



**STATE LOAD DESPATCH CENTRE**  
**OFFICE OF THE CHIEF LOAD DESPATCHER**  
**ODISHA POWER TRANSMISSION CORPORATION LIMITED**  
**GRIDCO Colony, P.O.- Mancheswar Rly. Colony, Bhubaneswar-17, FAX-0674- 2748509**  
**CIN – U40102OR2004SGC007553**

No-SGM (PS)-PL-15/2016 / 1984 (14)

Dated: 01.06.2017

From:

The Chief Load Despatcher  
SLDC, OPTCL, Bhubaneswar-17.

To:

As per distribution list

**Sub: Minutes of 109<sup>th</sup> PSOC meeting held on 23.05.2017 at SLDC, Bhubaneswar**

Sir,

Please find enclosed herewith the minutes of 109<sup>th</sup> Power System Operational Co-ordination meeting held on 23.05.2017 at SLDC, Bhubaneswar.

This is for your information & necessary action.

Encl: As above

Yours faithfully;

Chief Load Despatcher,  
SLDC, OPTCL

Copy along with enclosures forwarded to the Executive Assistant to CMD, Gridco / 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 (Telecom), OPTCL, Bhubaneswar.
8. The CGM (IT), OPTCL, Bhubaneswar.
9. The Sr. G.M (Const)-I, OPTCL, Bhubaneswar.
10. The Sr. G.M (Const)-II, OPTCL, Sambalpur.
11. The Sr. G.M (CPC), OPTCL, Bhubaneswar.
12. The Sr. G.M (CP), OPTCL, Bhubaneswar.
13. The Sr. G.M. (O&M), Zone-I, Narendrapur.
14. The Sr. G.M.(O&M), Zone-II, Meramundali.
15. The CEO, CESU, Bhubaneswar.
16. The A.O., WESCO Utility, Burla
17. The A.O., NESCO Utility, Balasore
18. The A.O., SOUTHCO Utility, 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.
43. The CEO, Bhubaneswar Power Pvt. Ltd, IRC Village, Nayapalli, Bhubaneswar

# Odisha Power Transmission Corporation Ltd. Bhubaneswar.

## Minutes of 109<sup>th</sup> PSOC meeting held on 23.05.2017 at SLDC, Bhubaneswar

List of participants is at Annexure.

CLD, SLDC welcomed all the members to the 109<sup>th</sup> PSOC meeting. In his welcome address, he highlighted the system performance for the month of April'2017 and overall power scenario of the State. He also emphasized on the power drawal, made by all the Discoms during the month.

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

### The review proceeded as follows:

#### 1: Confirmation of minutes of 108<sup>th</sup> PSOC meeting held on 24.04.2017

The minutes of meeting was circulated vide letter No. SGM (PS)-PI-15/2016/1687<sup>(45)</sup> dated 08.05.2017 to all the members and also uploaded in the SLDC website. No comment has been received from any of the members except OHPC, which was clarified in the Agenda.

#### Deliberation in the meeting:

The minutes of 107<sup>th</sup> PSOC meeting was confirmed.

### PART B : SYSTEM PERFORMANCE

#### B1: Review of Grid Performance for the month of April'2017.

##### (A) Frequency

It was noticed that, during the month of April'17, **73.15** % of times the frequency remained in the IEGC band i.e. 49.90Hz - 50.05Hz in comparison to 72.57 % during the month of March'17. The maximum and minimum System frequency during the month was **50.16 Hz & 49.76 Hz** respectively.

##### (B) Grid demand

Grid demand for the month of April'17 was reviewed. The average consumption during the month was **3463MW**. The maximum System demand of **4299 MW** occurred on **26.04.17** at 24:00 Hrs and minimum demand of **2466 MW** occurred on **03.04.17** at 07:00 Hrs.

#### Deliberation in the meeting

It is observed that the average demand during the month of April' 17 has been increased by 290 MW while the peak demand was increased by 235 MW from that of March'17. The average demand during the month has been increased by 230 MW in comparison to April'16. The energy consumption has been increased due to prevailing heat wave in the State.

##### (C) Voltage Profile of important Sub Stations in OPTCL System during the month of April'17.

The Voltage profile at different 220 kV buses in OPTCL system during the month of **April'17** was reviewed. The maximum Voltage of **242.65 kV** occurred at Jaynagar 220 kV bus while Katapali and Narendrapur, 220 kV bus have experienced the minimum Voltage of **189.94 and 192.37 kV respectively**. Bus Voltages at Samgara, Lapanga and Cuttack could not be incorporated due to non availability of energy meter in those S/Ss. The 220 kV Voltage profile of Jayanagar and Narendrapur and 400 kV Voltage profile of Meramundali bus during the month of April 2017 is shown.

**Deliberation in the meeting:**

Narendrapur Voltage shall be improved as charging of Atri S/S has been connected to Pandiabili (PG). As decided in the OCC meeting, the Tfr tap position at Jeypore PG to be kept at 12. The tap position at Jeypore (PG) need to be ascertained.

[Action: CGM (O&M) / OHPC / SLDC]

**(D) Loading of 220/ 132 kV Auto at 220 kV S/Ss in OPTCL system for the month of April'17.**

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

**Deliberation in the meeting:**

CGM (O&M) stated that energy meters have already been received and expected to be commissioned by end of June'17.

[Action: CGM (O&M)]

**(E) DISCOM Drawal during the month of April'17**

The schedule and actual energy drawal by Discoms for the month of **April'17** was reviewed.

**Deliberation in the meeting:**

It was noticed that CESU had overdrawn **11.19** MU followed by SOUTHCO 1.533 MU, while WESCO and NESCO have under drawn during the month.

[Action: All Distribution Utilities / SLDC]

**(F) Energy Generation / import during the month of April'17**

Energy generation and exchange during the month of April'17 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 **2493.24** MU.

**Deliberations in the meeting**

The energy demand has increased appreciably due to prevailing heat wave in the State.

**(G) Drawal of Machhakund Power during the month of April'17**

(i) The drawal of Machhakund power during the month of April'17 was **32.32** MU, against AP drawal of **30.95** MU.

In the 108<sup>th</sup> PSOC meeting, CGM (Telecom) stated that the RVDU is expected to be commissioned by 15<sup>th</sup> May'17. SGM (O&M)-I stated that if the traction bay at Machhakund PH Switchyard will be equipped and kept idle, the elements are likely to be utilized by Machhakund authority at some other places as replacement when required. As such the bay should be equipped just before commissioning of the proposed 2 X 10 MW Lower Machhakund small hydro station.

**(ii) Replacement of Multi Functional Meter (MFM) at Machhakund Power House**

The unit wise generation data in respect of #1, #2 & #6 of Machhakund PH are not available on the VPS in the SLDC control Room. This requires replacement of MFM at Machhakund PH. To carry-out the replacement work, shutdown on the above said units is required for half an hour each.

In the 108<sup>th</sup> PSOC meeting it was decided that, unit Head of Upper Kolab PH shall take up the matter with Machhakund Authority regarding issue of shutdown.

**Deliberations in the meeting**

CGM (Telecom) stated that MFM of unit 1 has been replaced. It was decided that DGM Upper Kolab HEP shall take up the matter with Machhakund Authority regarding issue of shutdown towards 2<sup>nd</sup> week of June'2017. CGM (Telecom) may co-ordinate with the DGM, Upper Kolab in this regard. CGM (Telecom) intimated that the RVDU at Jaynagar sub-station has been commissioned on 15.05.2017.

[Action: DGM, Upper Kolab / CGM (Telecom)]

**(H) Under Frequency relay operation in OPTCL System during the month of April'17.**

There is no UF Relay operation during the month of April'17 as the frequency had never gone beyond 48.50 Hz.

**(I) Status of Open Access applications during the month of April'2017**

Status of Open Access Applications received and disposed by SLDC during the month was reviewed.

**Deliberations in the meeting**

Total 121 numbers of Short Term / Medium term and Collective transaction applications have been processed by SLDC for according Consent / NoC during the month.

**PART C – Issues likely to be discussed in the 133<sup>rd</sup> OCC meeting of ERPC on 26.05.2017**

**C.1: Status of projects funded under PSDF schemes**

In the PSDF review meeting held on 29.04.16 at New Delhi, it was advised to RPCs to monitor the status of all the projects funded by PSDF. Therefore, constituents are requested to update the status of projects which are being funded by PSDF in the desired format.

The latest status as updated by OPTCL is as given below:

| Sl No | Name of Constituent | Name of Project   | Date of approval from PSDF | Target Date of Completion | Amount Approved (in Rs.) | Amount Drawn till date (in Rs.) | Status as updated in 129 <sup>th</sup> meeting  |
|-------|---------------------|---|----------------------------|---------------------------|--------------------------|---------------------------------|---|
| 3     | OPTCL               | Renovation & Up-gradation of protection and control systems of Sub-stations in the State of Odisha in order to rectify protection related deficiencies. | 11.05.15                   | 10.05.17                  | 162.5 Cr.                | 19.53 Cr.                       | <i>Total contract awarded for Rs. 67.73 Cr<br/>Erection work for received equipment is in progress.</i> |

**ERPC advised to submit monthly updated report to RPC secretariat.**

In the 131<sup>st</sup> OCC meeting, ERPC advised to furnish the information in the prescribed format (Annexure-B.3 (ii) of OCC agenda) by first week of every month on regular basis to Member Convener, PSDF Project Monitoring Group (AGM, NLDC, POSOCO) with a copy to NPC Division. In the 108<sup>th</sup> PSOC meeting G.M. (O&M) stated that the information is being sent regularly to ERPC in the prescribed format.

**Deliberations in the meeting**

(O&M) stated that the report is being submitted regularly to ERPC in the prescribed format.

## C.2: High Voltage problem in 400 kV Meramundali grid S/S: Regarding

GRIDCO vide letter dated 07.01.17 intimated that presently Odisha is going through very high Voltages at 400kV bus of Meramundali, Duburi and Mendhashal grid S/S. The situation is further worsened due to high reactive power flow from Meramundali to Angul pooling sub-station, from Duburi to Meramundali sub-station and from Kuchei to Duburi sub-station. It may be noted that, PGCIL has installed two nos. of 330 MVAR Bus reactors at Angul 765kV substation and two nos. of 125 MVAR Bus reactors at Angul 400kV substation, thus resulting high reactive power flow from Meramundali to Angul & Duburi to Meramundali grid S/S. In view of the above OPTCL suggests the following as short term and long term measures to mitigate the high Voltage issue as well as to improve the high reactive power flow situation.

### Short term measure

- OPTCL will install 80 MVAR reactor at Meramundali 400kV S/S.
- The Angul-Meramundali Double circuit ties to be opened at both ends.

### Long term measure

- The Meramundali-Angul Double circuit will be terminated at Meramundali (B).

A letter regarding the above change has already been forwarded to CEA and will be placed in the next Standing Committee meeting of CEA. Meremundali (B) will be a new 400kV substation of OPTCL, approved by CEA and the work order to be issued shortly.

In view of the above and as the high voltage situation is menacing, it is requested to grant permission for the short term measures, mentioned above, to get relief from the high voltage issue and high reactive power flow. The system in the above condition will remain stable.

In 130<sup>th</sup> OCC, ERLDC presented the study results and informed the following:

- The voltage at Meramundali is increasing during winter season due to low demand at Meramundali, Dubri and Mendhasal and insufficient reactive power support.
- In the present scenario the 765/400 kV Angul S/s is acting like sink of Reactive power for OPTCL system in and around 400kV Meramundali S/s.
- With opening of 400kV Angul-Meramundali line the export of reactive power to the ISTS network is reduced drastically but the voltage at 400kV Meramundali S/s is increasing by 4 kV which may affect the sub-station equipment.
- Further due to outage of one ckt of 400 kV Meramundali- Mendhasal the voltage at Meramundali is on higher side. This line may be restored at the earliest.

In 35<sup>th</sup> TCC, ERLDC informed that VAR is being generated at OPTCL system and the 765/400 kV Angul S/s is acting like sink of Reactive power for OPTCL system in around 400kV Meramundali S/s. The opening of 400kV Angul-Meramundali line will not the solution. Further due to outage of one ckt of 400 kV Meramundali- Mendhasal the voltage at Meramundali is on higher side. This line may be restored at the earliest.

OPTCL informed that 400 kV Meramundali- Mendhasal line will be charged on tomorrow and 315 MVA, 400/220kV ICT will be restored by 15<sup>th</sup> March, 2017.

Powergrid informed that the flexible LILO scheme as approved in 18th SCM was approved in their Board and it is in final stage and the scheme will be implemented by 2018.

TCC opined that the high voltage issue should be reviewed after restoration of 400 kV Meramundali- Mendhasal line and commissioning of 315 MVA, 400/220kV ICT at Meramundali in OCC meeting.

TCC advised all generators in around 400kV Meramundali S/s to absorb VAR up to maximum extent as per the capability curve. TCC also advised OPTCL to plan for proper reactive power compensation at 400kV Meramundali, New Dubri and Mendhasal S/s.

CE, CEA opined that reactive power compensation is part of grid security and it is eligible for PSDF grant. OPTCL may apply for PSDF.

In the 106<sup>th</sup> PSOC meeting, CGM (PP) stated that the generators connected to Meramundali should absorb VAR as per their capability and scope to arrest VAR injection by the State at higher Voltage. SLDC shall monitor such activity on real time.

In the 107<sup>th</sup> PSOC meeting, GM (O&M) stated that, the issue was discussed in the meeting convened by CEA on 10.03.2017 at New Delhi. CEA advised to monitor the VAR absorption by the generators connected with Meramundali 400 kV Bus. OPTCL may plan for installation of additional reactor at Meramundali. Isolation of Meramundali-Angul (PG) ckts has very marginal impact on VAR injection. However, after replacement of the ICT at Meramundali by 15<sup>th</sup> April'2017, the impact of isolation of the above ckts will be monitored.

In the 108<sup>th</sup> PSOC meeting, CGM (O&M) stated that as per the decision of PCC meeting of ERPC that, Sri A.Banerjea OPTCL is to be deputed to ERLDC for a joint system study to resolve the VAR generation and high Voltage problem at Meramundali S/S.

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

O&M stated that a joint system study has been done at ERLDC. It was suggested by ERLDC that 400 kV, 125 MVAR capacity bus reactors need to be installed at Meramundali, Mendhasal and New Duburi 400 kV Buses. Accordingly, a proposal shall be placed in the coming BoD meeting of OPTCL.

[Action: CGM (O&M)]

### **C.3: Operational Load Flow Study for Off-Peak Period (Winter Lean Period)**

In 128<sup>th</sup> OCC for lean off-peak load flow study, OCC finalized the date and time as follows

- 13.00 Hrs of 28th December, 2016.
- 02:00 Hrs of 29th December, 2016

In 130<sup>th</sup> OCC, PRDC informed that they will submit the report by end of March, 2017.

The report is available at ERPC website ([www.erpc.gov.in](http://www.erpc.gov.in))

Further OCC advised PRDC to carry out another load flow study in the first week of May, 2017 tentatively for 4<sup>th</sup> and 5<sup>th</sup> May, 2017 for 19:00 and 20:00 Hrs. Therefore, all utilities have to record data for four instances.

In the 108<sup>th</sup> PSOC meeting, CGM, SLDC stated that OCC decided to collect said data for 25<sup>th</sup> and 26<sup>th</sup> May'2017 in addition to the dates mentioned, as backup. SLDC shall write a letter to O&M in this regard. CGM (O&M) was requested to issue instructions to all field engineers for collection and forwarding the data to his office.

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

O&M stated that all field S/Ss shall be instructed to collect the data

[Action: CGM (O&M)]

#### C.4: Restoration of PLCC system of important lines

In 130<sup>th</sup> OCC meeting, OPTCL informed that PLCC panels at 220kV Joda end will be commissioned within a week. JUSNL informed that the Ramchandrapur end is ready in all respect for implementation of PLCC.

In 35<sup>th</sup> TCC, OPTCL informed that PLCC panels at 220kV Joda end will be commissioned by March 2017.

In 131<sup>st</sup> OCC, WBPDCCL informed that shutdown was proposed on 31<sup>st</sup> March, 2017 to complete the work. OPTCL informed that PLCC panels will be commissioned by March 2017.

In the 107<sup>th</sup> PSOC meeting CGM (Telecom) stated that PLCC at Joda end will be commissioned on 27<sup>th</sup> March'2017.

In the 108<sup>th</sup> PSOC meeting, CGM (Telecom) stated that local test of PLCC was done. Since the line was under shutdown, remote test could not be taken up. After revival of the line towards 2<sup>nd</sup> week of May'2017, remote test will be done.

#### Deliberations in the meeting

CGM (Telecom) stated that as per the letter received from BPL, the PLCC will be commissioned in the month of June17. The same has been intimated to ERPC.

[Action: CGM (Telecom)]

#### C.5: 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 400 kV 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.

In 130<sup>th</sup> OCC of ERPC, SLDC deliberated the completion schedule of inter-connecting system as follows:

| Sl.       | 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.      | Construction of 220 kV Sadeipali-Kesinga portion has started. Expected by June'17                                   |
| b.        | LILO of one circuit of Katapalli-Sadeipalli 220 kV D/C line at Bolangir S/S.    | <b>Charged on 04.05.16</b>  |
| <b>2.</b> | <b>400/220 kV Keonjhar S/S.</b>   |   |
| a.        | Keonjhar (PG)-Keonjhar (OPTCL) 220 kV D/C line                                  | Line is expected by June'2017   |
| b.        | Keonjhar (PG)-Turumunga (OPTCL) 220 kV D/C Line.                                | By 2019   |
| <b>3.</b> | <b>400/220 kV Pandiabil Grid S/s</b>  |   |
| a.        | Pratapsasan(OPTCL)-Pandiabil (PG) 220 kV D/C line                               | December 2017   |
| b.        | LILO of one circuit of Atri-Puri (Samangara) 220 kV D/C line at Pandiabil (PG). | Atri – Pandibili 220 kV one ckt charged on 19.05.2017<br>Pandiabili – Samangara 220 kV one ckt. charged on 20.05.17 |

CGM (Const) stated that, at present one ckt of Atri - Samangara line made LILO at Pandiabili (PG). LILO of 2<sup>nd</sup> ckt of the said line will be done after examining the commercial impact. GRIDCO may give its view in this regard. Further, it may also be examined to divert Khurda area load to

Mendhasal / Atri and connecting Narendrapur-Atri 2<sup>nd</sup> ckt, which is presently charged at 132 kV for power supply to Khurda.

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

**C.6: 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 113<sup>th</sup> 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.

CEEC vide letter dated 22.08.15 had furnished their status of the preparation of Crisis Management Plan (CMP) for Cyber attacks in their system.

In the 107<sup>th</sup> PSOC meeting, CGM (IT) informed that “Crisis management plan” work is awarded to M/s Digital Age Strategies Pvt. Ltd. The said firm has completed the study of Servers and Firewalls at SLDC, Bhubaneswar and back-up SLDC at Meramundali. Presently the data centers of SLDC and GRIDCO are being audited for IT security vulnerability assessment.

SLDC is requested to nominate one officer for attending the Cyber Security training to be held at Bengaluru during 11<sup>th</sup> to 15<sup>th</sup> April’2017. Nominations from GRIDCO and OPTCL have since been received. Top management awareness-cum Seminar on the subject shall be organized subsequently.

In the 108<sup>th</sup> PSOC meeting, IT stated that the Cyber Security training was held at Bengaluru during 11<sup>th</sup> to 15<sup>th</sup> April’2017. Regarding the proposed in house training to be held at Bangalore, members suggested to conduct the training at Bhubaneswar, so that all other officers can attend the same. IT requested to spare one room at SLDC building for **Security Operation Center**. SLDC stated that there is no spare room available at present.

**Deliberations in the meeting**

CGM (IT) stated that top level sensitization program will be held on 25<sup>th</sup> May’17, after which the suggestions will be implemented.

[Action: IT]

**C.7: 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 104<sup>th</sup> OCC, WBPDCCL informed that Bandel TPS is certified with IS 18001. OPTCL vide letter No. TB-SO-MISC-9/2010/1914 dated 20.12.2014 had proposed to go for IS 18001:2007 certification as per direction of CEA.

In the 107<sup>th</sup> PSOC meeting O&M stated that the proposal will be placed before PSC due to single bid. In the 108<sup>th</sup> PSOC meeting, O&M stated that the bid has been cancelled. Negotiation with BIS is under process.

**Deliberations in the meeting**

O&M stated that BIS is not responding. Members suggested that OHPC has complied with the certification. O&M may contact OHPC to follow the procedure adopted by them.

[Action: CGM (O&M)]

**C.8. Tie bay of 125MVAR Bus reactor and 400kV Indravati-Indravati and Indravati(PG):**

Under outage wef 18/03/16 due to R-Ph pole bursting of Tie CB. Due to non-availability of the tie bay, the Buses are coupled only via the tie bay of 400kV Rengali-Indravati and 400kV Indravati-Jeypore at Indravati and any outage of the lines would result in decoupling of the Buses.

In 125<sup>th</sup> OCC, Powergrid informed that main CB has some problem which will be taken care by OHPC / OPTCL.

In 129<sup>th</sup> OCC, OPTCL informed that the CB has reached at the site. The installation work will be completed by February, 2017.

In 131<sup>st</sup> OCC, OPTCL informed that the work will be completed by end of March, 2017.

In the 107<sup>th</sup> PSOC meeting, SGM (O&M)-I stated that breaker erection has already started from 22.03.2017.

In the 108<sup>th</sup> PSOC meeting, SGM (O&M)-I stated that installation of tie breaker has been completed. After receipt of clearance from Siemens, the same will be commissioned.

**Deliberations in the meeting**

Sr. G.M (O&M)-I stated that the breaker has been commissioned on 8<sup>th</sup> May 2017.

**C.9: Replacement of old RTU in Eastern Region for reporting of RTU / SAS to back-up control centre**

The matter for replacement of old RTU in Eastern Region for reporting to back up control centre has been discussed in a special project review meeting held on 14th February 2017 at ERPC & also on 35th TCC/ERPC meeting held on 24th / 25th February 2017, It was also mentioned that there would not be any service support for the old RTUs from POWERGRID after 15 years of operation period. It was accordingly advised to ERLDC to form a committee with POWERGRID as a nodal agency for assessment of such old RTUs vis-a-vis further action plan on replacement.

It was also advised to submit a report in the next TCC/ERPC meeting.

The matter for replacement of old RTU in Eastern Region for reporting to back up control centre has been discussed again in 19th SCADA O&M meeting held at ERLDC, Kolkata on 07th April 2017, wherein nomination of nodal person name from OPTCL, WBSETCL, DVC, BSPTCL, JUSNL, POWERGRID ERTS-1, POWERGRID ERTS-2, ERLDC, MPL & Jorethang has been collected.

Nomination from NTPC all stations including Nabinagar, NHPC all stations, Dikchu, Teesta-III, Chuzachen, JITPL, GMR, Ind Bharat & APNRL are yet to be provided. ERLDC has already issued letter ref no: ERLDC / SCADA O&M / 2017/ dated 11.04.2017 for the same. It is requested to provide the nomination from these stations.

In the 108<sup>th</sup> PSOC meeting, CGM (Telecom) stated that tender has already been floated for replacement of old RTUs. A meeting is scheduled to be held between OPTCL, POWERGRID and Chemtrol during 1<sup>st</sup> week of May'17 to decide integration charges.

**Deliberations in the meeting**

CGM (Telecom) stated that POWERGRID suggested to contact the vendor directly as the contract period is over. The tender has been cancelled, since the installation cost is more than the RTU cost. A fresh tender will be done.

[Action: CGM (Telecom)]

**C.10: Implementation of Automatic Demand Management Scheme**

OPTCL vide mail dated 24.02.2016 pointed that Hon'ble CERC vide their order dated 31.12.2015 passed in Sou-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 implantation 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.

\*\*\*\*\*

The DPR for ADMS has already been approved by BoD, OPTCL. SLDC shall submit the proposal for funding by PSDF for ADMS to O&M wing of OPTCL for further action.

In the 108<sup>th</sup> PSOC meeting, SLDC stated that filling of format for PSDF and floating of tender is under process. The DPR will be sent to ERPC. CGM (Telecom) stated that SLDC may contact the consultant of PSDF for filling the format. The proposal has already been sent to NLDC to include for funding through PSDF.

**Deliberations in the meeting**

SLDC stated that floating of tender is under process.

[Action: SLDC]

**C.11: Mock Black start exercises in Eastern Region**

Schedule of Mock black start exercise for State Hydro Stations for FY 2017-18 are as tabled.

| Sl. | Name of HEP | Schedule                        | Complied on | Schedule                       | Complied on |
|-----|-------------|---------------------------------|-------------|--------------------------------|-------------|
|     |             | <b>Test-I</b>                   |             | <b>Test-II</b>                 |             |
| 1   | U.Kolab     | Last week of May'17             | May'17      | Last week of Jan'18            |             |
| 2   | Rengali     | 2 <sup>nd</sup> week of June'17 |             | Last week of Nov'17            |             |
| 3   | U.Indravati | 3 <sup>rd</sup> week of June'17 |             | 2nd week of Feb'18             |             |
| 4   | Balimela    | 3 <sup>rd</sup> week of Oct'17  |             | 3 <sup>rd</sup> week of Oct'17 |             |
| 5   | Burla       | Last week of June'17            | Jun'17      | Last week of June'17           |             |

In the 108<sup>th</sup> PSOC meeting, SLDC stated that Black start exercise for Burla is scheduled to be conducted during the month of May'2017. Further, the existing procedure for Burla HEP needs to be modified due to shutdown of units at Burla and non-availability of bus splitting arrangement at Burla switchyard.

**Deliberations in the meeting**

OHPC stated that mock black start exercise for Burla may be programmed in June'2017. SLDC stated that the mock black start exercise for Upper Kolab is scheduled on 30<sup>th</sup> May'17.

[Action: SLDC / OHPC]

**C.12: Pollution mapping for Eastern Region**

Powergrid updated the latest status as follows:

| Scope (no. of locations) | Installed Locations | Number of locations where the results for 1st set of Measurements submitted | No. of locations where the results for 2nd set of Measurements submitted | Number of locations where the results for 3rd set of Measurements submitted | Number of locations where the results for 4 <sup>th</sup> set of Measurements submitted |
|--------------------------|---------------------|---|--|---|---|
|                          |                     |   |  |   |   |

|       |     |     |     |    |    |   |
|-------|-----|-----|-----|----|----|---|
| OPTCL | 164 | 102 | 100 | 90 | 79 | 1 |
|-------|-----|-----|-----|----|----|---|

Powergrid informed that most of scheduled measurements till fourth set has not been completed yet, it is requested to complete the measurements and submit the results at the earliest.

Powergrid added that they prepared an online format to submit the details of measurements. Powergrid requested to fill the Google form (<https://goo.gl/6375HJ>) for onward submission of measurements for better analysis of results.

OCC advised all the constituents to complete the measurements as per the schedule.

In the 108<sup>th</sup> PSOC meeting, O&M stated that the updated report will be sent to ERPC.

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

O&M stated that the OPTCL is providing the progress through online.

#### **C.13: Tap Position Optimization at Jeypore**

Current Tap position at Jeypore ICT is 14. From scatter plot of 400/220 kV Jeypore S/S for the month February it is seen that 80% of time it is remaining in 1<sup>st</sup> quadrant and 20 % of time in 2<sup>nd</sup> quadrant. This means most of the time voltage at both 400 and 220 kV level remains above their nominal value and occasionally 400 kV side voltage going below nominal value. But, 220 kV side voltage is always remaining on the higher side. Also it is seen that although 80% of time scatter plot is staying in 1<sup>st</sup> quadrant but Max voltage is within 420 kV. So if we reduce the Tap position then it will help to reduce 220 kV voltage and further increase 400 kV side voltage which is remaining below 400 kV for 20% of time and within 400 to 420 kV for 80 % of time. So even after tap change 400 kV side voltage will stay mostly within 420 kV and may occasionally cross 420 kV by a very small margin. We also have reactors at Jeypore and Indravati for controlling high voltage at 400 kV. It is proposed that Tap may set to 12 from 14.

131<sup>st</sup> OCC advised Powergrid to do the tap changing from 14 to 12.

Powergrid agreed to do the tap changing in off load condition.

In the 108<sup>th</sup> PSOC meeting, it was deliberated that the Voltage profile at Jayanagar is not improving. Sr. G.M (O&M)-I may ascertain the tap position at Jeypore (PG)

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

DGM, Upper Kolab HEP stated that the tap position at Jeypore PG is yet to be changed to “12”. It was decided to raise the issue of changing tap position in the 133<sup>rd</sup> OCC by SLDC.

[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 **April’17**:

| Sl. No | Name of Discom | No. of message issued | Over drawal (MU) | Deviation (%) |
|--------|----------------|-----------------------|------------------|---------------|
| 1      | CESU           | 1                     | 11.19            | 1.47          |
| 2      | WESCO          | 2                     | -1.702           | 0.26          |
| 3      | NESCO          | 2                     | -7.641           | 1.54          |
| 4      | SOUTHCO        | 0                     | 1.533            | 0.51          |
|        | <b>Total</b>   | <b>5</b>              | <b>3.38</b>      |               |

It is noticed that CESU had overdrawn substantial quantum to the tune of **11.19 MU**.

**Deliberations in the meeting**

It was noticed that CESU had overdrawn **11.19 MU** followed by SOUTHCO **1.533 MU** while WESCO and NESCO Utility have under drawn **1.702 MU** and **7.641 MU** respectively. All Distribution Utilities were advised to predict their day ahead drawal accurately to avoid deviation.

[Action: All Discoms]

**D.2: 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     | 220/132 kV, 100 MVA, Auto- 2 at Duburi | Oil leakage since 24 <sup>th</sup> October'2016 | May'2017                 |
| 2     | 132 kV Sunabeda-Damanjodi line         | For conversion to DC                            | Charged on 05.05.17      |

[Action: CGM (O&M)]

**D.3: Communication issues**

**Installation of communication equipment by CGPs / Industries.**

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

| Sl. | Name of CGP         | Present status   |
|-----|---------------------|--|
| 1   | M/s IFFCO, Paradeep | Outdoor commissioning work completed. RTU was locally tested. CVT already replaced. Data will be integrated after restoration of OPGW between New Duburi & Paradeep. |
| 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 Ferrotech | PLCC established and inspection by Telecom Engineers completed. Database has already been prepared by OPTCL.   |
| 5   | CONCAST             | No kV/Hz. (Industry is under lock up)  |
| 6   | VISA                | CB & Status data are not available   |
| 7   | Paradeep            | Data not available at ERLDC (Transducers need replacement)   |

GCC has convened a meeting with all the CGP and EHT consumers on 21<sup>st</sup> February'2017 to discuss the communication issues. In the 106<sup>th</sup> PSOC, SGM (Telecom) stated that data from Paradeep S/S will be obtained after availing shutdown of 220 kV Duburi-Paradeep DC line for OPGW stringing.

In the 107<sup>th</sup> PSOC meeting, GCC stated that the CGPs and EHT consumers have assured to establish communication system within a specified time limit. In case they fail to do so the matter will be placed before the OERC.

In the 108<sup>th</sup> PSOC meeting, GCC stated that, the minutes of the meeting have already been forwarded to OERC. SLDC stated that the generation of GMR unit connected to the State network is being received. It was decided that CGM (Telecom) will write to GMR for installation of a separate RTU for the said unit.

**Deliberations in the meeting**

CGM (O&M) stated that shutdown of 220 kV Duburi-Paradeep DC line for OPGW stringing will be allowed after charging of Duburi Auto. Members suggested that GCC may file a Petition before the OERC for non compliance of data communication by the CGPs.

[Action: GCC / RT&C]

#### **D.4: Web based drawal / generation scheduling.**

In the 107<sup>th</sup> PSOC meeting, CGM (IT) informed that Generators web based scheduling work is completed except for generation of report indicating “Final Generation Schedule” for which SLDC shall furnish the requisite format. SLDC was requested for a report to ascertain the submission of schedule by the CGPs.

It was decided to take a backup of the past web scheduling submissions by the generators and preserve them off line.

It is proposed to Go-Live for Generators web based scheduling w.e.f 1<sup>st</sup> April'2017. SLDC may issue necessary order.

Due to non-availability of sorting function for Date & Name of CGP under Accept / Edit Generator DC, difficulty is being faced by SLDC to find out the data of a particular CGP for a particular date. Further, the link for final schedule preparation has not been updated in the Web Based Scheduling application. Further, it is suggested by SLDC to take suitable back up of all the old records i.e. the DCs sent by the CGPs previously and clean the application database up to 31<sup>st</sup> March 2017.

In the 108<sup>th</sup> PSOC meeting, IT stated that **final report** generation will be completed by April'2017. **Searching and Sorting** of data has been done. The status to indicate whether the CGP has done scheduling or not, will be completed. SLDC may go for parallel run of the program for the month of May and June'17. From 1<sup>st</sup> July'17 the software will be made operative. SLDC may write a letter in line with the above program.

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

It was decided that acceptance of schedule for the month of April will be done by SLDC. A meeting will be conducted with IT and the scheduling group on 30<sup>th</sup> May'17 to resolve the pending issues.

[Action: SLDC / (IT)]

#### **D.5: 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.

It was deliberated that 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.

In the 100<sup>th</sup> PSOC meeting CGM (IT) stated that by end of August'2016 testing of all meters of CESU control area will be completed for billing purpose. SLDC may check August data from both the meters.

In the 104<sup>th</sup> PSOC meeting, DGM (IT) stated that, data from 90 Nos of S/Ss will be provided by January'2017. Gridco stated that the events such as PT failure, CT polarity reversal, meter power failure, MD reset, time synchronization etc. are not being incorporated the AMR. It was decided that IT, SLDC and GRIDCO may have a separate meeting to resolve the issue.

In the 105<sup>th</sup> PSOC meeting DGM (IT) stated that, data from 100 Nos of S/Ss will be provided by February'17. The issues raised by Gridco will be addressed except Time synchronization and MD reset.

In the 107<sup>th</sup> PSOC meeting, CGM (IT) stated that AMI-UAT open points viz., (a) “Status Flag” for events and (b) Phaser Diagram issues are resolved by TCS. SLDC and GRIDCO were requested to spare their officers on 24<sup>th</sup> and 25<sup>th</sup> March'17 for a final testing and Sign-off. Further if any non-fatal cosmetic issues remain, the same shall be resolved by TCS during support service period. Accordingly, an undertaking shall be obtained by IT from TCS. Hence it is proposed to go for parallel run with effect from 1<sup>st</sup> April'2017 for a period of six months after testing the software by the UAT team, before going Live. Out of 125 Grid S/Ss, 101 S/Ss reported 100 % data during March 2017.

In the 108<sup>th</sup> PSOC meeting IT stated that data for 39 Nos out of 41 Nos of CESU interface S/Ss have been completed. SLDC may prepare bill from 1<sup>st</sup> July with both from AMR and legacy meter data. If there is no difference between both the bills, the software will be made **Go Live**. It was further decided that AMR data will be taken on 1<sup>st</sup> day and manual data will be taken on 2<sup>nd</sup> day.

**Deliberations in the meeting**

IT stated that parallel billing for 188 Nos of metering points has been done but the report is yet to be received by IT. UAT team have given their observations. The parallel billing shall be continued.

[Action: SLDC / IT]

**D.6: 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.

In the 106<sup>th</sup> PSOC meeting CGM (IT) stated that the work will be awarded to TCS after notification of Deviation Mechanism Regulations by OERC. SLDC stated that OERC may not allow time for implementation of the DSM Regulations. As such action may be taken for placing Order.

In the 107<sup>th</sup> PSOC meeting, SLDC stated that IT may take necessary steps for placing order for the DSM software.

In the 108<sup>th</sup> PSOC meeting IT stated that TCS will forward their commercial offer by 1<sup>st</sup> week of May'17.

**Deliberations in the meeting**

IT stated that commercial offer will be given by TCS by 1<sup>st</sup> week of June'17

[Action: (IT) / SLDC]

**D.7. RSP Issue**

Repeated tripping of 220 kV Rourkela PGCIL to Tarkera Grid Substation Feeders 1&2 leading to voltage dips and power system disturbances and subsequent production losses at Rourkela Steel Plant.

**Deliberations in the meeting**

It was decided that the patrolling of the above line to ascertain proper earthing and tree clearance shall be done by O&M.

[Action: O&M]

**D.8. BPPL Issue**

1. BPPL has suffered huge Generation loss during April and May -2017 because of shutdown activities taken by O&M on Choudwar –TS Alloys circuit, though TS Alloys – Aarti circuit was opened for evacuation, but due to repeated occurrences of high voltage condition, power evacuation seriously hampered which had forced BPPL to decrease the Generation.
2. Because of evacuation constraints, BPPL had to surrender partly the ongoing STOA MW quantum that was allotted for May 2017 which incurred financial losses from every angle.
3. During the month of April and May (up to 15<sup>th</sup>), because of repeated Islanding, circuit outage condition, and unit tripped on line fault, under injected quantum is 710 MWH , for which penalty is being imposed on BPPL inviting financial losses and burden.

**Deliberations in the meeting**

CGM (SLDC) stated that the incidents are temporary, when the line is under shutdown for maintenance. However, in case of transmission constraint, SLDC can revise the Open Access schedule.

[Action: SLDC / BPPL]

#### **D.9. Furnishing of monthly Generation / Injection data**

It is noticed that the monthly generation / injection data in respect of State Generators & CPPs are not being received by SLDC in time even after a lot of pursue. Since these data are required for preparation of CEA report by 8<sup>th</sup> day of each month, it is required that all OHPC stations / TTPS/ IbTPs & CGPs should furnish the data by 3<sup>rd</sup> day of each month positively.

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

It was decided that OHPC Hd. Qrs office will collect the data from all Hydro Stations and forward to SLDC.

[Action: OHPC / SLDC]

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

##### **CESU**

1. Wide mismatch between actual drawal data and drawal displayed in the SCADA. The mismatch is to the tune of -70 to +120 MW.
2. SLDC should provide the weekly Deviation Bill to CESU for analysis.

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

SLDC stated that CESU may develop the demand estimation logic without depending fully on SCADA data. Both data may be compared to ascertain the error correction factor. The Deviation bill is being prepared from the monthly meter data at the end of the month on weekly basis. CESU may use the AMI data for demand estimation after its commercial implementation.

The SCADA display data is for monitoring purpose only, which may not match exactly with the meter data.

[Action: CESU / SLDC]

##### **NESCO**

1. Exclusion of OA from daily schedule.
2. Barbil, Bangiriposhi & Rairangpur grid data are to be updated in RVDU.
3. Drawl of all the OA consumers are to be appeared in one minute data.

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

SLDC stated that Open Access schedule is being separately indicated with the name of the drawee. Open Access customers are the consumers of NESCO. Display of drawal for such consumers is not feasible.

[Action : NESCO/ Telecom]

### **PART E: OPERATIONAL PLANNING**

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

The status of commissioning of new transmission elements deliberated in the meeting 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' 2017.   |
| 2             | Commissioning of 400 kV Meramundali-Mendhasal 2 <sup>nd</sup> ckt. | Line is ready and shall be charged after commissioning of 3 <sup>rd</sup> ICT at Mendhasal, which is under progress. Expected by July' 2017. |
| 3             | Commissioning of 220 kV Bidanasi-Cuttack line                      | Idle Charged on 29.11.2016   |
| 4             | Commissioning of 220/132 kV Cuttack S/S                            | Commissioned on 27.03.2017   |
| 5             | Commissioning of 132 kV Baripada (PG)-Jaleswar line                | Work has already been started, which will be completed by June 2017.   |
| 6             | Commissioning of 220/132 kV Kesinga S/S                            | Work under progress. Expected by December' 2017.   |

The list of Grid S/Ss already charged earlier and scheduled to be charged during FY 2016-17 has been placed in the meeting. The Discoms were requested to take necessary action for availing power supply through 33 kV feeders.

| Sl. No | Name of S/S | Date of Charging | No of Bays | Name of bays          | Remarks |
|--------|-------------|------------------|------------|-----------------------|---------|
| 1      | Argul       | 06.05.14         | 4          | 1.IIT                 |         |
|        |             |                  |            | 2.IIT                 |         |
|        |             |                  |            | 3.NISER               |         |
|        |             |                  |            | 4.NISER               |         |
| 2      | Barbil      | 02.08.14         | 5          | 1.Barbil              |         |
|        |             |                  |            | 2.Bhadrasahi          |         |
|        |             |                  |            | 3.Vacant              |         |
|        |             |                  |            | 4.Vacant              |         |
|        |             |                  |            | 5.Vacant              |         |
| 3      | Kuchinda    | 24.11.14         | 5          | 1.Kuchinda            | Loaded  |
|        |             |                  |            | 2.Laikera             | Loaded  |
|        |             |                  |            | 3.Laida(Proposed)     |         |
|        |             |                  |            | 4.Jamankira(proposed) |         |
|        |             |                  |            | 5.Kusumi(proposed)    |         |
| 4      | Nuapada     | 27.12.14         | 5          | 1.Bishra              |         |
|        |             |                  |            | 2.Khariar Road        |         |
|        |             |                  |            | 3.Vacant              |         |
|        |             |                  |            | 4.Vacant              |         |
|        |             |                  |            | 5.Vacant              |         |
| 5      | Boud        | 28.01.15         | 5          | 1.Purnacuttack        |         |
|        |             |                  |            | 2.Boud                |         |
|        |             |                  |            | 3.Badhiapada          |         |
|        |             |                  |            | 4.Chatrang(proposed)  |         |
|        |             |                  |            | 5.Jampalaka(proposed) |         |
| 6      | Sarasmal    | 13.03.15         | 4          | 1.Industrial          | Loaded  |
|        |             |                  |            | 2.Kolabira            | Loaded  |
|        |             |                  |            | 3.ODSSP(proposed)     | Loaded  |
|        |             |                  |            | 4.Vacant              |         |
| 7      | Banki       | 26.03.15         | 4          | 1.Banki               |         |
|        |             |                  |            | 2.Sunadei             |         |
|        |             |                  |            | 3.Vacant              |         |
|        |             |                  |            | 4.Vacant              |         |
| 8      | Dabugaon    | 10.04.15         | 4          | 1.Dabugaon            |         |
|        |             |                  |            | 2.Papdahandi          |         |
|        |             |                  |            | 3.Medina              |         |
|        |             |                  |            | 4.Kosamguda           |         |
| 9      | Umerkote    | 10.04.15         | 4          | 1.Umerkote            |         |
|        |             |                  |            | 2.Adhikariguda        |         |
|        |             |                  |            | 3.Beheda              |         |
|        |             |                  |            | 4.Vacant              |         |
| 10     | Konark      | 29.06.15         | 4          | 1.Gop                 |         |
|        |             |                  |            | 2.Konark              |         |
|        |             |                  |            | 3.ODSSP(proposed)     |         |
|        |             |                  |            | 4.ODSSP(proposed)     |         |
| 11     | Lapanga     | 11.08.15         | 4          | 1.Vacant              |         |

|    |                     |          |   |                             |  |
|----|---------------------|----------|---|-----------------------------|--|
|    |                     |          |   | 2.Vacant                    |  |
|    |                     |          |   | 3.Vacant                    |  |
|    |                     |          |   | 4.Vacant                    |  |
| 12 | Kalunga             | 07.09.15 | 5 | 1.IDC                       | Loaded   |
|    |                     |          |   | 2.Industrial                | Loaded   |
|    |                     |          |   | 3.Kalunga                   | Loaded   |
|    |                     |          |   | 4.Mahaveer Ferro            | Loaded   |
| 13 | Marshaghai          | 16.10.15 | 5 | 1.Luna                      |  |
|    |                     |          |   | 2.Mahakalpada               |  |
|    |                     |          |   | 3.Lift irrigation(proposed) |  |
|    |                     |          |   | 4.Vacant                    |  |
|    |                     |          |   | 5.Vacant                    |  |
| 14 | Somnathpur          | 11.12.15 | 4 | 1.HIL                       |  |
|    |                     |          |   | 2.Vacant                    |  |
|    |                     |          |   | 3.Vacant                    |  |
|    |                     |          |   | 4.Vacant                    |  |
| 15 | Atri                | 24.02.16 | 4 | 1.Vacant                    |  |
|    |                     |          |   | 2.Vacant                    |  |
|    |                     |          |   | 3.Vacant                    |  |
|    |                     |          |   | 4.Vacant                    |  |
| 16 | Padampur            | 24.02.16 | 5 | 1.Padampur                  | Loaded   |
|    |                     |          |   | 2.Gaisilat(proposed)        |  |
|    |                     |          |   | 3.Paikmal(proposed)         | Loaded   |
|    |                     |          |   | 4.Melchamunda(prop)         |  |
|    |                     |          |   | 5.Vacant                    |  |
| 17 | Mania               | 31.03.16 | 5 | 1.Vacant                    |  |
|    |                     |          |   | 2.Vacant                    |  |
|    |                     |          |   | 3.Vacant                    |  |
|    |                     |          |   | 4.Vacant                    |  |
|    |                     |          |   | 5.Vacant                    |  |
| 18 | Puri<br>(Samangara) | 30.05.16 | 5 | 1.Sriramnagar               |  |
|    |                     |          |   | 2.Sriramnagar               |  |
|    |                     |          |   | 3.Gabakunda                 |  |
|    |                     |          |   | 4.Vacant                    |  |
|    |                     |          |   | 5.Vacant                    |  |
| 19 | Bangiriposi         | 03.10.16 | 4 | 1.Bangiriposi               | Loaded   |
|    |                     |          |   | 2.Vacant                    |  |
|    |                     |          |   | 3.Vacant                    |  |
|    |                     |          |   | 4.Vacant                    |  |
| 20 | Infocity-II         | 23.12.16 | 5 |                             |  |
| 21 | Khajuriakata        | 28.03.17 | 5 |                             | 33/11 kV S/S under Dindayal Scheme.  |
| 22 | Chandaka-B          | 31.03.17 | 5 |                             | 33/11 kV Chandaka S/S under ODSSP.   |
| 23 | Malkangiri          | 28.03.17 | 5 |                             | Govindapali & Padia S/S const. in progress under ODSSP. (one feeder charged) |
| 24 | Bonei               | 15.04.17 | 5 |                             | One feeder Loaded  |
| 25 | Bhogorai            | 29.03.17 | 5 |                             |  |

Distribution Utilities are advised to take necessary action for drawal of power from the S/Ss already charged and prepare their action plan for takeoff arrangement.

**[Action: All DISCOMs]**

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

Energy meters have already been installed at all hydro stations. Billing for all OHPC stations is to be done from the newly installed energy meters.

In the 108<sup>th</sup> PSOC meeting, it was decided that for all OHPC stations the main meter reading shall be considered for billing purpose from 1<sup>st</sup> May'2017.

### **Deliberations in the meeting**

It was decided that for all OHPC stations the Apex meter reading shall be considered for billing purpose from 1<sup>st</sup> May'2017. CGM (PP) shall write a letter to OHPC accordingly. OHPC shall take necessary follow up action with GRIDCO.

[Action: OHPC / GRIDCO]

## **E.3: Installation of ABT compliance Energy Meter at Ib TPS feeders & Generators**

SLDC shall prepare the schedule and Energy Accounting in respect of IbTPS. It is learnt that the Main meter installed by IbTPS feeders is recording 30 minutes reading while Check meter provided by OPTCL is recording 15 minutes reading. Unless ABT compliance Main and Check energy meters installed in IbTPS feeders & Generators, the energy accounting and PAFM cannot be computed. It is requested OPTCL / IbTPS to provide ABT compliance Main and Check meters in all the 220 kV IbTPS feeders & Generators.

### **Deliberations in the meeting**

It was decided that OPGC shall give a proposal to CGM (O&M) for providing ABT compliance meters in their feeders and Generators.

[Action: IB TPS/ O&M]

## **E.4: Major Events in the month of April'17**

**12.04.2017: 220/33kV S/S at Bonai commissioned.**

## **E.5: Important Grid Incidences during the month of April'17.**

There was only one Grid incidents occurred during the month. All 400 kV lines emanating from Meramundali Grid S/S tripped. O&M may analyze the incident for deliberation in the OCC meeting of ERPC. It is also noticed that 400 kV Meramundali-Vedanta DC line is tripping frequently.

### **Deliberations in the meeting**

CGM (Const) stated that action has been taken for clearing trees under the line.

[Action: Const./O&M / SLDC]

## **E.6: Outage of major transmission Elements during the month of April'17. (above 10 hrs).**

Outage of major transmission elements above 10 hours during the month was reviewed. The outages are due to bursting of LA and snapping of conductor in the switchyard.

[Action: O&M]

## **E.7: Review of Outage Program of State Generators / Transmission elements for the month of June'17:**

Tentative Outage programme for State Generators for the month of **June'2017** are as follows:

| <b>Sl.</b> | <b>Station</b> | <b>Unit</b>              | <b>Period</b>  | <b>Remarks</b>   |
|------------|----------------|--------------------------|--|--|
| 1          | Burla          | # 2<br># 5<br># 6<br># 7 | 22.07.16 to 31.05.17<br>25.10.16 to continue<br>16.10.15 to continue<br>21.02.17 to 15.07.17 | Capital Maintenance<br>Under R,M & U<br>Under R, M & U<br>GT problem |
| 2          | Chiplima       | # 1<br># 3               | 15.04.17 to 15.06.17<br>15.10.15 to continue   | Annual Maintenance & bush replacement<br>Under R,M & U               |
| 3          | Balimela       | # 1<br># 7               | 05.08.16 to continue<br>16.04.17 to 30.06.17   | Under R,M & U<br>Generator Stator problem                            |
| 4          | Rengali        | # 5                      | 21.03.17 to 10.06.17   | Hoist gate problem   |
| 5          | Upper Kolab    | # 3                      | 18.04.17 to 30.06.17   | Forced outage due to stator fault                                    |

The proposed shutdown program of one of the IbTPS units may be deferred. The shutdown may be taken during the month of August or September'17.

### **Deliberations in the meeting**

OPGC stated that they have applied one month extension for renewal of boiler license which is due in the month of June and July for # 1 & # 2 respectively. The shut down program will be finalized after receiving reply from the appropriate authority.

[Action: Ib TPS/ SLDC]

### **E.8: Generation Program for the month of June'17.**

Generation schedule for the month of June'17 furnished by OHPC are given below.

| Name of Hydro Gen. Station | Generation Program (MW)             |                                     | Reservoir Level as on 01.05.16 | Reservoir Level as on 01.05.17 | MDDL     | High Flood Reservoir Level |
|----------------------------|-------------------------------------|-------------------------------------|--------------------------------|--------------------------------|----------|----------------------------|
|                            | June'17 (1 <sup>st</sup> fortnight) | June'17 (2 <sup>nd</sup> fortnight) |                                |                                |          |                            |
| HPS-I, Burla               | 40                                  | 40                                  | 609.54 ft                      | 611.69 ft                      | 590 ft.  | 630 ft.                    |
| HPS-II, Chipilima          | 20                                  | 30                                  | -                              | -                              | -        | -                          |
| Balimela                   | 300                                 | 250                                 | 1477.00 ft                     | 1478.10 ft                     | 1440 ft. | 1516 ft.                   |
| Rengali                    | 150                                 | 150                                 | 114.24 mt                      | 119.96 mt                      | 109.72m  | 123.5 mtr.                 |
| U.Kolab                    | 130                                 | 120                                 | 849.54 mt                      | 851.44 mt                      | 844 mtr  | 858 mtr.                   |
| U. Indravati               | 210                                 | 220                                 | 631.76 mt                      | 632.35mt                       | 625mtr   | 642 mtr                    |
| MKD (O/D)                  | 40                                  | 40                                  | 2724.20 ft                     | 2714.30 ft                     | 2685 ft. | 2750 ft.                   |
| <b>TOTAL</b>               | <b>890</b>                          | <b>850</b>                          |                                |                                |          |                            |

### **E.9: Compliance of CEA Regulations for Grid Connectivity of Renewable Energy Sources.**

As per CEA (Technical Standards for connectivity to Grid) Regulations, 2007, dated 21<sup>st</sup> February 2007, the pertinent clauses 6 (iii) & 6 (iv) (b) of general Connectivity Conditions shall be applicable to all the Generating Projects including the renewable, which are getting connected to the Grid at voltage level of 33kV & above. Subsequently, CEA have notified the CEA (Technical Standards for Connectivity of the Distributed Generation Resources) Regulations 2013 dated 30.09.2013. These Regulations are applicable for "Distributed Generation Resources", which means a Generating Station feeding electricity into the System at voltage level below 33kV. Needless to mention that these Regulations also cover the renewable projects connected to the Distribution Licensee's System at voltage level of below 33kV. The letter received from CEA is annexed herewith.

All the Distribution / Transmission Licensee may please indicate the status in this regard and the action plan with definite time frame to ensure real time data telemetry from all the grid connected renewable Generators / Plants to SLDC.

In the 108<sup>th</sup> PSOC meeting it was decided that a SLDC shall convene a meeting between all Renewable projects, Telecom and SLDC to decide the strategy.

### **Deliberations in the meeting**

It was decided that GRIDCO shall convene a meeting with all Renewable generators, Telecom and SLDC to decide the strategy.

[Action: GRIDCO / SLDC]

#### **E.10: Furnishing of data for CEA portal**

As per the decision taken in the meeting convened by Chairman, CEA on dated 17.05.2017 all the SLDCs shall furnish the information sought by CEA in the prescribed formats on daily / monthly basis as applicable. The Format “Proforma-Monthly\_c” contains information relating the generator parameters. OHPC, TTPS, IBTPS and all IPPs (GMR & Vedanta) are required to furnish the data to SLDC in the format enclosed as **Annexure** for necessary action by SLDC.

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

It was decided that GRIDCO and SLDC shall resolve the issue in a separate meeting.

[Action: GRIDCO / SLDC]

#### **E.11: Anticipated power generation and demand for the month of June’2017.**

| Sl. No              | Discom                    | Average     | Peak        |
|---------------------|---------------------------|-------------|-------------|
| 1                   | CESU                      | 1150        | 1350        |
| 2                   | WESCO                     | 1000        | 1150        |
| 3                   | NESCO                     | 800         | 1070        |
| 4                   | SOUTHCO                   | 450         | 550         |
| <b>6</b>            | <b>Total Discom</b>       | <b>3350</b> | <b>4120</b> |
|                     | <b>System Loss</b>        | <b>150</b>  | <b>180</b>  |
|                     |                           | <b>3600</b> | <b>4300</b> |
| <b>Availability</b> |                           |             |             |
| 1                   | Hydro                     | 810         | 1400        |
| 2                   | State Thermal             | 750         | 750         |
| 3                   | IPP, small hydro &RE      | 850         | 850         |
| 4                   | ISGS share (including OA) | 1000        | 1050        |
| 5                   | CGP support (OA)          | 200         | 250         |
| <b>6</b>            | <b>Total availability</b> | <b>3610</b> | <b>4300</b> |
| <b>7</b>            | <b>Surplus / Deficit</b>  | <b>10</b>   | <b>Nil</b>  |

Members may discuss.

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

All members expressed their gratitude to Sri M. Ananta Rao, CGM (IT), OPTCL, who is going to retire from service on superannuation by end of this month for his guidance and advice. PSOC will remember his valuable advices and the foot prints he has left for all times with deep regard.

#### **F.1: IFFCO Issue**

IFFCO stated that the tower s of 132 kV Paradeep-IFFCO line is getting rusted and need to be replaced. IFFCO requested OPTCL to prepare an estimate for replacement of rusted members, so that they will deposit the amount. IFFCO also suggested replacing the towers with cable inside their premises. O&M stated that let IFFCO give a fresh proposal in this regard to CGM (O&M).

[Action: IFFCO / O&M].

#### **F.2: Date and Venue of the next (110<sup>th</sup>) PSOC meeting.**

109th Power System Operational Co-ordination Committee Meeting  
 [ At 11:00 A.M. on 23.05.2017 ]  
 [At SLDC, Bhubaneswar]

| Sl. No. | Name                  | Designation       | Organisation    | Mobile No.  | E-mail Address                 | Signature          |
|---------|-----------------------|-------------------|-----------------|-------------|--------------------------------|--------------------|
| 1       | P. S. Sahu            | GRAMPS            | SLDC            | 9438907778  | ele.pesahu@optel.co.in         | <i>[Signature]</i> |
| 2       | U. N. Mishra          | CGMSLDC           |                 | 9438907774  | sgm.11@gridco.co.in            | <i>[Signature]</i> |
| 3       | B. K. Sahoo           | CGM(O&M)          | OPTCL           | 9438907919  | cgm.001@optel.co.in            | <i>[Signature]</i> |
| 4       | B. P. Mishra          | CGM(R&B)          | OPTCL           | 9438907019  | ele.bpmishra@optel.co.in       | <i>[Signature]</i> |
| 5       | H. K. Samantary       | CGM(TC)           | OPTCL           | 9438907720  | cgm.tel@optel.co.in            | <i>[Signature]</i> |
| 6       | M. Anantadas          | CGM-II            | OPTCL           | 9438907008  | cgm.ii@optel.co.in             | <i>[Signature]</i> |
| 7       | P. K. Behera          | Consultant        | K.P.O. Tatasoft | 9937035551  | P.k.behera@optel.co.in         | <i>[Signature]</i> |
| 8       | RANJIT KUMAR          | Sr. Mgr           | TATA STEEL      | 9040097687  | ranjit.kumar@tatasteel.com     | <i>[Signature]</i> |
| 9       | G. D. Patel           | Sr. Jm (O&M) MRDL | OPTCL           | 9438907823  | ele.gpatel@optel.co.in         | <i>[Signature]</i> |
| 10      | M. R. Choudhary       | CGM(O&M)          | OPTCL           | 9438907820  | sgm.001.npr                    | <i>[Signature]</i> |
| 11      | D. R. Singh Babu      | Sr. GM (Tel)      | OPTCL           | 9438907520  | sgm.tel@optel.co.in            | <i>[Signature]</i> |
| 12      | P. K. Reddy           | GM                | CESU            | 9438676810  | alt.g.ross@cesu.co.in          | <i>[Signature]</i> |
| 13      | S. K. Patra           | Manager           | WESCO           | 9437057208  | santoshpatra@gmail.com         | <i>[Signature]</i> |
| 14      | K. K. Agrawal         | Ch. GM            | C.P.            | 9438907122  |                                | <i>[Signature]</i> |
| 15      | S. K. Puri            | Sr. GM            | OPTCL           | 9438907312  | ele.skpuri@optel.co.in         | <i>[Signature]</i> |
| 16      | S. K. Das             | Asst. Mgr         | OPTCL           | 9438907316  | ele.santoshdas@optel.co.in     | <i>[Signature]</i> |
| 17      | C. R. Mishra          | AGM(EL)           | OPTCL           | 9438907305  | ele.crmishra@optel.co.in       | <i>[Signature]</i> |
| 18      | P. PATRA              | GM(IT)            | OPTCL           | 9438907240  | it.patra@optel.co.in           | <i>[Signature]</i> |
| 19      | PK Mahapatra          | DG M              | OPTCL           | 9438715401  | Pradeep.mahapatra@optel.co.in  | <i>[Signature]</i> |
| 20      | R. M. Ojha            | Mgr               | DHPC            | 7328840658  | roshanmohanta@dhpc.com         | <i>[Signature]</i> |
| 21      | Pareen chandra Mishra | Asst. M           | NEESCO          | 9438906019  | nescoast@gmail.com             | <i>[Signature]</i> |
| 22      | D. K. Sahu            | Manager           | NEESCO          | 9438906022  | nescoast@gmail.com             | <i>[Signature]</i> |
| 23      | S. Mohapatra          | AGM               | RSP             | 8895501476  | Subash.mohapatra@railosp.co.in | <i>[Signature]</i> |
| 24      | S. Mohanty            | AM                | SOUTHCO         | 9439959608  | santoshmohanty@gmail.com       | <i>[Signature]</i> |
| 25      | K. T. R. Achary       | DGM               | OPTCL           | 9438905237  | tel.ktracharya@optel.co.in     | <i>[Signature]</i> |
| 26      | Dharmendra Nath Patra | Manager           | DHPC            | 7328840020  | dnpatra.dhpc@gmail.com         | <i>[Signature]</i> |
| 27      | A. K. Mohanty         | Manager           | DHPC            | 7328840019  | akm67@gmail.com                | <i>[Signature]</i> |
| 28      | R. K. Swain           | Asst. Mgr         | PPCO            | 9937238311  | rkswain@ppco.co.in             | <i>[Signature]</i> |
| 29      | P. S. Sahu            | Asst. M           | Hindalco        | 9090071509  | ps.sahu@hindalco.com           | <i>[Signature]</i> |
| 30      | Souravanti Ray        | DGM(ITA)          | OPTCL           | 9438907477  | tel.suray@optel.co.in          | <i>[Signature]</i> |
| 31      | S. K. Mishra          | DGM(ITA)          | OPTCL           | 9438907466  | tel.sk.mishra@optel.co.in      | <i>[Signature]</i> |
| 32      | M. K. Panda           | AGM               | vedanta         | 9777457222  | manoj.panda@vedanta.com        | <i>[Signature]</i> |
| 33      | S. K. Pattnaik        | AGM               | SLDC            | 9438907245  |                                | <i>[Signature]</i> |
| 34      | B. K. Behera          | Mgr               | RPL             | 9438907689  | ele.bkbehera@optel.co.in       | <i>[Signature]</i> |
| 35      | S. P. Panda           | Unit Head UKHEP   | DHPC            | 7328840300  | sgm.el.ukhep@dhpc.com          | <i>[Signature]</i> |
| 36      | S. S. Bhoi            | Unit Head         |                 | 7328840483  | sgm.tel.ukhep@dhpc.com         | <i>[Signature]</i> |
| 38      | SYAMA RANJAN DAS      | GM(Asst)          | DHPC            | 7328840160  | syamarananddas@gmail.com       | <i>[Signature]</i> |
| 39      | Manoranjan Biswal     | Unit Head         | CHEP            | 7328840235  | manoranjanbiswal@gmail.com     | <i>[Signature]</i> |
| 40      | H. P. Mahapatra       | AGM               | DHPC            | 7328840015  | hpm.dhpc@gmail.com             | <i>[Signature]</i> |
| 41      | S. K. Mishra          | Asst. M           | BPL             | 8380042024  | skmishra@bhubaneswarpower.com  | <i>[Signature]</i> |
| 42      | Radha Raman Panda     | CGM(C)            | OPTCL           | 09438907373 | CGM.cmc@optel.co.in            | <i>[Signature]</i> |
| 43      | P. K. Mishra          | GM                | SLDC            | 9438907402  | ele.phonishra@sldc.co.in       | <i>[Signature]</i> |
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| 45      | Ananta Das            | GM                | SLDC            | 9438907403  |                                | <i>[Signature]</i> |
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| 47      | Sujata Sathy          | DM                | SLDC            | 9438907423  |                                | <i>[Signature]</i> |
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