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CIN – U40102OR2004SGC007553

No-SGM (PS)-PL-15/2015 / 1319 (43)

Dated: 07.05.2016

From:

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

To:

As per distribution list

Sub: Minutes of 96th Power System Operational Co-ordination meeting held on 23.04.2016 at PTC, Chandaka .

Sir,

Please find enclosed herewith the minutes of 96th Power System Operational Co-ordination meeting held on 23.04.2016 at Power Training Centre, Chandaka.

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, Burla
17. The A.O., NESCO, Balasore
18. The A.O., SOUTHCO, Berhampur.
19. The Member Secretary (GCC), OPTCL.
20. The ED, Power Grid Corporation of India, Bhubaneswar.
21. The Sr. G.M. (El.), BHEP, Balimela
22. The A.G.M. (El.), CHEP, Chiplima
23. The Sr. G.M. (El.), UIHEP, Mukhiguda
24. The Sr. G.M. (El.), RHEP, Rengali
25. The D.G.M. (El.), HHEP, Burla
26. The D.G.M. (El.), UKHEP, Bariniput, Koraput
27. The S.E. (O&M), Machhakund
28. The DGM (Elect.), IbTPS, OPGC, Banharpali.
29. The Vice President (O), IMFA, Choudwar.
30. The D.G.M. (O&M), NTPC (TTPS), Talcher.
31. The AGM (Elect.), JINDAL Stainless Ltd., Duburi
32. The G.M, HINDALCO, Hirakud.
33. The G.M.CPP, NALCO, Angul.
34. The Director, M/s. Jindal Steel & Power Ltd., Angul
35. The AVP-Vedanta Ltd (IPP), Jharsuguda
36. The G.M, Vedanta Ltd (CGP), Jharsuguda.
37. The DGM (Power Distribution), RSP, Rourkela.
38. Joint President, Aditya Aluminium Ltd., Lapanga, Sambalpur
39. The G.M.(Elect.), Bhusan Steel Limited. Meramundali
40. The G.M. (Elect.), Bhusan Power & Steel Ltd, Budhipadar.
41. The G.M.(Elect.), IFFCO Limited.
42. Director & COO, GMR Kamalanga Energy Limited, Satyanagar, Bhubaneswar.

Odisha Power Transmission Corporation Ltd. Bhubaneswar.

Minutes of 96th PSOC meeting held on 25.04.2016 at PTC, Chandaka

List of participants is at Annexure.

Chief Load Despatcher, SLDC, OPTCL welcomed all the participants to the 96th Power System Operational Coordination meeting and highlighted the system performance during the month of March'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.

Manager (SS), SLDC took the agenda items for discussion.

The review proceeded as follows:

1: Confirmation of minutes of 95th PSOC meeting held on 29.03.2016

The minutes of meeting was circulated vide letter No. SGM (PS)-PI-15/2015/1114⁽⁴³⁾ dated 20.04.2016 to all the members and also uploaded in the SLDC website. No comment has been received from any of the members.

Deliberation in the meeting

Since no comments have received from the members, the minutes of 95th 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 March'2016.

(A) Frequency

It was noticed that, during the month of March'16, **73.46** % of times the frequency remained in the IEGC band i.e. 49.90Hz - 50.05Hz in comparison to **75.09** % during the month of February'16. The maximum and minimum System frequency during the month was **50.17 Hz & 49.75Hz** respectively.

(B) Grid demand

Grid demand for the month of March'16 was reviewed. The energy average consumption during the month was **3230 MW**. The maximum System demand of **4175 MW** occurred on 12.03.2016 at 21:00 Hrs and minimum demand of **2427 MW** occurred on **28.03.16** at 07:00 Hrs.

Deliberation in the meeting

It is observed that the average demand during the month of March' 16 was increased by 237 MW and the peak demand was increased by 154 MW from that of February'16. The average energy consumption during the month has been increased by 270 MW in comparison to March'15.

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

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

Deliberation in the meeting

The maximum Voltage of **240.57** kV occurred at Jaynagar 220 kV bus while Narendrapur, 220 kV buses have experienced the minimum Voltage of **164.08** kV. Bus Voltages at Samangara and Lapanga 220 kV bus could not be incorporated due to non availability of Energy audit meter. CGM (O&M) stated that the tender for procurement of energy meters is under process. CGM told that action is being taken for feeding Khurda area load from Atri Grid to improve the Voltage profile.

[Action: CGM (O&M)]

(D) Loading of 220/ 132 kV Auto at 220 kV S/Ss in OPTCL system for the month of March'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 is under process.

[Action: CGM (O&M)]

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

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

Deliberation in the meeting

It was noticed that CESU had overdrawn 43.566 MU followed by WESCO 13.006 MU during the month, while NESCO and Southco had drawn energy almost as per their schedule. All Discoms were requested to comply with their respective drawal schedule. CESU representative stated that they are estimating their day ahead drawal schedule basing on their drawal display in the SCADA. SLDC stated that the SCADA data is for monitoring purpose only and showing the drawal trend only as, certain assumption have been adopted. CESU should analyse the data comparing with the actual metered drawal and ascertain the correction factors in different blocks. It was also suggested that CESU may consult SLDC in this regard.

[Action: All Distribution Utilities / SLDC]

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

Energy generation and exchange during the month of March'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 **2403.48 MU**.

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

The drawal of Machhakund power during the month of March'16 was **25.354 MU** against AP drawal of **25.213 MU**. The cumulative drawal of the State for the FY 2015-16 was **280.554 MU** and AP was **297.268 MU**.

In the 95th PSOC meeting it was decided that:

- Sr. G.M (O&M), Zone-I shall instruct Jayanagar S/S to monitor Machhakund drawal to avoid hand tripping at their end.
- DGM (OHPC) Upper Kolab shall coordinate Machhakund authority to make the traction bay functional and to pursue them for taking up the maintenance work.
- Southco shall co-ordinate for early commissioning of 33 kV Akhusing –Gumuda feeder.
- CGM (Telecom) shall explore installation of RVDU at Jayanagar Control room for monitoring of Machhakund drawal in co-ordination with M/s Chemtrol.

Deliberations in the meeting

Sr. G.M (O&M), Zone-I stated that Jayanagar S/S may monitor Machhakund generation and take the responsibility for drawal of State's share of power to which Members agreed.

DGM (OHPC), Upper Kolab stated that, procurement action has already been taken by Machhakund authority to make the bay functional.

Southco stated that inspection of 33 kV Akhusing –Gumuda feeder is likely to be completed within 10 days.

CGM (Telecom) stated that the offer of M/s Chemtrol amounting Rs. 11.58 lacs towards the licensing fees, for installation of RVDU at Jayanagar control room has been forwarded to CLD, SLDC for acceptance.

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

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

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

PART C – Issues to be raised in 120th OCC meeting of ERPC scheduled on 28.04.16

C.1: 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.

In 119th OCC, advised all the SLDCs to implement the ADMS in their respective control area by 30.06.2016.

Subsequently, on request from DVC & WBSEDCL, ERPC vide letter dated 05.04.2016 requested Powergrid to take up the issue for inclusion of DMS/ADMS application software in the new SCADA system under new ULDC project which would be of great help for the ER constituents in implementing the ADMS system in their respective control area and subsequent compliance of CERC directive

As decided in the 95th PSOC, SLDC has invited offer for providing consultancy service to prepare the tender documents for implementation of ADMS in OPTCL system.

Deliberations in the meeting

CLD, SLDC stated that SLDC has already invited offer for providing consultancy service to prepare the tender documents for implementation of ADMS in OPTCL system. Some of the constituents of ER have raised the issue non- provision of the ADMS logic in the RTU installed by M/s Chemtrol. ERPC will examine.

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

C.2: 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 LILOOing of 400kV Meramandali-Jeypore S/C line and 400/220 kV Keonjhar S/s with an objective of supplying power from ER grid to its adjoining areas in Odisha.

The status deliberated in the meeting is as detailed.

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.	7 out of 14 completed. Severe ROW problem. Negotiation under progress.
b.	LILO of one circuit of Katapalli-Sadeipalli 220 kV D/C line at Bolangir S/S.	All work completed. ERLDC agreed to charge the line without PLCC. Powergrid, Odisha has sent the relay settings to their corporate office for approval. Expected to be made through by end of April' 16.
2.	400/220 kV Keonjhar S/S.	
a.	Keonjhar (PG)-Keonjhar (OPTCL) 220 kV D/C line	Work order yet to be issued.
b.	Keonjhar (PG)-Turumunga (OPTCL) 220 kV D/C Line.	Yet to be awarded
3.	400/220 kV Pandiabil Grid S/s	
a.	Pratapsasan(OPTCL)-Pandiabil (PG) 220 kV D/C line	It will take 1 year for completion.
b.	LILO of one circuit of Atri-Puri (Samangara) 220 kV D/C line at Pandiabil (PG)	Pandiabili S/S is expected to be completed by April' 16. LILO of Atri-Samangra 220 kV line at Pandiabili, by July' 16

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

C.3: Restoration of PLCC system of important lines

1) In 119th OCC, JUSNL informed that the following:

In 220 KV Ramchandrapur-Joda line auto-reclosure has been enabled and termination done in PLCC panels at Ramchandrapur end but due to non-availability of PLCC panels at Joda (OPTCL) end the A/R and PLCC scheme could not be implemented.

Further, it was informed that JUSNL is ready to share their standby PLCC panels (BPL make) with WBPDC (for Snataldih end) and OPTCL (for Joda end) to complete the PLCC schemes of both the above lines.

OCC advised WBPDC and OPTCL to accept the JUSNL offer and implement the PLCC scheme at the earliest for both the 220 kV lines.

WBPDC and OPTCL agreed and nominated their coordinators as follows to complete the work:

2) For 220 kV Ramchandrapur-Joda line:

Sh. L. Nayak, GM, OPTCL, M.- 943890780, e-mail: ele.lanayak@optcl.co.in

(ERPC Secretariat has issued a fax message vide no. 138 dated 21.03.2016 to JUSNL for taking up the issue with the above nominated coordinators for restoring the PLCC scheme of both the lines at the earliest.)

OPTCL vide mail dated 16.03.2016 informed the PLCC communication status of the important links under OPTCL as follows:

1. Jeypore(PG)-Jayanagar (Commn. in OPGW exists)
2. Rourkela(PG)-Tarkera (Commn. in OPGW exists)
3. Rengali(PG)-Rengali S/Y (Proposal for Commn. in OPGW is pending)
4. Indravati(PG)-Indravati(PH) (Proposal for Commn. in OPGW pending)
5. Baripada(PG)-Baripada (Tendering in Progress for OPGW)
6. Baripada(PG)-Rairangpur (Tendering in Progress for OPGW)

Subsequently, JUSNL vide letter dated 13.04.2016 has asked for consent of OPTCL and WBPDC for cost estimate details for further needful action.

Deliberations in the meeting

Sr. G.M (Telecom) stated that they have already replied to JUSNL. For item (3) and (4) proposal has been initiated. The performance of BPL carrier set is not satisfactory. This may be deliberated in the OCC.

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

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

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

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

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

In the 95th PSOC IT representative stated that tendering for consultancy has been done. It may take one month time.

Deliberations in the meeting

CGM (IT) stated that tendering for providing consultancy service will be done by end of April'2016. Appointment of Consultant is likely to be done by June'2016.

[Action: CGM (IT)]

C.5: 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 95th PSOC, O&M stated that BIS, Kolkata have responded to send their offer

Deliberations in the meeting.

O&M stated that the data required by BIS, Kolkata will be furnished.

[Action: CGM (O&M)]

C.6: Energy Generation data management from Renewable Energy Sources

RES development Division, CEA has been receiving monthly **generation details** and **installed capacity** of Renewable Energy Sources from respective SLDCs and other authorized agencies. Some discrepancies have been found in the data as received by CEA and MNRE. The discrepancies indicated by CEA are as tabled below:

Sl. No.	Generation Type	Data furnished to MNRE	Data furnished to CEA
1.	Small Hydro	64.63	57.00
2.	Solar	66.92	108.00
3.	Biomass	20.00	20.00

Constituents are requested to reconcile/confirmed the correct information at the earliest.

Deliberations in the meeting

SLDC stated that they are submitting the data to CEA only, which is the correct one. Gridco also denied regarding submission of data to MNRE. SLDC may deliberate the same in the OCC.

[Action: SLDC]

C.7: Compilation of data for meeting Renewable Energy targets of 175 GW by 2020 -- Reference from MNRE

CEA vide letter dated 29.03.16 has referred Ministry of Power letter no. 23/2/2005-R &R (Vol-XI), dated 22.03.2016 & MNRE letter dated 02.03.2016 regarding compilation of data for meeting Renewable Energy targets of 175 GW by 2020.

Concerned State Utilities /Generating companies are requested to submit data of their respective control areas in the format.

Deliberations in the meeting

CGM (PP), Gridco agreed to furnish the data in the prescribed format.

[Action: GRIDCO]

C.8: Long outage of important transmission lines

a) Prolonged shutdown of 220kV Mermundali-Bhanjanagar-I

220kV Meramundali-Bhanjanagar-I was taken under shutdown on continuous basis for replacement of deteriorated conductors on 09/02/16 with scheduled completion date being 25/03/16. However, till date the shutdown has not yet been returned. It needs to be noted that with the depletion of hydro at South Odisha stations, any tripping of ckt-II is leading to cascade tripping of Mendhasal ICTs(2 x 315MVA), leading to disruption of capital area and important loads at Chandaka, Bhubhaneshwar, Nimapara and at times also the entire south Odisha has also gone into blackout subsequently.

OPTCL may furnish the day wise schedule of the pending works indicating the completion time as there has already been significant time over-run.

b) Prolonged shutdown of 220kV TTPS-Joda-I

220kv TTPS-Joda-I was taken under shutdown for replacement of old Sheep conductor by ACSR Zebra conductor w.e.f 13/02/16 to 15/04/16. However, the shutdown has not been returned till date. The above line is important specially in context of feeding Joda loads during s/d of 220kv Joda-Ramchandrapur during which redundancy of feed to Joda/Jindal/ Jamshedpur (DVC) is affected.

OPTCL may furnish the day wise schedule of the pending works indicating the completion time as there has already been significant time over-run.

Deliberations in the meeting

CGM (O&M) stated that 220 kV Meramundali –Bhanjanagar ckt will be charged by 26th April, pending completion of the balance work.

CGM (Const) stated that 132 kV Jayanagar –Sunabeda line shutdown will be returned by end of May 2016. The foundation work is being delayed due to stony soil.

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

C.9: Replacement / repair of meters on Various Locations

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

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

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

SLDC deliberated in the OCC that, since there is no line CT, installation of meter in the B/C bay was sought for.

In 119th OCC, OPTCL informed that SEM at Joda end needs to be checked and corrected.

OPTCL informed that there is no line CT so 2 nos SEM for the bus-coupler at Joda end is required.

ERLDC requested OPTCL to furnish the SLD of the Joda Sub-station for their study and assessment of requirement of SEM for bus-coupler. OPTCL agreed.

Powergrid also agreed to look into the matter and resolve it.

Deliberations in the meeting.

SLDC shall place the S/S Single Line Diagram before OCC.

[Action: SLDC]

C.10: Dynamic data of Generator Models required in PSSE for Simulations – ERLDC

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

In 114th OCC, the house was informed that the formats are available at ERPC website. (www.erpc.gov.in)

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

In the 95th PSOC meeting, OHPC stated that only 30 % data are available with them. SLDC stated that they may forward the data to ERPC / ERLDC. All other generators including CPPs may furnish their data to ERPC.

Deliberations in the meeting.

OPGC stated that they have submitted the data in respect of their units to ERPC. OHPC stated that they will submit the available data on 28th April'2016. All other generators including CPPs may furnish their data to ERPC

OHPC stated that only 30 % data are available with them. SLDC stated that they may forward the data to ERPC / ERLDC.

[Action: OHPC/ All generators /CPPs]

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 **March'16** was reviewed.

It is noticed that CESU had overdrawn a substantial quantum of power to the tune of 43.566 MU followed by WESCO to the tune of 13 MU, while Southco & NESCO had almost drawn as per the schedule.

Deliberations in the meeting.

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

[Action: All Discom utilities]

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

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

In the 95th PSOC meeting, OHPC stated that revival of station supply from Balimela 220/33 kV S/S will be done by end of March' 2016.

Deliberations in the meeting

OHPC stated that all works at their end have been completed. The 33 kV feeder could not be charged due to isolator problem at Balimela Grid S/S of OPTCL. CGM (O&M) advised SGM (O&M)-I to expedite and rectify the isolator problem soon at Grid end.

[Action: SGM (O&M)-I]

D.3: Non-compliance of Grid Code provision by Mendhasal sub-station.

On 12.04.2016, 400kV Mendhasal - New Duburi ckt tripped which was subsequently charged at Mendhasal in absence of charging code from ERLDC through SLDC. It should be ensured that all the executives in charge of 400 kV Grid S/Ss must be aware of Grid Code provisions. O&M may

arrange training programme on “Awareness of GRID CODE” to all the executives posted at 400/220 kV S/Ss through OPTCL training cell to avoid such incidents in future.

Deliberations in the meeting

All shift charge Engineers deployed at major Grid S/Ss should be aware of Grid Code provisions to avoid unwanted incidents resulting outage of transmission elements.

[Action: O&M]

D.4: Prolonged outage of transmission elements and tentative revival dates

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

Sl.No	Name of transmission element	Reason of outage	Probable date of revival
1	220kV Jayanagar-Theruvalli ckt-III breaker	Breaker erection	Charged.
2	132 kV Jayanagar-Sunabeda line	For conversion to double ckt	May'16.
3	220 kV TTPS-Joda ckt-I	Replacement of conductor	April'2016
4	220 kV Meramundali-Bhanjanagar ckt-I	Replacement of conductor	April'2016

Outage of 220 kV Meramundali –Bhanjanagar ckt-I is causing overloading of Mendhasal ICT, which may aggravate during summer. Outage of TTPS-Joda ckt-I, limit the operational flexibility.

Deliberations in the meeting

CLD, SLDC stated that shutdown of 220 kV Meramundali –Bhanjanagar ckt-II was availed without the knowledge of DGM (Mtc), Meramundali, resulting blackout of South Odisha for about four hours. DGM, Meramundali stated that CESU have heightened their 33 kV line without intimating to O&M, which cause low clearance and sparking. CGM (O&M) stated that 220 kV Meramundali-Bhanjanagar ckt – will be charged on 26th April'2016.

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

D.5. Maintenance of 400 kV Indravati (OHPC)- Indravati (PG) S/C line.

Indravati(OHPC)-Indravati(PG) 400 kV S/C line was being maintained by Powergrid since commissioning of the line. At present Powergrid is insisting OHPC / OPTCL for maintenance of the said line. As per Powergrid's statement, the line and bay at PGCIL end belongs to the then OSEB. A meeting was convened between Powergrid, OPTCL, Gridco and SLDC to resolve the ownership dispute. Powergrid vide their letter dated 19.03.2016, addressed to CGM (O&M) also indicated the same and requested OPTCL to take up the maintenance work. The line was tripped at PG end due to blasting of R-phase CB. OHPC and OPTCL may verify the records and resolve the issue.

In the 95th PSOC meeting Powergrid stated that since the line and bay at Indravati PG belongs to OPTCL / OHPC they should take up the maintenance work. Director (Commercial) stated that OHPC may collect the documents pertaining the ownership of the line and ICT at Indravati (OHPC) S/S from Govt. office, as the matter was dealt by the then Indravati Cell of under Electricity-cum – Electrical Projects. OHPC may intimate to OPTCL, the details of the 400 kV SC line. CGM (O&M) stated that let Powergrid maintain the bay at Indravati (PG) and OPTCL the two nos of bays at Mendhasal S/S (Baripada PG and Duburi line) for smooth operation of the system. It was decided that a meeting shall be convened to take a decision in this regard by 15th April'16. It was further decided that OPTCL shall provide the breaker pole and Powergrid will take up the restoration work. OHPC shall coordinate.

Deliberations in the meeting

CGM (O&M) stated that a meeting will be convened with Powergrid to discuss the issue.

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

D.6: 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. No	Name of CGP	Present status
1	M/s IFFCO, Paradeep	Outdoor commissioning work completed. RTU was locally tested. After replacement of the faulty CVT, data will be integrated.
2	M/s MSP Mettalicks	PLCC / RTU installed. Database has already been prepared by OPTCL. Final RTU integration with OPTCL system by the vendor is awaited.
3	M/s NINL, Duburi	M/s NINL has requested for Scheme, BOQ for PLCC / SCADA, which has been forwarded by OPTCL. No action has been taken by NINL so far.
4	M/s Rohit Ferro tech	PLCC established and inspection by Telecom Engineers completed. Database has already been prepared by OPTCL.
5	M/s Vedanta Ltd. (IPP), Jharsuguda	Generators data remains suspect most of the times.

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

Deliberations in the meeting

It was decided that GCC will intimate the status to O&M in consultation with Telecommunication. O&M shall write the defaulting CGPs to comply the communication issue.

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

D.7: Web based drawal / generation scheduling.

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

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

In the 95th PSOC it was decided that, SLDC shall organize the training by 2nd week of April'16 after confirmation by IT wing.

Deliberations in the meeting

IT stated that they have rectified the software as suggested by SLDC. It was decided that SLDC will arrange the training programme during 1st week of May'2016 after the final demo by IT.

[Action: CGM (IT) / SLDC]

D.8: Implementation of Automatic Meter Reading for OPTCL-Discom interface points.

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

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

In the 93rd PSOC meeting CGM (IT) stated that from 1st March onwards the AMR shall be made "Go live". Data will be available after one hour lapses of time.

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

In the 95th PSOC IT stated that after receiving report from SLDC the process will be implemented.

Deliberations in the meeting

It was decided that SLDC will finalize the checking and sent the report to IT by end of April'2016

[Action: SLDC / IT]

D.9: 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 95th PSOC, IT stated that the proposal for appointment of outside agency for development of the software has been placed before the CMD for approval.

Deliberations in the meeting

IT stated that the proposal for appointment of outside agency for development of the software is pending with the finance wing of OPTCL, after which it will be forwarded to CMD, OPTCL for approval.

[Action: SLDC/IT]

D.10: DISCOM Issues

CESU

A.CESU has forwarded different issues relating to augmentation of EHT S/S capacity, conversion of S/C line to D/C, bay extension at different S/Ss etc. These issues have already been discussed in the technical workshop on "Effective Grid Management" held on 19.04.2016. Also the concern wings of OPTCL have been advised to take required steps. The Distribution utilities were also advised to contact with the concerned GM /DGM, EHT (O&M) of OPTCL and for necessary action in this regard. CESU may deliberate whether any such follow up action has taken in this regard.

B.Mismatch of SCADA drawal with the billing meter data to the tune of 45 MU during March'16.

- (i) Fixed data indicated on dashboard may be converted to variable for accurate drawal display.
- (ii) Interruption of RVDU data.
- (iii) Provision of on line recording of drawal data for CESU on real time basis.
- (iv) Mismatch in dashboard and RVDU data.
- (v) Deviation charge bill need to be replaced with UI charge bill from 17.02.2014.
- (vi) Gridco to facilitate for realizing the long outstanding dues of CESU from WESCO & NESCO.

Deliberations in the meeting

Director (Com) stated that the issues in item "A" have already been discussed in the meeting on 19.04.2016 organised by GCC.

SLDC stated that CESU may analyze the SCADA data and compare with the actual drawal. The "correction factor" may be ascertained to estimate the day-ahead demand. Conversion of fixed data is not possible until all 33 kV feeders are integrated with SCADA.

At present only Chemtrol system is in place and the Dashboard data have been stopped. CESU may verify the same. Regarding bilateral issues with NESCO, CESU may convene a meeting with NESCO and resolve.

[Action: CGM (Telecom) / SLDC / CESU / Gridco]

NESCO

NESCO has forwarded the requirement of additional bays at different Gris Sub-stations. As decided in the technical workshop on "Effective Grid Management" held on 19.04.2016, NESCO may contact the respective GM / DGM of EHT (O&M) for necessary action in this regard.

[Action: NESCO]

SOUTHCO

a. RVDU should be in the new proposed format, which will be user friendly for Discoms

- b. Data of 33 kV Khallikote and Sonepur feeders are fixed due to non installation of RTU for which total power drawn by Southco is not computed by the actual value accurately. Early action solicited.
- c. Providing meter data through AMR for computing the actual in parallel with RVDU.
- d. Energy bill has been done on actual energy instead of scheduled energy from July'2015, which should be revised on scheduled energy as deviation charges has been claimed by SLDC simultaneously.

Deliberations in the meeting

SLDC stated that the RVDU is as per the approved format submitted by Southco earlier; however more data will be incorporated in future after integration of SCADA provided space is available. Southco may discuss the billing matters with Gridco separately. Fixed data and AMR issues have already been discussed.

[Action: Gridco / Southco]

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
3	Commissioning of 220 kV Bidanasi-Cuttack line	Work in progress and expected to be completed by May' 2016.
4	Commissioning of 220/132 kV Cuttack S/S	Work in progress and expected to be completed by May' 2016.
5	Commissioning of 132 kV Baripada (PG)-Jaleswar line	Work has already been started, which will be completed by June'2016.
6	Commissioning of 220/132 kV Kesinga S/S	Work under progress. Expected by March' 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	July'16	CESU	Action being taken
2	220/33kV, 2x20 MVA Banei	Mar'17	WESCO Utility	Stayed by Court.
3	132/33kV, 2x20 MVA Udala	Mar'17	NESCO Utility	Line existing

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

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

E.2: Energy Metering at Hydro stations.

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

In the last meeting OHPC stated that Upper Kolab and Balimela PH meters are showing error. Mismatch noticed at both ends metering data of Burla-Chipilima Tie line. Rengali-TTPS feeder meter is not functioning. The meter data can be considered for billing purpose only after

rectification of all defects. OHPC has already written to CGM (O&M) in this regard. It was decided that O&M shall take up the matter with the vendor for rectification of energy meters.

In the 95th PSOC, O&M stated that the matter has already been taken up with the vendor and rectification action is being taken

Deliberations in the meeting

OHPC stated that energy meters at Kolab HEP have been rectified. The meter defect at Balimela, Burla and Chipilima has not yet been resolved. O&M stated that the matter has already been taken up with the vendor and rectification action is being taken.

[Action: O&M / OHPC]

E.3: TTPS Feeder metering.

Implementation of Feeder Metering

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

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

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

In the 93rd PSOC meeting, GRIDCO stated that, in response to the letter of GRIDCO, CEA has sought for some information such as location of Main, Check and Standby meters. TTPS was requested to comply those queries. OPTCL may take action for installation of feeder meters.

In the 94th PSOC meeting TTPS stated that the reply has already been sent to CEA. DGM (O&M), Meramundali stated that action has been taken for installation of feeder meters at TTPS.

In the 95th PSOC, TTPS stated that CEA has asked the signed copy of the reply, which will be sent by TTPS. DGM (O&M), Meramundali stated that installation of panel and meters is expected to be completed by end of April' 16.

Deliberations in the meeting

DGM (O&M), Meramundali stated that installation of panel and meters is expected to be completed by end of April' 16. As requested by TTPS, the on line data can be shared to them. Issue of on line time synchronization will be examined.

[Action: TTPS / O&M]

E.4: Reactive Power Management

SLDC is preparing the mock reactive charge billing to all Dist. Utilities as per the direction of Hon'ble Commission. The issue of low voltage at different 33 kV feeders is also being raised at various forums. Although OPTCL is maintaining 132 kV Voltage profile within limit, it is observed that 33 kV Voltage profile is low. The reason may be due to increase in feeder length and low power factor. It is suggested that the distribution utilities may examine for installation of capacitor banks at their 33 kV S/Ss to improve the Power Factor as well as Voltage profile.

Deliberations in the meeting

As suggested by SLDC, the distribution utilities may examine for installation of capacitor banks at their 33 kV S/Ss to improve the Power Factor as well as Voltage profile.

[Action: All Distribution Utilities]

E.5: Major Events in the month of March'16

On 31.03.2016: 132/33kV, 1 X 12.5 MVA sub-station at Mania charged.

E.6: Important Grid Incidences during the month of March'16.

Important Grid incidents during the month of March'16 were reviewed. The incidents to be analyzed and deliberated in the PCC meeting of ERPC.

[Action: O&M / SLDC]

E.7: Outage of major transmission Elements during the month of March'16. (above 10 hrs).

Outage of major transmission elements above 10 hours during the month of March'16 was reviewed. Almost all such outages are for line patrolling and tree cutting.

[Action: O&M]

E.8: Review of Outage Program of State Generators/Transmission elements for the month of May'16:

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

Sl.	Station	Unit	Period	Remarks
1	Burla	# 7 # 6	02.05.16 to 31.05.16 17.02.14 to continue	Annual Maintenance Programming for R, M & U
2	Chiplima	# 3 # 1 # 2	15.02.14 to continue 16.05.16 to 15.06.16 16.05.16 to 15.06.16	Programming for R, M & U Power Chanel maintenance -do-
3	Balimela	# 1 # 7	31.01.13 to continue 02.05.16 to 31.05.16	TGB problem and started R,M & U Annual maintenance
4	Upper Kolab	# 1 # 4	29.07.15 to 17.05.16 11.04.16 to 30.04	Capital Maintenance Checking of turbine vibration
5	Rengali	# 3	04.04.16 to 03.05.16	Annual maintenance
6	Upper Indravati	# 3	23.11.15 to 15.06.16	Capital Maintenance

E.9: Generation Program for the month of May'16.

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

Name of Hydro Gen. Station	Generation Programme (MW)		Reservoir Level as on 15.04.15	Reservoir Level as on 15.04.16	MDDL	High Flood Reservoir Level
	May'16 (1 st fortnight)	May'16 (2 nd fortnight)				
HPS-I, Burla	30	00	611.71ft	612.83ft	590 ft.	630 ft.
HPS-II, Chipilima	20	0	-	-	-	-
Balimela	120	160	1497.10ft	1478.30ft	1440 ft.	1516 ft.
Rengali	40	50	119.71mt	115.31mt	109.72mtr	123.5 mtr.
U.Kolab	100	100	853.17mt	850.70mt	844 mtr	858 mtr.
U. Indravati	110	180	635.40mt	633.42mt	625mtr	642 mtr
MKD (O/D)	30	30	2727.35ft	2727.80ft	2685 ft.	2750 ft.
TOTAL	450	530				

[Action: OHPC/ SLDC]

E.10: Anticipated power generation and demand for the month of May'2016.

Sl. No	Discom	Average	Peak
1	CESU	1000	1300
2	WESCO	960	1150
3	NESCO	800	1000
4	SOUTHCO	400	550
5	OPEN ACCESS	200	200
6	Total	3360	4200
Availability			
1	Hydro	450	870
2	State Thermal	780	780
3	IPP, small hydro &RE	850	800
4	ISGS share (including OA)	1000	1100
5	CGP support (OA)	150	150
6	Banking	160	500
7	Total availability	3390	4200
8	Surplus / Deficit	30	0

PART F: OTHER ISSUES

F.1: Date and Venue of the next (97th) PSOC meeting

List of participants in the 96th PSOC meeting dated 25.04.2016

96th Power System Operational Co-ordination Review Meeting

[At 11:00 A.M. on 25.04.2016]

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

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