



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-15/2015 /

4214 (43)

Dated: 09.11.2016

From:

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

To:

As per distribution list

Sub: Minutes of 102nd PSOC meeting held on 27.10.2016 at PTC, Chandaka, Bhubaneswar

Sir,

Please find enclosed herewith the minutes of 102nd Power System Operational Co-ordination meeting held on 27.10.2016 at PTC, Chandaka, 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 (Operation), OHPC, Bhubaneswar
2. The CGM (O&M), OPTCL, Bhubaneswar.
3. The CGM (Const.), OPTCL Bhubaneswar.
4. The CGM (RT&C), OPTCL, Bhubaneswar.
5. The CGM (PP), GRIDCO, Bhubaneswar.
6. The CGM (Telecom), OPTCL, 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 CEO, CESU, Bhubaneswar.
15. The A.O., WESCO Utility, Burla
16. The A.O., NESCO Utility, Balasore
17. The A.O., SOUTHCO Utility, Berhampur.
18. The Member Secretary (GCC), OPTCL.
19. The ED, Power Grid Corporation of India, Bhubaneswar.
20. The Sr. G.M. (El.), BHEP, Balimela
21. The A.G.M. (El.), CHEP, Chiplima
22. The Sr. G.M. (El.), UIHEP, Mukhiguda
23. The Sr. G.M. (El.), RHEP, Rengali
24. The D.G.M. (El.), HHEP, Burla
25. The D.G.M. (El.), UKHEP, Bariniput, Koraput
26. The S.E. (O&M), Machhakund
27. The DGM (Elect.), IbTPS, OPGC, Banharpali.
28. The Vice President (O), IMFA, Choudwar.
29. The D.G.M. (O&M), NTPC (TTPS), Talcher.
30. The AGM (Elect.), JINDAL Stainless Ltd., Duburi
31. The G.M, HINDALCO, Hirakud.
32. The G.M.CPP, NALCO, Angul.
33. The Director, M/s. Jindal Steel & Power Ltd., Angul
34. The AVP-Vedanta Ltd (IPP), Jharsuguda
35. The G.M, Vedanta Ltd (CGP), Jharsuguda.
36. The DGM (Power Distribution), RSP, Rourkela.
37. Joint President, Aditya Aluminium Ltd., Lapanga, Sambalpur
38. The G.M.(Elect.), Bhusan Steel Limited. Meramundali
39. The G.M. (Elect.), Bhusan Power & Steel Ltd, Budhipadar.
40. The G.M.(Elect.), IFFCO Limited.
41. Director & COO, GMR Kamalanga Energy Limited, Satyanagar, Bhubaneswar.
42. The CEO, Bhubaneswar Power Pvt. Ltd, IRC Village, Nayapalli, Bhubaneswar

Odisha Power Transmission Corporation Ltd. Bhubaneswar.

Minutes of 102nd PSOC meeting held on 27.10.2016 at PTC, Chandaka, Bhubaneswar

List of participants is at Annexure.

Chief Load Despatcher, SLDC, OPTCL welcomed all the participants to the 102nd Power System Operational Coordination meeting and highlighted the system performance during the month of September'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 101st PSOC meeting held on 29.09.2016

The minutes of meeting was circulated vide letter No. SGM (PS)-PI-15/2015/3990⁽⁴³⁾ dated 24.10.2016 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 been received from the members, the minutes of 101st 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 September'2016.

(A) Frequency

It was noticed that, during the month of September'16, **76.00** % of times the frequency remained in the IEGC band i.e. 49.90Hz - 50.05Hz in comparison to **77.06** % during the month of August'16. The maximum and minimum System frequency during the month was **50.15 Hz & 49.74 Hz** respectively.

(B) Grid demand

Grid demand for the month of September'16 was reviewed. The average consumption during the month was **3101 MW**. The maximum System demand of **3936 MW** occurred on **01.09.16** at 22:00 Hrs and minimum demand of **2479 MW** occurred on **04.09.16** at 15:00 Hrs.

Deliberation in the meeting

It is observed that the average demand during the month of September' 16 has been decreased by 45 MW while the peak demand was decreased by 169MW from that of August'16. The average energy consumption during the month has been decreased by 36 MW in comparison to September'15. The energy consumption has been decreased due to adverse weather during the month.

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

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

Deliberation in the meeting:

The maximum Voltage of **244.44** kV occurred at Jaynagar 220 kV bus while Narendrapur, 220 kV bus has experienced the minimum Voltage of **188.85** kV. Bus Voltages at Samgara and Lapanga could not be incorporated due to non availability of energy meter in those sub-stations. The duration of occurrence of high voltage at Jayanagar and Low Voltage at Narendrapur 220kV bus may be obtained for analysis.

O&M stated that tender for procurement of Energy Audit meters has already been floated.

Narendrapur Voltage profile can be improved after charging 220 kV bus of Pandiabili PG S/S.

[Action: CGM (O&M)]

(D) Loading of 220/ 132 kV Auto at 220 kV S/Ss in OPTCL system for the month of September'16.

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 tender for procurement of Energy Audit meters has been floated.

[Action: CGM (O&M)]

(E) DISCOM Drawal during the month of September'16

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

Deliberation in the meeting:

It was noticed that CESU had overdrawn 17.598 MU while WESCO, NESCO and Southco had under drawn 20.609, 5.279 and 2.318 MU respectively.

WESCO Utility stated that they had predicted demand considering Vedanta SEZ drawal.

[Action: All Distribution Utilities / SLDC]

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

Energy generation and exchange during the month of September'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 **2232.65** MU.

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

The drawal of Machhakund power during the month of September'16 was **30.835** MU against AP drawal of **31.739** MU.

In the 101st PSOC meeting:

CGM (Telecom) deliberated that installation of RVDU at Jayanagar control room, negotiation with M/s Chemtrol for issue of advance payment is under process, which is likely to be resolved within a short time.

Deliberations in the meeting:

CGM (Telecom) stated that certain clarifications relating to payment has been sought for from M/s Chemtrol for supply of RVDU. The RVDU is expected to be commissioned by 15th November'16.

The date for high level meeting for Machhkund issue is yet to be finalized. Southco may explore the possibilities of inducting more 33 kV feeders in Machhakund system.

[Action: Sr.GM (O&M)-I / OHPC / Southco / Gridco / SLDC]

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

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

(I) Status of Open Access applications during the month of September'2016

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

PART C – Issues raised in the 126th OCC meeting of ERPC held on 21.10.2016

C.1: Commissioning of new transmission elements in Eastern Region

1. 400/220kV, 500MVA ICT-III at Baripada was charged for the first time on no load at 14:28Hrs of 29/09/16 and subsequently loaded at 22:48Hrs of 30/09/16.
2. 125MVAR B/R at Baripada was charged for the first time at 05:52Hrs of 30/09/16.

C.2: Status of projects funded under PSDF schemes

In the PSDF review meeting held on 29.04.16 at N. 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 122 nd 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.	4.91 Cr.	Erection work of the already procured equipment is going on. LOA for eight different types of Testing equipment already placed worth about Rs.4 Cr. Placement of LOA for balance equipment is under process.

Deliberations in the meeting

O&M stated that Rs. 14.61 Crs is yet to be released. Further, order for Rs. 20.00 crore has been placed. SLDC stated that OPTCL may include the cost of ADMS for PSDF funding. It was decided that SLDC shall prepare the DPR and submit to CGM (O&M) for inclusion in PSDF.

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

C.3: Preparation of Load Generation Balance Report (LGBR) of ER for 2017-18.

As per the IEGC under Clause 5.7.4 of Principal Regulations, first amendment in 2012 under sub-Regulation (a), (b), (c) and (d) states that

- a) "The RPC Secretariat shall be primarily responsible for finalization of the Annual Load Generation Balance Report (LGBR) and the annual outage plan for the following financial year by **31st December of each year**. The LGBR shall be prepared by the respective RPC Secretariat for Peak as well as Off-peak scenarios".
- b) "Each SLDC shall submit LGBR for its control area, for Peak as well as Off-Peak scenario, by **31st October** for the next financial year, to respective RPC Secretariat".
- c) "RPC Secretariat shall then come out with draft LGBR and draft outage plan for the next financial year by **30th November** of each year for the regional grid taking"

C.5: Status of construction of 400 kV Sterlite-Jharsuguda D/C sections

A special meeting, on the issues related to Vedanta Ltd. was held on 14.10.2016 in the presence of CEA, CTU, OPTCL, GRIDCO, Vedanta, ERLDC & ERPC

Minutes of Special Meeting on “Issues related to Vedanta Limited” held on 14th October, 2016 at ERPC, Kolkata

Member Secretary, ERPC welcomed CEA, CTU, Vedanta, OPTCL, GRIDCO, ERLDC and all other participants to the special meeting. He informed that this special meeting was convened on short notice to deliberate the issues related to Vedanta Limited.

He briefed the house that in the 125th OCC meeting held on 20.09.16 the Vedanta related issues were raised and OCC in its capacity deliberated in detail and decided the following:

- i) Vedanta has to get a fresh connectivity from CTU for their CPP units #1, 3 & 4 (as these units were converted from IPPs to CPPs) as per the decision of 11th Connectivity and LTA meeting of ER held on 13.06.2016.
- ii) Vedanta has to get NOC from SLDC Odisha for scheduling of their units through ERLDC.
- iii) Vedanta will be allowed to connect to CTU system only after submission of the above two documents.
- iv) ERLDC will start scheduling Vedanta CPP Units #1,3,& 4 only after getting a fresh NOC from SLDC Odisha and with grant of fresh connectivity by CTU.
- v) Till then Vedanta would be treated as an embedded customer under the jurisdiction of SLDC Odisha and may remain connected to grid through STU system only (as presently its units are connected to OPTCL system) and do their STOA transaction through SLDC Odisha.
- vi) In view of all of above, the NOC granted to Vedanta would stand revoked and fresh NOC could be issued subject to fulfillment of the stated conditions
- vii) Vedanta has to complete the dedicated line within the schedule (i.e. November, 2016) otherwise the LILO may be removed as per the decision of 33rd ERPC and the meeting convened by CEA held on 16.09.2016.

Deliberation in the meeting

Vedanta informed that they are actively perusing for the NOC from Odisha for the purpose of getting connectivity from CTU. Rounds of discussions were going on for with GRIDCO/ OPTCL officials on the terms and conditions for the NOC and it will be finalized within 2-3 days.

Further, Vedanta clarified that their present requirement is as follows:

- Getting connectivity for their 3x600 MW CPPs along with smelter load (Maximum of 2000 MW) from CTU, with provision to draw power upto 1000 MW (maximum).
- To meet their 900 MW (approx) smelter load from the CPPs.
- To supply 550 MW power to Odisha through STU network.
- Shifting of units from ISTS to STU system and vice versa are being done as per their convenience for supply of smelter load and power supply to Odisha.

Therefore, to meet their own requirement along with their commitment to supply Odisha as per terms of PPA between them, Vedanta is compelled to connect their three (3) units to STU network, keeping one unit as standby.

GRIDCO informed that several meetings are going on with Vedanta to sort out the issues related to NOC and power supply to Odisha. They were in a process to sign a modified PPA for getting power supply from Vedanta.

Further, OPTCL viewed that all CPP units (unit #1, 3 &4) and IPP unit (#2) of Vedanta Ltd along with SEZ (smelter) load shall be kept at 400 kV bus of Vedanta Ltd Switchyard without bus splitting and shall be connected to STU network through 400 kV Vedanta Ltd-Meramundali D/C line.

CTU clarified that as per connectivity regulations Vedanta can get connectivity either as 3x600 CPP generator provided their net exportable capacity is more than 250 MW or as a Bulk Consumer with load of 1000 MW. But connectivity for both injection of more than 250 MW and drawl of 1000 MW power is not permitted as per present CERC regulation on grant of Connectivity, LTA and MTOA.

Further, it was informed that for the purpose of scheduling Vedanta generation, the control area jurisdiction of Vedanta should be decided following the principle outlined in IEGC, i.e. if a generating

station is connected both to ISTS and the State network, scheduling and other functions performed by the system operator of a control area will be done by SLDC, only if state has more than 50% Share of power. The role of concerned RLDC, in such a case, shall be limited to consideration of the schedule for interstate exchange of power on account of this ISGS while determining the net drawal schedules of the respective states. If the State has a Share of 50% or less, the scheduling and other functions shall be performed by RLDC.

During deliberation it emerged that Vedanta as a 4X600 MW plant has obligation to supply power more than 50% of its capacity within the home state of Odisha itself [900 MW (50% of 1800MW) for smelter load and 550 MW to Odisha state i.e. 1450MW total]. As such, it does not qualify to be a regional entity. Therefore even if Vedanta is connected to both CTU and STU system, it should be scheduled by Odisha SLDC. After detailed deliberation the followings were decided:

1. Control area jurisdiction of Vedanta will be shifted from ERLDC to SLDC, Odisha.
2. CPP units (unit #1, 3 &4) and IPP unit (#2) of Vedanta Ltd along with SEZ (smelter) load shall be kept at 400 kV bus of Vedanta Ltd Switchyard without bus splitting and shall be connected to STU network through 400 kV Vedanta Ltd-Meramundali D/C line.
There will be no need to operate the 400kV buses of Vedanta in split bus mode and they should be coupled by completing all the dias.
3. One unit shall be kept as standby till the completion of 400 kV Sterlite-Jharsuguda D/C line.
4. Vedanta Ltd shall be a State embedded entity for all purposes and requisite STU connection would be obtained by Vedanta Ltd i.r.o above.
5. The CTU connectivity of Vedanta may be kept in abeyance. The same may be closed/ withdrawn from the date of getting the STU connectivity.
6. On change of control area jurisdiction the NOC granted by ERLDC to Vedanta Ltd shall stand revoked.
7. After changeover of control area jurisdiction, the LILO point of 400 kV Rourkela-Raigarh at Vedanta will be interface point of Odisha STU till 30th November, 2016.
8. Subsequently, after the completion of 400 kV Sterlite-Jharsuguda D/C line the interface point of Odisha STU will be shifted to Jharsuguda.
9. With the change of control area jurisdiction the status of 400 kV Sterlite-Jharsuguda D/C line will no more be a dedicated line. So, Vedanta agreed to hand over the line to OPTCL which can be treated as an ISTS tie of OPTCL.
10. Vedanta has to strictly adhere to the schedule for completion of 400 kV Sterlite– Jharsuguda D/C line (i.e. 30th November, 2016) as per the decision of 33rd TCC/ERPC and decided in the meetings held in CEA on 16.9.16. In case 400kV Vedanta-Jharsuguda D/C line is not commissioned by that date, the LILO connection to Vedanta shall be withdrawn.
11. Due to change of control area jurisdiction from ERLDC to SLDC Odisha. Vedanta Ltd has to settle the following:
 - I) ERLDC fees and charges shall be paid by Vedanta Limited as applicable up to the cutoff date.
 - II) Previous dues up to cut off date of the pool accounts such as DSM charges along with interest, RTDA, any others has to be settled by Vedanta.
 - III) Henceforth, any deviation of Vedanta Limited will be treated as deviation of OPTCL.
 - IV) After changeover of jurisdiction if in future it is found that any amount in pool account had remained unaccounted by mistake against Vedanta Limited, Vedanta Limited will have to pay the amount into the pool account.
 - V) For calculation of POC charges and losses Vedanta Limited generation will be considered as generation of Odisha.
 - VI) Vedanta Limited has to get registered afresh at each RLDC for Short Term Open Access as embedded entity in OPTCL.
 - VII) Reconciliation of accounts is also required to be done up to the cutoff date by Vedanta.
 - VIII) OPTCL in coordination with Vedanta has to send weekly SEM data to ERLDC by Tuesday Noon.

Vedanta expressed that presently the 400 kV Vedanta- Meramundali D/C line is not stable and tripping frequently. Vedanta and OPTCL were advised to look into the matter and resolve the issues related to this line expeditiously. Till carrier aided distance protection scheme is implemented, entire length of the line should be covered in Zone-1 from both ends ERLDC stressed that the SPS for restricting power

flow in 400kV Vedanta – Rourkella or Vedanta-Raigarh line within 650 MW, should be kept in service. Vedanta agreed.

After changeover of the jurisdictional authority, it was felt that closed Bus operation would ensure greater reliability. In this regard CTU stated that with such a closed bus operation, the impact of increase of short circuit MVA levels at various buses would not be significant and would remain within limits. Further, it was decided that a system study may be carried out for the above arrangement and placed in the next OCC. It was also decided that the control area jurisdiction may be handed over to SLDC, Odisha w.e.f. 24.10.2016 as under the present circumstances Vedanta is not mandated to inject to the ISTS Grid and their NOC stands revoked w.e.f 24.10.16.

Meeting ended with vote of thanks to the chair.

As per the decision taken in the 126th OCC meeting, LILO point of 400 kV Rourkela-Raigarh at Vedanta has become interface point of Odisha STU with effect from 00:00 hrs of 24.10.2016.

M/s Vedanta shall collect weekly meter data from the LILO points and send to SLDC on each Monday positively for onward transmission to ERLDC.

Gridco shall develop metering logic for Vedanta for preparation of monthly Energy Accounting by SLDC.

Deliberations in the meeting

Gridco stated that a meeting for discussion of Vedanta metering logic will be convened on 1st November'16. CGM (O&M) stated that after joining the 400 kV Vedanta buses substantial quantum of power is flowing to the CTU system. 400 kV Vedanta-Meramundali ckts are under loaded resulting increase in Meramundali bus Voltage. Gridco may pay penalty for VAr injection at High Voltage. Vedanta generator should absorb reactive power as per their capability to avoid high Voltage.

[Action : SLDC / Gridco / Vedanta Ltd]

C.6: 220 kV inter-connecting lines of OPTCL with 400/220 kV Bolangir (PG), Keonjhar & Pandiabil S/s

PGCIL has already commissioned the 2x315MVA 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 126th OCC of ERPC, OPTCL updated the completion schedule of inter-connecting system as follows:

Sl. No.	Name of the transmission line	Completion schedule
1.	2 X 315MVA 400/220kV Bolangir S/s	
a.	LILO of one circuit of Sadeipalli-Kesinga 220 kV D/C line at Bolangir S/S.	Only 7 towers left (Severe ROW problem). By Dec, 2016.
b.	LILO of one circuit of Katapalli-Sadeipalli 220 kV D/C line at Bolangir S/S.	Charged on 04.05.16
2.	400/220 kV Keonjhar S/S.	
a.	Keonjhar (PG)-Keonjhar (OPTCL) 220 kV D/C line	By 2017
b.	Keonjhar (PG)-Turumunga (OPTCL) 220 kV D/C Line.	By 2019
3.	400/220 kV Pandiabil Grid S/s	
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)	December'2016

[Action: CGM (Const)]

C.7: 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 101st PSOC meeting, CGM (IT) stated that the price bid has already opened. Order for appointment of consultant is expected to be placed within 10 days.

Deliberations in the meeting

CGM (IT) stated that finalization of appointment of consultant is placed before the PSC for approval. SLDC has to nominate a person for UAT.

[Action: IT / SLDC]

C.8: Certification through BIS as per IS 18001:2007 to all generating/ transmission units.

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

In 85th 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 100th PSOC meeting CGM (O&M) stated that “Expression of Interest” for providing consultancy has been floated.

Deliberations in the meeting

CGM (O&M) stated that time will be extended since no response has been received.

[Action: CGM (O&M)]

C.9: Reporting of Energy generated from renewable resources on daily basis

Government of India has set an ambitious target to achieve 175 GW of renewable generation by year 2022. Renewable energy sources (RES) development division of CEA along with MNRE is continuously monitoring the progress in installation of renewable resources and also collecting actual generation data on monthly basis. However the energy injected from the renewable generating plants into the grid also needs to be monitored on daily basis and incorporated in the reports by NLDC, to determine the correct percentage of energy mix for whole country on any particular day. Thus the renewable generators/ concerned SLDC may furnish following data on daily basis:

a) Grid connected RES whose scheduling and metering is done as regional entity:

Maximum / Time and energy injected (MWh) for the previous day (from the SEM meters on a daily basis till the AMR is commissioned/working)

b) Grid connected RES which is under State purview:

Maximum/Time and energy injected (MWh) for the previous day. Concerned SLDCs to compile station wise / connection point wise energy injected into the state grid and send it RLDC on a daily basis.

The above data may be sent by mail to erldc.cal@gmail.com positively by 01:00hrs of the day in respect of data for the previous day. This is essential as the power supply report has to be sent by early morning hours for the previous day.

It was deliberated that SLDC shall provide the data in respect of the RES connected to grid with dedicated feeder. SLDC may instruct all the RE Sources to furnish their data to SLDC on daily basis as mentioned above.

Deliberations in the meeting

It was decided that SLDC and Gridco shall write to all RE generators to furnish their hourly energy injection data to SLDC by 20:00 hrs through email. SLDC shall forward the same to ERLDC by 01:00 hrs of the next day. CGM (IT) stated that SLDC should not use Public Domain mails for official data transfer.

[Action: SLDC / Gridco]

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.

A team of officers had visited Gujarat SLDC on 30.08.2016 to observe the implementation of ADMS in their State. It was found that a separate type of RTU known as “**Client RTU**” has to be installed in the grid sub-stations where the pre identified 33kV feeders (to be isolated under ADMS) are located. These are in addition to the existing RTUs. One ADMS server shall be installed at SLDC which will acquire data from SCADA server to compare the over drawal of the State and Discoms and send the signal to the client RTU for isolation of the pre identified 33kV feeders. Since, all these activities are related to SCADA & communication, Telecom wing need to be involved for implementation of the scheme. A team is to be constituted with Telecommunication, SLDC & OPTCL Engineers for this purpose.

One presentation was made by M/s Kirti Telnet, Ahemedabad, the agency provided ADMS solution to Gujarat on 17.10.16 in the Conference Hall of GRIDCO. SLDC shall float tender for this purpose.

Deliberations in the meeting

It was decided that SLDC shall convene a meeting with all Distribution Utilities and OPTCL for finalization of identification of feeders and grouping. These feeders will be included in the ADMS.

[Action: SLDC / Dist Utilities]

C.11: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.

As per the minutes of special meeting convened by Member Secretary, ERPC for resolving O&M issues between OPTCL, OHPC and POWERGRID for lines, bays and equipment held on 17.06.2016, “400kV bays (2nos.) Odisha bays in POWERGRID 400kV Indravati sub-station – POWERGRID will carry out routine O&M for the bays.”

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

It was deliberated that OPTCL has taken action for installation of breaker & CT. The joint inspection of line is under progress.

Deliberations in the meeting

CGM (O&M) stated that the installation of tie breaker will be done by November'2016. The 400 kV Indravati-Indravati (PG) line has taken over by OPTCL. Minor maintenance of the bay and associated equipments will be done by the respective Grid owner. However, the cost will be borne by the equipment owner.

[Action: CGM (O&M)]

C.12: Mock Black start exercises in Eastern Region

Mock black start exercise in respect of Balimela PH is to be carried out during first week of November, 2016.

Deliberations in the meeting

SLDC stated that the mock black start exercise for Balimela HEP will be done by 15th November'16.

[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 **September'16** was reviewed.

Deliberations in the meeting.

It was noticed that CESU had overdrawn 17.598 MU while WESCO, NESCO and Southco had under drawn 20.609, 5.279 and 2.318 MU respectively. All Distribution Utilities were advised to predict their day ahead drawal accurately to avoid overdraw.

[Action: SLDC / 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	400kV Meramundali-Mendhasal ckt.	Tower Collapse at Loc-180, 181 & 182	December 2016

Deliberations in the meeting

SLDC stated that shutdown of 220 kV Meramundali-Bhanjanagar ckt for a period of 2 months has been permitted for replacement of conductor. It was suggested that instead of continuous shut down some breaks in intervals may be taken to accommodate shut down of other transmission elements.

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

D.3: Communication issues

Installation of communication equipment by CGPs / Industries.

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

Sl.	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. Database has already been prepared by OPTCL.
5	BPSL	No kV
6	CONCAST	No kV/Hz.
7	BSL	No Hz & status data.
8	JSL	No Bus kV / Hz (for Bus-2)
9	TSIL	No data
10	VISA	CB & Status data are not available
11	Paradeep	Data not available at ERLDC
12	Bolangir (New)	Data not available at ERLDC

It was also 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.

In the last meeting CGM (Telecom) stated that NINL has agreed to extend communication system through optical fiber with SLDC. He also stated that CERC is going to notify Communication Regulation soon. He further stated that the optical fibre between Meramundali-Kaniha was cut due to construction work, resulting interruption of data communication. Construction wing should intimate the shutdown work along with the tower schedule for keeping provision of optical fiber wire.

Deliberations in the meeting

CGM (Const) has made a circular to intimate all shutdowns to Telecom wing. CGM (RT&C) has intimated OERC regarding non compliance of data communication facility to SLDC by CGPs. CGM (RT&C) stated that they have already intimated the list of CGPs / Bulk consumers not complying with the provisions of data communication with SLDC.

[Action: GCC / O&M / RT&C/ C.G.M. (Telecom.)]

D.4: 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.

SLDC had organized training on web based scheduling on 11.05.2016 for all the CGPs connected with OPTCL network. The feedback of the CGPs has been forwarded to IT wing.

In the 101st PSOC meeting IT stated that, the issues raised, has been rectified on 27th September. SLDC may fix a date for demo during 1st week of October. They have also posted one “Help” document.

Deliberations in the meeting

SLDC stated that all the generators have been intimated. Response from GMR and IMFA has been received. IT may make provision for taking a draft print out of the schedule submitted by the users. SLDC shall finalize a date towards 2nd week of November’16 for making a presentation to all generators.

[Action: CGM (IT) / SLDC]

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 1st March onwards the AMR shall be made “Go live”. Data will be available after one hour lapses of time.

In the 100th 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 101st PSOC meeting DGM (IT) stated that out of 41 Nos. of CESU S/Ss, testing of data for 20 Nos S/S have been done. He also ensured for availability of 60 Nos S/S data by 2nd October.

Deliberations in the meeting

DGM (IT) stated that, meter data for 54 nos of S/Ss have been sent to SLDC. SLDC stated that due to server problem the testing has been delayed. However, the server problem has been resolved. O&M shall intimate the change of meters to IT.

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

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 last meeting CGM (IT) stated that memorandum for closure of M/S Infosys contract will be placed in the next BoD meeting of OPTCL. After closing the contract, fresh tender can be floated.

Deliberations in the meeting

CGM (IT) stated that OPTCL BoD have approved for closure of contract with Infosys. SLDC may submit their new requirement if any, along with the left out works.

[Action: SLDC /CGM (IT)]

D.7: DISCOM Issues

CESU

A. CESU has identified technical issues relating to early completion of ongoing S/Ss, augmentation of EHT S/S capacity, conversion of S/C line to D/C, bay extension at different S/Ss etc.

B.

- (i) Mismatch of SCADA drawal with the billing meter during September'16.
- (ii) Instant implementation of schedule revision.

Deliberations in the meeting

It was deliberated that CESU may take up the technical issues with CGM (O&M) / CGM (Const), OPTCL. SLDC stated that the SCADA data are for monitoring purposes only. It may not match with the billing meter data. The revision of drawal schedule shall be done as per OGC Regulation.

CGM (O&M) / CGM (Telecom) / SLDC / CESU may please deliberate.

WESCO

A. The import quantum of GEDCOL solar has not been deducted from WESCO's BSP bill

B. Fixed value of solar drawal by WESCO is not being removed from RVDU after 05:30 PM.

Deliberations in the meeting

Gridco stated that after finalization of CoD for GEDCOL solar, the energy import shall be deducted from WESCO's BST bill. Telecom stated that the fixed Solar data are being removed after 06:00 PM each day.

[Action: GRIDCO / WESCO]

PART E: OPERATIONAL PLANNING

E.1: Commissioning status of New Transmission elements.

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

Sl. No	Transmission element details	Present Status
1	Commissioning of 220 kV Jayanagar-Jeypore 2 nd DC line	Work has already been started. Expected to be completed by December' 2016.
2	Commissioning of 400 kV Meramundali-Mendhasal 2nd ckt	Line is ready and shall be charged after commissioning of 3 rd ICT at Mendhasal, which is under progress. ICT is at BHEL factory. Expected by March'2017.
3	Commissioning of 220 kV Bidanasi-Cuttack line	Work in progress and expected to be completed by December' 2016.
4	Commissioning of 220/132 kV Cuttack S/S	Work in progress and expected to be completed by December' 2016.
5	Commissioning of 132 kV Baripada (PG)-Jaleswar line	Work has already been started, which will be completed by March 2017.
6	Commissioning of 220/132 kV Kesinga S/S	Work under progress. Expected by December' 2017.

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	December'16	CESU	Action being taken
2	220/33kV, 2x20 MVA Banei	Dec'17	WESCO Utility	Stayed by Court.
3	132/33kV, 2x20 MVA Udala	Dec-17	NESCO Utility	Line existing
4	132/33 kV, 1x12.5 MVA, Mania	Charged	CESU	33 kV line not done by CESU

WESCO shall take action for diversion of 11 kV lines from Jharusuguda S/S.

[Action: CGM(O&M) / CGM(Const.) / All Distribution Utilities]

E.2: Energy Metering at Hydro stations.

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

On completion of the above energy accounting for hydro stations will be taken up by SLDC.

In the 101st PSOC meeting OHPC stated that TTPS feeder meter at Rengali PH is yet to be changed. Sr. G.M. Indravati PH stated that ICT-II meter at Indravati is not recording correctly.

O&M may take necessary action for rectification of the meters at those hydro stations, so that energy accounting for hydro stations will be taken up by SLDC.

Deliberations in the meeting

OHPC stated that defective meter at Rengali –TTPS feeder has been replaced. OHPC has requested M/s Alstom to check the PT of ICT-II at Indravati.

[Action: O&M / GRIDCO / OHPC/ SLDC]

E.3: Major Events in the month of September'16

No report of major event has been received by SLDC.

E.4: Important Grid Incidences during the month of September'16.

Important Grid incidents during the month were reviewed. O&M may analyze the incidents for deliberation in the OCC meeting of ERPC.

[Action: O&M]

E.5: Outage of major transmission Elements during the month of September'16. (above 10 hrs).

Outage of major transmission elements above 10 hours during the month was reviewed. Most of the outages are due to Insulator damage.

E.6: Review of Outage Program of State Generators / Transmission elements for the month of Nov'16:

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

Sl.	Station	Unit	Period	Remarks
1	Burla	# 2 # 5 # 6	22.07.16 to 30.11.16 25.09.16 to continue 17.02.14 to continue	Capital Maintenance Programming for R,M & U Under R, M & U
2	Chiplima	# 3	15.02.14 to continue	TGB problem and started R,M & U
3	Balimela	# 1 # 5	31.01.13 to continue 02.11.16 to 30.11.16	Programming for R,M & U Annual Maintenance
4	Upper Kolab	# 1	11.09.16 to 25.11.16	Stator inter turn fault
5	Upper Indravati	# 4	01.11.16 to 25.11.16	Annual Maintenance

[Action: OHPC / SLDC]

E.7: Generation Program for the month of November'16.

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

Name of Hydro Gen. Station	Generation Programme (MW)		Reservoir Level as on 01.10.15	Reservoir Level as on 01.10.16	MDDL	High Flood Reservoir Level
	Nov'16 (1 st fortnight)	Nov'16 (2 nd fortnight)				
HPS-I, Burla	70	70	630.00ft	629.95 ft	590 ft.	630 ft.
HPS-II, Chipilima	40	40	-	-	-	-
Balimela	100	100	1499.90 ft	1505.40 ft	1440 ft.	1516 ft.
Rengali	60	60	119.16 mt	122.58 mt	109.72m	123.5 mtr.
U.Kolab	100	100	856.31 mt	856.31 mt	844 mtr	858 mtr.
U. Indravati	250	250	636.18 mt	639.11 mt	625mtr	642 mtr
MKD (O/D)	40	40	2748.2 0	2746.40 ft	2685 ft.	2750 ft.
TOTAL	660	660				

[Action: SLDC / OHPC]

E.8: Anticipated power generation and demand for the month of November'2016.

Sl. No	Discom	Average	Peak
1	CESU	950	1250
2	WESCO	900	1140
3	NESCO	850	1000
4	SOUTHCO	420	520
6	Total	3120	3910
Availability			
1	Hydro	660	1300
2	State Thermal	750	750
3	IPP, small hydro &RE	750	710
4	ISGS share (including OA)	850	1000
5	CGP support (OA)	150	150
6	Total availability	3160	3910
7	Surplus / Deficit	40	0

[Action: SLDC / Discoms]

PART F: OTHER ISSUES

F.1: CGM (O&M) advised all Distribution Utilities to forward their feedback to SLDC regarding the mock Reactive energy charge billing to them.

[Action: All Dist. Utilities]

F.2: Power supply to Rayagada Rly Traction Sub-station.

In the earlier meeting, it was decided to extend power supply to Railway traction sub-station from Theruvali grid instead of Rayagada as most of the times Rayagada load is being fed from Machhakund PH. Also, there are frequent changeovers of Rayagada to provide matching load for Machhakund share. Due to the above, there may be frequent interruption of power to traction.

Deliberations in the meeting

CGM (O&M) stated that Railway may not bear frequent interruption of power to their traction S/S due to changeover of area load to the traction bus section. As a result of which, State's Machhakund share may not be availed fully. CGM (Const) may suggest Rly authority for diversion of Rly feeder from Rayagada to Theruvali Grid S/S.

[Action: CGM (Const)]

F.3: Date and Venue of the next (103rd) PSOC meeting.

The date of 103rd PSOC meeting will be intimated to all members.

F.4: The meeting ended with Vote of thanks by GM (GO), SLDC.

List of participants in the 102th PSOC meeting dated 27.10.2016

101st Power System Operational Co-ordination Committee Meeting

[At 10:30 A.M. on 27.10.2016]

[At PTC, Chandaka, Bhubaneswar]

Sl. No.	Name	Designation	Organisation	Mobile No.	E-mail Address	Signature
1	P. S. Sahu	CD	SLDC	9438907778	ele.pssahu@optel.co.in	
2	M. R. Mohanty	CGM (COPT)	OPTCL	9438907310	cgmour@optel.co.in	
3	B. P. Mishra	CGM (R&E)	OPTCL	9438907019	ele.bpmishra@optel.co.in	
4	H. K. Samantary	CGM (TE)	OPTCL	9438907720	cgm.tel@optel.co.in	
5	M. Ananta Rao	CGM-IT	OPTCL	9438907008	CGM.it@optel.co.in	
6	P. K. Patra	Manager (ci)	OHPC	9437163472	prakashpitrarao@yahoo.com	
7	S. P. Panda	Unit Head V&R&P	OHPC	9388403001 9437055094	spand.vr@ohpc.com	
8	P. N. Patra	Manager (E)	OHPC	7328840020	pnpatra.ohpc@gmail.com	
9	M. K. Dash	SGM (EL)	OHPC Mukhiguda	7328840415	sgmd_el@ohpc.com	
10	D. R. Singh Babu	Sr. GM (Tel)	BBSR	9438907520	tele_ele_bbsr@optel.co.in	
11	G. D. Patel	Sr. GM O&M	Mermandali OPTCL	9438907823	Sgm.O&M.m.r.m@optel.co.in	
12	M. R. Choudhury	Sr. GM O&M	Narandaha OPTCL	9438907820	Sgm.O&M.npr@optel.co.in	
13	P. K. Mishra	GM, SLDC	SLDC	9438907402	ele.pkmishra@slcdc.org.in	
14	Umakanta Saha	do	do	9438907402		
15	L. N. Nayak	GM	To CGM (SLDC)	9438907801		
16	L. K. Mohanty	GM (O&M)	OPTCL	9438907665	ektan_ele_bbsr@optel.co.in	
17	U. N. Mishra	CGM (P)	GRUXO	9438907774	sgm-reg@gruxo.com	
18	M. K. Panda	AGM	Vedanta	9774552222	manoj.panda@vedanta.co.in	
19	P. K. Mahapatra	DGM	DPGC	9338715401	pradeep.mahapatra@dpdc.co.in	
20	G. C. Ganayak	DGM	TTPS	9437966670	gaganayak@tpps.co.in	
21	D. Kasi Viswanath	Sr. Manager	TTPS	9437001281	kriswanath.d@tpps.co.in	
22	P. K. Padhy	GM	CESV	9438676810	pkp@cesv.com	
23	Gourykanthi Ram	DGM (TC)	OPTCL	9438907477	tel.suray@optel.co.in	
24	Sharat Ch. Mahalin	DGM (V&R&P)	Neredi Vardaha	9438906016	sharat.mahalin@gmail.com	
25	C. R. Mishra	AGM (EL)	OPTCL	9438907305	ele.crmishra@optel.co.in	
26	B. K. Behera	Manager (EL)	OPTCL	9438907689	ele.bkbehera@optel.co.in	
27	S. K. Mishra	DGM IT	OPTCL	9438907466	tel.sk.mishra@optel.co.in	
28	P. K. Saha	DM (CI)	OPTCL	9438907227	ct.pksaha@optel.co.in	
29	A. K. Baral	AGM (Tel)	CGM (IT)	9438907773	tel.abaral@optel.co.in	
30	K. T. R. Achary	DGM (CI)	OPTCL (Tel)	9438908037	tel.ktrachary@optel.co.in	
31	G. S. Dash	GM (Tel)	OPTCL	9438908033	tel.gsdash@optel.co.in	
32	P. Arun Kumar	C.O.O	Santhco	9437959757	coo.santhco@santhco.co.in	
33	S. P. Padhy	AGM/BC	OPTCL	9438907830	sgcc@optel.co.in	
34	S. K. Patra	Manager	WESCO	9437057208	sonny.cbt@gmail.com	
35	S. K. Harichandan	DGM	OPTCL	9438907042	ele.suharichandan@optel.co.in	
36	S. Panda	DGM (E)	GRIDCO	9439557019	ele.spanda@gridco.co.in	
37	P. Patra	GM (IT)	OPTCL	9438907240	it.patra@optel.co.in	
38	A. K. Mishra	Dir (el)	OHPC	7328840003		
39	S. K. Das	Consultant	SLDC	9437000261	S.sambadon@gmail.com	
40	P. K. Das	DGM (SS)	SLDC	9438907408	prosrnk_das@yahoo.co	
41	Sujata Setty	D.M.	SLDC	9438907403		