the line and rest of the line is being maintained by CSPTCL. According to OPTCL, in this case, the intending licensee i.e PGCIL/CSPTCL need to submit the requisite formats to ERLDC.

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

In the TCC meeting it was decided that CSPTCL and Powergrid shall furnish the data to ERLDC with a copy to OPTCL for relay coordination at Budhipadar end.

#### **C.2: Status of PLCC system installed in Eastern Region**

In 30th TCC/ERPC, Powergrid agreed to restore the PLCC system at both ends (its own end as well as the constituent end) of a line wherein the other ends are not operational for some reasons or others as one time job.

In 117<sup>th</sup> OCC, OPTCL submitted that OPGW communication installation is under way and they are planning to implement carrier protection using OPGW.

In the last meeting C.G.M. (Telecom.) stated that a letter has been issued to PGCIL for joint verification regarding restoration of communication links for which OPTCL has laid OPGW. OPTCL will not go back with PLCC mode.

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

C. G.M. (Telecom.) stated that a letter has been issued to ED, Powergrid to finalize a date for joint inspection.

**[Action: CGM (Telecom) / Powergrid]**

#### **C.3: 220 kV inter-connecting lines of OPTCL with 400/220 kV Bolangir (PG), Keonjhar & Pandiabil S/s**

PGCIL has already commissioned the 2 X 315MVA 400/220kV Bolangir S/s by LILOing of 400kV Meramandali-Jeypore S/C line and 400/220 kV Keonjhar S/s with an objective of supplying power from ER grid to its adjoining areas in Odisha.

OPTCL updated the completion schedule of inter-connecting system as follows:

Sl. No.	Name of the transmission line	Completion schedule
<b>1.</b>	<b>2 X 315MVA 400/220kV Bolangir S/s</b>	
a.	LILO of one circuit of Sadeipalli-Kesinga 220 kV D/C line at Bolangir S/S.	7 out of 14 completed. Severe ROW problem. Negotiation under progress.
b.	LILO of one circuit of Katapalli-Sadeipalli 220 kV D/C line at Bolangir S/S.	All work completed. Powergrid to provide meter to be installed at Katapali end before charging the line.
<b>2.</b>	<b>400/220 kV Keonjhar S/S.</b>	
a.	Keonjhar (PG)-Keonjhar (OPTCL) 220 kV D/C line	Work order expected to be issued by Feb-16
b.	Keonjhar (PG)-Turumunga (OPTCL) 220 kV D/C Line.	Yet to be awarded
<b>3.</b>	<b>400/220 kV Pandiabil Grid S/s</b>	
a.	Pratapsasan(OPTCL)-Pandiabil (PG) 220 kV D/C line	It will take 1 year for completion.
b.	LILO of one circuit of Atri-Puri (Samangara) 220 kV D/C line at Pandiabil (PG)	After commissioning Pandiabili S/S by Powergrid.

[Action: CGM (Const) / CGM (O&M)]

#### **C.4: Preparation of crisis management plan for Cyber Security in Power Sector in line with CERT-IN.**

The activity of the preparation of Crisis Management Plan for countering the cyber attacks and its implementation including the Mock Drills, audits etc. is being monitored by CEA regularly in line with crisis management plant of Ministry of Power. Power Utilities (including generation, transmission & distribution utilities) of eastern region are to furnish regularly, the updated status to Chief Engineer, Distribution Planning & Development Division, CEA.NTPC communicated their activity of the preparation of Crisis Management Plan for countering the cyber attacks vide letter dated 2nd August, 2013.

In 113th OCC, Member Secretary informed that during interaction with consultants of Grid Study Committee, NLDC agreed that they will plan for conducting workshops on crisis management plan for Cyber Security and few workshops will also be held in Eastern Region.

In the last meeting, CGM (IT) stated that the draft crisis management plan is under preparation.

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

CGM (IT) stated that the draft report has been prepared, which has to be finalized by the consultant. After finalizing the report, a workshop shall be organized by IT.

[Action: CGM (IT)]

#### **C.5: Certification through BIS as per IS 18001:2007 to all generating/ transmission units.**

In 84<sup>th</sup> OCC meeting all constituents were requested to interact with BIS with intimation to ERPC and get certified as per CEA direction.

In 85<sup>th</sup> OCC, NTPC informed that NTPC-Farakka has been certified with IS 18001. Other constituents including OHPC requested to interact with BIS with intimation to ERPC and get certified as per CEA direction. The matter is getting reviewed by highest authorities with top priority.

In the last meeting it was decided that CGM (O&M) shall again write to BIS for certification.

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

It was decided that BIS shall be reminded again. OPTCL may take the help of any consultancy agency for the above purpose.

[Action: CGM (O&M)]

## **C.6: Replacement / repair of meters on Various Locations**

### **i. Replacement/Repair of Defective meter at Mendhasal – SLDC, Odisha**

Meter at Mendhasal (GRIDCO) end of Mendhasal (GRIDCO) – Baripada (PG)- I is defective since more than two months. SLDC, Odisha vide mail dated 05.01.2016 have requested for early replacement / repair of meter at Mendhasal.

In the 117<sup>th</sup> OCC meeting, Powergrid assured to make the replacement of meter by end of Jan'16.

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

SLDC stated that the meter at Mendhasal end is functioning at present. Gridco may raise the issue for adjustment of the reactive power flow recorded in the past period, during which the meter was defective.

[GRIDCO]

### **ii. Installation of New SEMs in B/C panels at Joda Grid S/s of OPTCL - OPTCL**

OPTCL vide mail dated 30.12.2015 have requested for installation of new SEMs at B/C panel at their Joda GSS for 220kV Joda- Ramchandrapur & Joda – Jindal Interstate tie lines.

In the 117<sup>th</sup> OCC meeting Powergrid informed that required meters are already installed and SEM for bus coupler is not required.

ERLDC informed that the SEM reading at both ends of 220 kV Joda-Ramchandrapur line is not matching and advised OPTCL to check for any tapping in the line. SEM for 220 kV Joda-Jindal is not required as it is an intra state line.

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

O&M stated that there is no tapping in 220 kV Joda-Ramchandrapur line. Since there is no line CT, installation of meter in the B/C bay was sought for. SLDC may deliberate in the OCC.

[Action: SLDC]

## **C.7: Dynamic data of Generator Models required in PSSE for Simulations – ERLDC**

To carry out proper simulation studies in PSSE, actual generator parameters are required as incomplete or incorrect modeling of generator may not give valid simulation result. Hence all the generating companies are requested to furnish data for generator, exciter, governor, PSS of their all generating units in the format.

In 114<sup>th</sup> OCC, the house was informed that the formats are available at ERPC website. ([www.erpc.gov.in](http://www.erpc.gov.in))

OCC advised all the generating utilities to submit the relevant information as per the format.

All generating utilities agreed to submit.

Till 115<sup>th</sup> OCC, the data received only from NTPC Kahalgaon & Barh, NHPC Teesta-V, GMR and CESC.

In 116<sup>th</sup> OCC, all the other constituents were advised to send the requisite information and ERLDC was requested to give the description of symbols and abbreviations for proper understanding of the constituents.

Subsequently, Vedanta Ltd. has submitted the relevant information vide mail dated 11.01.2016.

In the last meeting all Generators were requested to forward the data to ERLDC at an early date.

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

O&M and generators stated that SLDC may deliberate in the OCC to clarify the symbols and abbreviations.

[Action: SLDC]

**C.8: Mock Black start exercises in Eastern Region – ERLDC**

Sl. No.	Name of Hydro Station	Schedule (1 <sup>st</sup> )	Tentative Date	Schedule (2 <sup>nd</sup> )
1	U.Kolab	Last week of May, 2015	Done on 16/07/2015	Last Week of January, 16
2	Rengali	2 <sup>nd</sup> week of June 2015	Done on 09/02/2016	February, 16
3	U. Indravati	3 <sup>rd</sup> week of June 2015	Done on 16/07/2015	2 <sup>nd</sup> week of February 2016
4	Balimela	1 <sup>st</sup> week of November,15	Done on 24/11/2015	1 <sup>st</sup> week of March 2016
5	Burla		Done on 19/01/2016	January 2016

**Deliberations in the meeting**

Mock black start exercise for Upper Kolab and Upper Indravati may be scheduled during the month of March'2016.

[Action: SLDC/OHPC]

**PART-D – Operational Issues**

**D.1: Non-compliance of drawal schedule by DISCOMs**

Non compliance of drawal schedule messages issued to Discoms during the month of **January'16** was reviewed.

It is noticed that WESCO had overdrawn a substantial quantum of power to the tune of 11.139 MU while Southco had overdrawn 3.105 MU beyond their schedule.

**Deliberations in the meeting.**

SLDC stated that maximum number of messages were issued to WESCO for compliance of drawal schedule. All the Discoms were advised to remain in the schedule to maintain grid discipline and security.

[Action: All Discom utilities]

**D.2: Revival of Station Transformer for Station Auxiliary supply at Balimela HEP.**

It was suggested in earlier meetings for revival of station supply for Balimela HEP from Balimela Grid S/S.

**Deliberations in the meeting**

OHPC stated that revival of station transformer to avail supply from Balimela 220/33 kV S/S will be done by end of March' 2016.

[Action: OHPC]

**D.3: Prolonged outage of transmission elements and tentative revival dates**

The tentative revival dates of transmission elements are updated in the last meeting are as follows:

Sl.No	Name of transmission element	Reason of outage	Probable date of revival
1	220kV Jayanagar-Theruvalli ckt-III breaker	Breaker already erected but not commissioned. Isolator problem	January'2016
2	220/132 kV, 100 MVA Auto-II at Duburi		Filtration completed. Charged within a week.
3	132 kV Jayanagar-Sunabeda line	For conversion to Double ckt	By end of March'2016.
4	220/132 kV, 160 MVA Auto-I at Bhanjanagar	Overhauling	Oil filled up. Filtration to be taken up.
5	220 kV TTPS-Joda ckt-I	Replacement of conductor	April'2016
6	220 kV Meramundali-Bhanjanagar ckt-I	Replacement of conductor	April'2016

[Action: C.G.M. (O&M)]

**D.4: Communication issues**



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

The status of data communication from CGPs as deliberated in the last meeting is as follows

Sl. No	Name of CGP	Present status
1	M/s IFFCO, Paradeep	Outdoor commissioning work completed. RTU was locally tested. After replacement of the faulty CVT, data will be integrated.
2	M/s MSP Mettalicks	PLCC / RTU installed. Database has already been prepared by OPTCL. Final RTU integration with OPTCL system by the vendor is awaited.
3	M/s NINL, Duburi	M/s NINL has requested for Scheme, BOQ for PLCC / SCADA, which has been forwarded by OPTCL. No action has been taken by NINL so far.
4	M/s Rohit Ferro tech	PLCC established and inspection by Telecom Engineers completed. Data base has already been prepared by OPTCL.
5	M/s Vedanta Ltd. (IPP), Jharsuguda	Generators data remains Suspect most of the times.

In the last meeting it was decided that GCC, OPTCL may file a case before the OERC through RT&C wing of OPTCL against those CGPs not complying the data communication provisions with SLDC.

[Action: CGM (Telecom) / GCC]

**D.5. Islanding Scheme of Ib TPS**

The islanding scheme for IbTPS has already been commissioned but not functioning due to non-incorporate the trip commands to the breakers at Budhipadar from the Islanding Relay. This has already been discussed in the 81<sup>st</sup> PSOC meeting, wherein Telecom wing of OPTCL assured to complete the optical fibre link, provided IbTPs allow for working in their premises. Ib TPS had also agreed to allow them. The link is yet to be completed yet.

In the last meeting it was decided that OPGC shall finalize the date and intimate to CGM (Telecom) for providing connectivity and testing.

**Deliberations in the meeting**

Telecom stated that in the event of an islanding situation (5 Nos of situations), trip command will be generated from the islanding relay. The present status of work is as detailed.

- All works work for interconnection to trip the identified feeders at Budhipadar grid completed.
- Sending of direct trip command to Tarkera for tripping of 132 kV Tarkera-Rajgangpur ckt-I & II is done and tested.
- Sending of command to ramp down generation for unit-I has been tested. Testing for unit-II is yet to be done by OPGC.
- Ramping down through governor, assigned to M/S BHEL will take 1- 2 week of time.
- OPTCL had requested OPGC to fix a date for simulating the test without effecting power flow, for which no response has been received.

[Action: IBTPS/ CGM (Telecom)]

**D.6: Web based drawal / generation scheduling.**

SLDC is going to implement web based drawal / generation scheduling for Dist. Utilities and State generating stations including IPPs and CGPs soon. A demo has been organized on 29.07.15.

In the last meeting, CGM (IT) stated that, web based generation scheduling module for State generating stations has been already been developed by IT wing. Modules for Discom and CGP / IPP shall be made available before the next PSOC meeting. After approval by the stake holders the same shall be go live from September'15. All Users were requested to forward their respective schedule in the prescribed format.

In the last meeting IT representative deliberated that SLDC shall finalize the date for one day demonstration cum training programme at SLDC for web base scheduling. SLDC has written a letter to IT to make a demonstration at SLDC prior to finalization of the training programme.

In the last meeting CGM (IT) stated that the problems identified by SLDC have been rectified. A demo shall be given at SLDC on 4<sup>th</sup> February. After that all generators will be invited for a Demo. The Demo by IT is yet to be done.

**Deliberations in the meeting**

CGM (IT) stated that final demo will be arranged by end of February'2016.

[Action: CGM (IT)/ SLDC]

**D.7: Implementation of Automatic Meter Reading for OPTCL-Discom interface points.**

The work for Automatic Meter Reading (AMR) for all the interface points is in progress.

In the last meeting all Discoms have agreed to display the meter data on the dashboard required for analysis purpose.

In the last meeting CGM (IT) stated that from 1<sup>st</sup> March onwards the AMR shall be made "Go live". Data will be available after one hour lapses of time.

**Deliberations in the meeting**

CGM (IT) stated that AMR data for six types of meters has been mailed to GM (SLDC) for checking and acceptance. Action will be taken after acceptance of the data.

GM(SLDC stated that required manpower is not available at SLDC for checking the data. Sr. GM (PS) stated that requisition for posting of executives at SLDC has been placed before the HR wing.

[Action: SLDC / IT]

**D.8: Software for Deviation charge billing.**

Hon'ble OERC may notify "Intra State Deviation settlement and related matters" Regulation at any time. For implementation of the regulation, required software for Deviation Charge billing need to be developed and tested. CGM (IT) may take necessary steps for development of the software.

**Deliberations in the meeting**

CGM (IT) stated that requirement for development of deviation charge billing may be furnished by SLDC. The software shall be developed by outside agency, as, Infosys may take long time.

[Action: SLDC/IT]

**D.9: High Voltage at 400 kV Meramundali & Duburi S/S\_ Reactive Power Injection by OPTCL**

Persistent high Voltage is being observed at Meramundali & Duburi 400 kV buses. Since these buses are the inter State exchange points, Reactive power injection penalty is being charged to Gridco. It is learnt that one no of 50 MVA line reactor at Meramundali is not functioning. O&M may take action for rectification of the same early. It may also be examined for installation of 2<sup>nd</sup> reactor at Duburi to arrest the high Voltage. Further Powergrid may be requested to shift the line reactor of the 400 kV Baripada- New Duburi-Mendhasal ckt from Mendhasal to New Duburi.

In the last meeting it was suggested for installation of additional reactor at Meramundali to control VAR injection at high Voltage conditions. Gridco may examine to approach the Commission for sharing of the penalty by the Generators / CGPs responsible for injection of VAR at high voltage condition. SLDC may monitor the VAR flow on real time basis and take all possible measures.

As per suggestion of SLDC in the 117<sup>th</sup> OCC meeting of ERPC, tap position at 765kV / 400kV Angul sub-station has been lowered as per instruction of ERLDC resulting control of voltage at Angul as well as at Meramundali sub-station, thereby reduction in reactive power injection charges.

### **Deliberations in the meeting**

DGM Meramundali stated that Reactor at Meramundali is functioning at present

[Action: SLDC / Gridco]

#### **D.10: DISCOM Issues**

##### **CESU**

A. In the last meeting, it was decided that CESU shall approach O&M through a meeting to resolve bilateral issues. The discussion in the meeting may be placed in the next PSOC meeting.

B.

- (i) Mismatch of SCADA drawal with the billing meter data to the tune of 23 MU during December'15.
- (ii) Fixed data indicated on dashboard may be linked with SCADA.
- (iii) Interruption of RVDU data. mismatch in dashboard and RVDU data.

##### **WESCO**

- (i) Import of Solar projects is yet to be deducted from BSP bill of WESCO.
- (ii) Frequent interruption of RVDU data causes monitoring problem. Dashboard may be kept in parallel operation along with RVDU.
- (iii) Open Access, S/S Drawal and major EHT consumer drawal may be incorporated in the RVDU.

##### **NESCO**

ABT Dashboard is not working since January-16 till date. So, necessary action may kindly be taken for rectification. When RVDU data is not coming, Dashboard data is essential to monitor.

### **Deliberations in the meeting**

CGM (Telecom) stated that due to transition period the data mismatch may be continue for 1-2 months. The Discoms may collect the data from SLDC through their representatives deployed at SLDC. BSNL link is not stable at NESCO, due to which RVDU is not functioning properly. However M/s Chemptrol is in the job of restoration.

Director (Commercial) stated that import by solar projects shall be deducted from BSP bill.

[Action: GRIDCO / Telecom/All Discoms]

## **PART E: OPERATIONAL PLANNING**

### **E.1: Commissioning status of New Transmission elements.**

The status of commissioning of new transmission elements is as follows:

<b>Sl. No</b>	<b>Transmission element details</b>	<b>Present Status</b>
1	Commissioning of 220 kV Jayanagar-Jeypore 2 <sup>nd</sup> DC line	Work has already been started. Expected to be completed by June 2016.
2	Commissioning of 400 kV Meramundali-Mendhasal 2nd ckt	Line is ready and shall be charged after commissioning of 3 <sup>rd</sup> ICT at Mendhasal, which is under progress. ICT is at BHEL factory
3	Commissioning of 220 kV Bidanasi-Cuttack line	Work in progress and expected to be completed by March 2016.
4	Commissioning of 220/132 kV Cuttack S/S	Work in progress and expected to be completed by March 2016.
5	Commissioning of 132 kV Baripada (PG)-Jaleswar line	Work has already been started, which will be completed by June 2016.
6	Commissioning of 220/132 kV Kesinga S/S	Work under progress. Expected by September 2016.

Status of Discom's action plan for power drawal from the S/Ss commissioned / expected to be commissioned in near future.

Sl. No	Name of the sub-station	Probable month of commissioning	Name of DISCOM	Action taken by Discoms
1	132/33kV, 2x20 MVA Khajuriakota	March'16	CESU	Action being taken
2	220/33kV, 2x20 MVA Banei	Dec'16	WESCO Utility	Stayed by Court.
3	132/33kV, 2x20 MVA Padmapur	February'16	WESCO Utility	Line is ready
4	132/33kV, 2x20 MVA Udala	Dec-16	NESCO Utility	Line existing

CESU stated that action is being taken for construction of 33/0.4 kV S/S at Mendhasal to avail power supply for Mendhasal area.

WESCO stated that diversion of 11 kV lines from Jharusuguda S/S will be done soon.

**Action: CGM (O&M)/CGM(Const.) / All Discoms]**

### **E.2: Energy Metering at Hydro stations.**

Energy meters have already been installed at all hydro stations. Billing for all OHPC stations, except Upper Kolab, is being done from the newly installed energy meters. The energy meters at Upper Kolab are have been rectified in the mean time.

In the last meeting, OHPC stated that there are mismatch in the recording for some of the energy meters. It was decided that OHPC shall identify those meters and intimate OPTCL. GRIDCO stated that energy meter for island feeder at Burla PH is yet to be installed. OPTCL shall take necessary action for installing / testing of those meters.

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

OHPC stated that Upper Kolab and Balimela PH meters are showing error. Mismatch in Burla-Chipilima Tie line meter at both ends noticed. Rengali-TTPS feeder meter is not functioning. The meter data can be considered for billing purpose only after rectification of all defects. OHPC has already written to CGM (O&M) in this regard. It was decided that O&M shall take up the matter with the vender for rectification of energy meters.

**[Action: O&M / OHPC]**

### **E.3: TTPS Issue.**

#### **Implementation of Feeder Metering**

In the earlier PSOC meeting, TTPS deliberated that all the meters were tested & calibrated by the STL on 09.10.2015. The 132kV CTs for TTPS-Duburi-1 have been replaced. Further, as per the PPA dated 08.03.1995, the energy meters are to be installed at GT end. Since the meter locations will be shifted to feeders, the corresponding clause in the PPA is required to be amended. Accordingly, the proposal has been sent to the competent authority of NTPC for approval.

TTPS in their letter No.045/GGM/TTPS, Dated. 20.11.2015 addressed to CGM (PP) Gridco pointed out that, as per clause 7(1), 1<sup>st</sup> proviso of CEA (Installation and operation of Energy meters) Regulation, 2006 as amended in 2010 “ for existing stations the location of Main, Check and Standby meters shall not be changed unless permitted by the Authority”.

In the present case, for the first time, energy meters have been installed at the interface points, which should have been installed earlier, without changing the position of the existing meters. As such the regulation as mentioned by TTPS is not applicable. However the existing meters will be treated as standby meters.

In the last meeting, GRIDCO stated that, in response to the letter of GRIDCO, CEA has sought for some information such as location of Main, Check and Standby meters. TTPS was requested to comply those queries. OPTCL may take action for installation of feeder meters.

TTPS stated that the reply has already sent to CEA. DGM (O&M), Meramundali stated that action has been taken for installation of feeder meters at TTPS.

**[Action: TTPS / O&M]**

**E.4: Major Events in the month of January'16**

28.01.2016: 3<sup>rd</sup> 220/132 kV, 160 MVA Auto charged at Katapali S/S.

**E.5: Important Grid Incidences during the month of January'16.**

Important Grid incidents during the month of January'16 was reviewed. The incidents to be analysed and deliberated in the PCC meeting of ERPC

[Action: O&M / SLDC]

**E.6: Outage of major transmission Elements during the month of January'16. (above 10 hrs).**

Outage of major transmission elements above 10 hours during the month of October was reviewed. Out of two Nos. of such outage, one is due to insulator damage.

[Action: O&M]

**E.7: Review of Outage Program of State Generators / Transmission elements for the month of February & March'2016:**

Tentative Outage programme for State Generators for the month of **March'2016** are as follows:

Sl.	Station	Unit	Period	Remarks
1	Burla	# 1	26.01.16 to 24.02.16	Brake system rectification
		# 4	25.01.16 to 24.02.16	Annual Maintenance
		# 5	25.02.16 to 22.03.16	Annual Maintenance
		# 6	17.02.14 to continue	Programming for R, M & U
2	Chiplima	#3	15.02.14 to continue	Programming for R, M &U
3	Balimela	# 1	31.01.13 to continue	TGB problem and started R,M & U
		# 8	03.03.16 to 04.04.16	Annual maintenance
4	Upper Kolab	# 1	29.07.15 to 17.05.16	Capital Maintenance
5	Rengali	# 5	11.02.16 to 10.03.16	Annual maintenance
		# 3	14.03.16 to 12.04.16	Annual maintenance
6	Upper Indravati	# 3	23.11.15 to 30.04.16	Capital Maintenance
7	TTPS	# 5	06.03.16 to 11.03.16	ESP Work

[Action: OHPC / SLDC]

**E.8: Generation Program for the month of March'16.**

Generation schedule for the month of March'16 furnished by OHPC are given below.

Name of Hydro Gen. Station	Generation Programme (MW)		Reservoir Level as on 15.02.15	Reservoir Level as on 15.02.16	MDDL	High Flood Reservoir Level
	March'16 (1 <sup>st</sup> fortnight)	March'16 (2 <sup>nd</sup> fortnight)				
HPS-I, Burla	20	20	620.89ft	621.08ft	590 ft.	630 ft.
HPS-II, Chipilima	10	10	-	-	-	-
Balimela	90	90	1503.60ft	1490.30ft	1440 ft.	1516 ft.
Rengali	40	40	120.62mt	117.78mt	109.72m	123.5 mtr.
U.Kolab	150	150	855.30mt	854.37mt	844 mtr	858 mtr.
U. Indravati	105	105	638.44mt	634.30mt	625mtr	642 mtr
MKD (O/D)	30	30	2738.05ft	2737.65ft	2685 ft.	2750 ft.
<b>TOTAL</b>	<b>445</b>	<b>445</b>				

As per the Action Taken Report received from Department of Energy, Govt. of Odisha, vide Letter No. R&R-71/2015/1380 dated 16.02.2016, Average generation of Upper Kolab and Indravati shall be maintained as 100 MW and 75 MW respectively.

[Action: OHPC/ SLDC]

**E.9: Operating procedure for Odisha System.**

As per provision in the Regulation 5.1(4) of Odisha Grid Code, the draft Operating Procedure for Odisha System has been prepared and uploaded in the SLDC site (path: Document⇒ information). Members were requested and forward their comments / suggestions to SLDC before 15<sup>th</sup> December

2015. No comment has been received from Members except OHPC. It is again requested to forward comments on the said procedure. The final Operating Procedure shall be placed in the next meeting.

[Action: SLDC]

#### **E.10: Automatic Demand Management Scheme (ADMS)- Implementation in OPTCL system.**

Hon'ble CERC vide their order dated 31.12.2015 passed in Suo-motu Petition No.- 5/SM/2014 in the matter of Non-compliance of Regulation 5.4.2 (d) of IEGC directed all Respondents (SLDCs) for implementation of ADMS in their respective control area. CERC have allowed dead line till 30.06.2016 to the Respondent for implementation of ADMS. Failing which they will be liable for action under Section 142 of the Act. Copy of the order has already been forwarded to CGM (O&M) and CGM (RT&C). OPTCL may take necessary action for implementation of the same.

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

It was decided that SLDC may raise the issue in the OCC meeting and request ERLDC to provide the logic for implementation of the scheme in OPTCL system

[Action: SLDC / O&M / Telecom]

#### **E.11: Anticipated power generation and demand for the month of March'2016.**

Sl. No	Discom	Average	Peak
1	CESU	950	1300
2	WESCO	900	1200
3	NESCO	800	1000
4	SOUTHCO	400	550
5	OPEN ACCESS	200	200
<b>6</b>	<b>Total</b>	<b>3250</b>	<b>4250</b>
<b>Availability</b>			
	Hydro	450	1400
	State Thermal	750	750
	IPP, small hydro &RE	800	800
	ISGS share (including OA)	1000	1050
	CGP support (OA)	250	250
6	Total availability	3250	4250
<b>7</b>	<b>Surplus / Deficit</b>	<b>0</b>	<b>0</b>

### **PART F: OTHER ISSUES**

#### **F.1: Other Issues**

##### **Tripping of POWMAX feeder from Kesinga end**

SLDC stated that M/s POWMAX has complained regarding frequent interruption of power supply to their industry.

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

SLDC stated that in case load restriction, 132 kV Bolangir-Kesinga feeder is being hand tripped, interrupting power supply to M/s POWMAX industry. It was decided that only Kesinga area load may be restricted in case of contingency. Kesinga Grid shall be instructed accordingly.

[Action: O&M / SLDC]

##### **Interruption of power supply to HINDALCO.**

Hindalco stated regarding interruption of power supply to their Industry from Burla PH in case of disturbance.

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

Director (Commercial) stated that 220 kV, Katapali-Hindalco line is going to be charged soon.

[Action: O&M]

#### **F.2: Date and Venue of the next (95<sup>th</sup>) PSOC meeting will be intimated.**

List of participants in the 94<sup>th</sup> PSOC meeting dated 23.02.2016

## 94th Power System Operational Co-ordination Review Meeting

[ At 11:00 A.M. on 23.02.2016 ]

[At Power Training Center, OPTCL, Chandaka, Bhubaneswar]

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