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OFFICE OF THE CHIEF LOAD DESPATCHER, SLDC

ODISHA POWER TRANSMISSION CORPORATION LIMITED

GRIDCO Colony, P.O.-Mancheswar Rly. Colony, Bhubaneswar-751017, FAX-0674- 2748509

CIN – U40102OR2004SGC007553

No-SGM (PS)-PL-15/2019/

2880⁽⁴⁹⁾

Dated: 06.09.2019

From:

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

To:

As per distribution list

Sub: Minutes of 136th PSOC meeting held on 21.08.2019 at PTC, Chandaka, Bhubaneswar.

Sir,

Please find enclosed herewith the minutes of 136th Power System Operational Co-ordination meeting held on 21.08.2019 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 (Commercial), Gridco, Bhubaneswar
2. The Director (Operation), OPTCL, Bhubaneswar
3. The Director (Projects), OPTCL, Bhubaneswar
4. The Director (Operation), OHPC, Bhubaneswar
5. The CGM (O&M), OPTCL, Bhubaneswar.
6. The CGM (Const.), OPTCL, Bhubaneswar.
7. The Sr. G. M. (RT&C), OPTCL, Bhubaneswar.
8. The CGM (PP), GRIDCO, Bhubaneswar.
9. The CGM (IT), OPTCL, Bhubaneswar.
10. The CGM (Telecom), OPTCL, Bhubaneswar.
11. The Sr. G. M. (Const)-I, OPTCL, Bhubaneswar.
12. The C.G.M. (Const), OPTCL, Sambalpur.
13. The Sr. G.M (CPC), OPTCL, Bhubaneswar.
14. The Sr. G.M (CP), OPTCL, Bhubaneswar.
15. The Sr. G.M. (O&M), Zone-I, Narendrapur
16. The Sr. G.M. (O&M), Zone-II, Meramundali.
17. The CEO, CESU, Bhubaneswar.
18. The A.O., WESCO, Burla
19. The A.O., NESCO, Balasore
20. The A.O., SOUTHCO, Berhampur.
21. The Member Secretary (GCC), OPTCL.
22. The ED, Power Grid Corporation of India, Bhubaneswar.
23. The Sr. G.M. (El.), BHEP, Balimela
24. The A.G.M. (El.), CHEP, Chiplima
25. The Sr. G.M. (El.), UIHEP, Mukhiguda
26. The Sr. G.M. (El.), RHEP, Rengali
27. The D.G.M. (El.), HHEP, Burla
28. The D.G.M. (El.), UKHEP, Bariniput, Koraput
29. The S.E. (O&M), Machhakund
30. The DGM (Elect.), IbTPS, OPGC, Banharpali.
31. The Vice President (O), IMFA, Choudwar.
32. The D.G.M. (O&M), NTPC (TTPS), Talcher.
33. The AGM (Elect.), JINDAL Stainless Ltd., Duburi
34. The G.M, HINDALCO, Hirakud.
35. The G.M.CPP, NALCO, Angul.
36. The Director, M/s. Jindal Steel & Power Ltd., Angul
37. The AVP-Vedanta Ltd (IPP), Jharsuguda
38. The G.M, Vedanta Ltd (CGP), Jharsuguda.
39. The DGM (Power Distribution), RSP, Rourkela.
40. Joint President, Aditya Aluminium Ltd., Lapanga, Sambalpur
41. The G.M. (Elect.), Bhusan Steel Limited. Meramundali
42. The G.M. (Elect.), Bhusan Power & Steel Ltd, Budhipadar.
43. The G.M. (Elect.), IFFCO Limited.
44. Director & COO, GMR Kamalanga Energy Limited, Satyanagar, Bhubaneswar.
45. The CEO, Bhubaneswar Power Pvt. Ltd, IRC Village, Nayapalli, Bhubaneswar.
46. M/S Tata Power & Steel Ltd., Kalinganagar
47. Power Grid Corporation of India, Bhubaneswar.
48. M/S BEL, Badamal, Bolangir.

Minutes of 136th PSOC meeting held on 21.08.2019 at PTC, Chandaka, BBSR

List of participants is at Annexure.

Chief Load Dispatcher, SLDC, OPTCL welcomed all the participants to the 136th Power System Operational Coordination meeting and highlighted the system performance during the month of July'2019 and overall power scenario of the State. He also emphasized on the drawal by all the Discoms during the month.

Dy. Manager, SLDC took the agenda items for discussion.

The review proceeded as follows:

1: Confirmation of minutes of 135th PSOC meeting held on 24.07.2019

The minutes of meeting was circulated vide letter No. SGM (PS)-PI-15/2019/2446 ⁽⁴⁸⁾ dated 07.08.2019 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 135th PSOC meeting was confirmed.

PART B: SYSTEM PERFORMANCE

B1: Review of Grid Performance for the month of July'2019.

(A) Frequency

It was noticed that, during the month of July'19, **67.57 %** of times the frequency remained in the IEGC band i.e. **49.90Hz - 50.05Hz** in comparison to **69.87 %** during the month of June'19. The maximum and minimum System frequency during the month was **50.23 Hz & 49.72 Hz** respectively.

Deliberations in the meeting

SLDC stated that the percentage of times of frequency in the IEGC band has been decreased. The frequency ("above 50.05 Hz") range has been increased from 20.03 % to 25.39 % in comparison with the previous month. The low frequency range 49.7-49.9 Hz decreased from 10.06 % to 07.00%. The high frequency range might have been increased due to flood situation in the country.

(B) Grid demand

Grid demand for the month of July'19 was reviewed. The average consumption during the month was **3688 MW**. The maximum System demand of **4899 MW** occurred on **15.07.19** at 21:00 Hrs and minimum demand of **2640 MW** occurred on **02.07.19** at 04:00 Hrs.

Deliberation in the meeting

It is observed that the average demand during the month of July' 19 was almost remained same as that of June'19 but the maximum demand increased by 109 MW in comparison to June'19. The peak demand has increased during the month due weather condition and power import by bulk consumers through Open Access transactions.

(C) Voltage Profile of important Sub Stations in OPTCL System during the month of July'19.

The Voltage profile at different 220 kV buses in OPTCL system during the month of **July'19** was reviewed.

The maximum Voltage of **240.06 kV** occurred at **Jayanagar 220 kV bus**, while **Cuttack** 220 kV bus has experienced the minimum Voltage of **196.76 kV**. Voltage profile of Meramundali, Mendhasal and New Duburi bus during the month of July' 2019 was reviewed.

Deliberations in the meeting

SLDC stated that Cuttack 220 kV bus experienced minimum Voltage for 2 days in the month. Voltage profile of those S/Ss seems to be normal except a few transient deviations.

(D) Loading of 220/ 132 kV Auto at 220 kV S/Ss in OPTCL system for the month of July'19.

Auto loading of all 220 kV S/Ss during the month of July'19 was reviewed.

(E) DISCOM Drawal during the month of July'19

The schedule and actual energy drawal by Discoms for the month of **July'19** was reviewed.

Deliberation in the meeting:

It is noticed that CESU & WESCO were over drawn during the month, while NESCO & SOUTHCO have under drawn. **WESCO** has deviated **3.306%** followed by **SOUTHCO 3.204%** from the scheduled energy while **CESU & NESCO** have deviated **0.596 % & 0.702 %** respectively.

All the DISCOMs were requested to submit their month ahead demand projection in the mail "**psocodisha@gmail.com**". The month ahead Demand estimation should reach at SLDC by end of 3rd week of each month so that SLDC shall forward the Monthly LGBR to GRIDCO for power procurement / sale planning.

[Action: DISCOMs]

(F) Energy Generation / import during the month of July'19

Energy generation and exchange during the month of July'19 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 **2744 MU**.

Deliberations in the meeting

The quantum of energy transaction has increased by **92 MU** in comparison with previous month.

(G) Drawal of Machhakund Power during the month of July'19

The drawal of Machhakund power during the month of July'19 was **26.579 MU**, against AP drawal of **31.116 MU**.

Deliberations in the meeting

It was noticed that the State's drawl from Machhakund during the month was less by **4.537 MU**.

Southco stated that Dasmantpur feeder is expected to be charged today i.e on 21.08.2019.

Sr.GM (O&M), Zone –I suggested to explore the following link lines for providing adequate matching load in Machhakund system.

- i. Connecting Patangi S/S or Proposed Lamtaput S/S with Podagada S/S through 132 kV link.
- ii. Providing Sunabeda S/S area load in Machhakund system
- iii. Modification of Jayanagar S/S to accommodate Jayanagar load

[Action: O&M/SOUTHCO]

(H) Under Frequency relay operation in OPTCL System during the month of July'19.

There is no UF Relay operation during the month of July'19 as the frequency had never gone beyond 48.50 Hz.

(I) Status of Open Access applications during the month of July'2019

SLDC has processed 182 numbers of Short Term / Medium term and Collective transaction applications have been processed by SLDC for according Approval / Consent / NoC during the month.

PART C – Issues discussed in the 160th OCC meeting of ERPC on 09.08.2019

C.1: Status of projects funded under PSDF schemes

In the PSDF review meeting, 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 / OHPC is as given below:

Sl No	Name of Constituent	Name of Project	Date of approval from PSDF	Target Date of Completion	PSDF grant Approved (in Rs.)	Amount Drawn till date (in Rs.)	Status as updated in 129 th meeting
4	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	31.03.20	162.5 Cr. Total expenditure may not exceed Rs. 68 Crs.	38.09 Cr. Received Rs. 8.00 Cr on 28.03.19	<i>90% equipment installed and commissioned. Tender for measuring instruments under evaluation.</i>
7		Implementation of OPGW based reliable communication at 132kV and above substations	15.11.2017		51.22 Cr	2.56 Cr received as 10 % DPR. Claimed for 20 %.	Order placed. Expected by Sept'19
13	OHPC	Renovation & up-gradation of protection & control system of 4 nos. OHPC sub-stations		U.Kolab-March 19 Balimela-Feb 2019 U.Indravati-Jan 19 Burla-Nov18 Chiplima Dec 2018	22.35 Cr.	2.674 Cr	<i>Placed work order for Balimela. PO for other units amounting Rs. 12.79 Crs placed. Order under process.</i>
Projects under process of approval:							
	OPTCL	Installation of 125 MVAR Bus Reactor along with construction of associated bay each at 400kV Grid S/S of Mendhasal, Meramundali & New Duburi for VAR control & stabilisation of system voltage	27-07-18		31.94 Cr Estd. Cost. Approved amount 30.26 Cr. Grant amount 27.23 Cr.	Rs.2.72 Cr received as 10% of DPR. Retendering under process.	Agreement signed and sent to NLDC for signature. Retendering already done.
Projects recently submitted:							
	OPTCL	Implementation of Automatic Demand Management System (ADMS) in SLDC, Odisha	22-12-17	Date of submission	3.26 Cr Estt cost. 2.93 Cr recommended by Appraisal committee.		CERC approval received. Tender documents will be made by end of August'19.
	OPTCL	Protection up gradation and installation of SAS for seven numbers of 220/132/33kV Grid substations (Balasore, Bidanasi, Budhipadar, Katapalli, Narendrapur, New-Bolangir & Paradeep).	12.03.2018	Date of submission	41.1 Cr Estt cost	10% of DPR to be asked.	Project approved. Tender to be floated after revision of specification..

CGM (O&M) / OHPC/ SLDC may update the status

C.2: Effect of cyclone FANI on Odisha system

In 159th OCC, Odisha was advised to give a presentation in next OCC Meeting on effect of FANI cyclone on transmission and distribution system in Odisha along with the restoration status. Odisha agreed to give the presentation in next OCC Meeting. Odisha may give a presentation.

Deliberations in the meeting

It was suggested that O&M may depute representative to 161st OCC meeting of ERPC to make a presentation on “**Effect of FANI and Restoration process**”.

[Action: SLDC / O&M]

C.3: Implementation of non-scheduling of power due to failure of Payment security mechanism (PSM)--ERLDC

As per Govt order: (1.) "23/22/2019-R&R" dated: 28th June, 2019; (2.)"23/22/2019-R&R" dated: 17th July, 2019; (3.) "23/22/2019-R&R" dated: 23rd July, 2019,

Non-scheduling of power to the default beneficiary in case of failure of Payment security mechanism has been successfully implemented by PSOOCO w.e.f. from 1st August 2019. To facilitate the non-scheduling of power by the generator to any beneficiaries for non-maintenance of any valid Payment Security Mechanism (PSM), a web portal (Payment Security Administration portal link: <https://psa.posoco.in>) has been introduced by POSOCO on 31st July 2019. Using this portal beneficiaries and generators can update their payment security status for ISGS/LTA/MTOA transactions for the day ahead by 08:00 Hrs of the ‘D-1’ day using their user credential. As per the declaration in this portal, entitlement of the beneficiaries is being calculated at 09:00 Hrs of ‘D-1’ day for the day ‘D’ and uploaded in scheduling portal of ERLDC.

Deliberations in the meeting

It was suggested that GRIDCO and IPPS connected to the STU may implement the same.

[Action: GRIDCO / GKEL/ Vedanta Ltd/SLDC]

C.4: Renewal of Maintenance and Support Contract for PSS/E User licenses—

ERLDC It has been decided in the 30th FOLD meeting held on 19.07.2019 that RLDCs shall coordinate with SLDCs of respective regions and confirm their approval for renewal of AMC of PSS/E. On receipt of the confirmation from RLDCs, NLDC will intimate the negotiation price details to SLDCs so that SLDCs can place award accordingly. The award needs to be placed by 30th September, 2019 to avoid any further rise in price. In view of the above ERLDC had written a letter to all SLDCs of Eastern Region with request to communicate their approval for renewal of AMC along with the no. of licenses required by 9th August, 2019.

Deliberations in the meeting

SLDC stated that Odisha has already given consent for renewable of the Maintenance and support contract

[Action: SLDC]

C.5: Finalization Outage Request and processing timeline--ERLDC

The procedure for timeline regarding submission of outage request till approval of the outage formulated by ERLDC has been circulated and discussed in 156th OCC meeting held at NTPC, Kahalgaon. The same had also been presented in 157th OCC meeting held at ERPC, Kolkata for beneficiary’s comments/suggestion. Till date ERLDC did not receive any objection/suggestion from the utilities. Under this circumstance, the procedure mentioned through a flow chart in Annexure-B15 may be approved and minute unless any modification/suggestion recommended. In

158th OCC, all the constituents were advised to submit their comments on outage procedure within a week. OCC decided to finalize the procedure in next OCC Meeting.

Deliberations in the meeting

It was decided that SLDC and O&M shall submit feedback to ERPC

[Action: SLDC/ O&M]

C.6: Ratification of projected Demand and generation for POC transmission charges and loss calculations for Q3 (2019-20)-ERLDC

The projected Demand and Generation of ER constituents to be considered in the base case for POC transmission charge and loss calculations for Q3 (Oct 19-Dec 19) are attached at Annexure B16 for ratification by the constituents.

Deliberations in the meeting

It was suggested that GRIDCO may place their views in the Validation Committee meeting

[Action: GRIDCO]

C.7: Updated Operating Procedure of Eastern Region-2019.

The Operating Procedure of Eastern Regional power system, developed and maintained by ERLDC in accordance with section 5.1(f) of the IEGC, has been updated taking into consideration the developments that have taken place in the regional power system during the last one year including the amendments incorporated in the IEGC so far by Hon'ble CERC. Draft Operating procedure was circulated to the concerned for their review and suggestion via email dated 10th July 2019. Based on comments received and other development operating procedure is finalized and same is available at ERLDC website www.erldc.in Comments received from West Bengal after 20th July is considered in Revision 1 of operating procedure and same is available at ERLDC website www.erldc.in.

Deliberations in the meeting

SLDC / O&M /OHPC and all users connected to STU may go through the procedure and communicate feedback/suggestions to ERPC.

[SLDC / O&M/OHPC/ IPPs]

C.8: Status of main bay of 400kV Indravati (OHPC)-Indravati(PG) at OHPC substation.

In 159th OCC, OHPC was advised to submit a detail plan of restoration of the main bay to ERLDC and ERPC.

Deliberations in the meeting

Sr. G.M (O&M), Zone-I stated that dismantling process of the foundation of the defunct CB has already been started.

Action: O&M]

C.9: Implementation of Automatic Demand Management Scheme

The latest status along with proposed logic as follows:

Sl. No	State /Utility	Logic for ADMS operation	Implementation status/target	Proposed logic (if different from under implementation logic)
1	Odisha	1. System Frequency < 49.9 Hz 2. Odisha over-drawl > 150 MW 3. DISCOM over-drawl > (40 MW)	10 Months Sent for PSDF approval	Logic 2 and 3 is AND or OR, in case it is AND then ADMS may not operate when DISCOMs are in schedule but GRIDCO is over drawing due to less generation at State embedded generators.

In the 116th PSOC meeting, CGM (O&M) stated that since considerable time has already been lapsed SLDC may prepare the EoI without waiting for CPC.

In the 123rd PSOC meeting SLDC stated that since the estimated cost has increased due to inclusive of SCADA integration, the revised estimate is placed in the BoD for approval.

CERC has approved the revised estimate. SLDC shall process for tendering.

In the 133rd PSOC meeting a committee was constituted with representatives of DISCOM, Telecom, IT & SLDC.

A meeting of the Committee was held on Dt. 06.07.2019. SLDC made a presentation on the logic and methodology to be adopted for the ADMS. The technical specifications prepared by SLDC were shared among the concern wings of OPTCL for their views. The specification will be finalized on receipt of the same. The DISCOMs were requested to update the list of feeders and group considering the present network configuration. On finalization of the above, the tendering process will be taken up by CPC wing of OPTCL as already approved by CMD, OPTCL.

The role of different wings was discussed in the meeting as tabled.

Role of different wings of OPTCL for implementation of ADMS

Task	Responsible Entity in OPTCL
Preparation of Tender Document and finalization of ADMS logic	SLDC
Finalization of Technical Spec.	Telecom wing, OPTCL
Floating of Tender	CPC wing, OPTCL
Interfacing between SCADA and ADMS Server at SLDC	Telecom wing, OPTCL
Communication link between SLDC ADMS Server and Grid S/S	IT / Telecom wing, OPTCL
Installation of RTU at Grid S/s	Under the supervision of O&M / Telecom wing, OPTCL
Connection of 33KV trip Ckt. with RTU at Grid S/S	Under the supervision of O & M wing, OPTCL
Updating and Grouping of 33KV feeders	Discom
Day to day monitoring of ADMS	SLDC
Bidding Guidelines	As per OPTCL procurement guidelines

As decided in the 135th PSOC meeting, SLDC convened a meeting on 06.08.2019 with Telecom, O&M, IT and CPC to discuss their rolls in the ADMS project.

Deliberations in the meeting

The Technical specification has been approved by the committee. SLDC shall forward the Commercial specifications to CPC for processing Tender.

[Action: SLDC / CPC]

C.10: Review of the PSS Tuning of Generators in Eastern Region

On 31st January 2019, PSS Tuning Meeting was held at ERPC. All generating utilities were advised to complete the PSS tuning of their plant at earliest for improvement of damping in the grid during transients. In addition, the tuning reports have also to be submitted to ERLDC/ERPC for their validation.

In the 131st PSOC meeting OPGC stated that they have already furnished the data to ERPC. GMR and Vedanta were requested to furnish the data soon to ERPC.

In the 159th OCC agenda, it is mentioned that PSS tuning of Ib TPS unit 1 & 2 was done during the year 2011 and 2012 respectively. Time line for next PSS tuning has not been confirmed by OPGC. GMR has recommended for their PSS tuning. Vedanta Ltd. may furnish the details of their last PSS tuning and future plan for next tuning.

Deliberations in the meeting

Vedanta Ltd has done PSS tuning of their units in the year 2016. OPGC stated that PSS tuning will be taken up after stabilization of # 3 & # 4.

[Action: OPGC/GMR]

C.11: 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 134rd PSOC meeting the status has been updated as follows:

Sl.	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 (PG) S/S.	Construction of 220 kV Sadeipali- Kesinga line has started. 220 kV Sadeipali-Bolangir (PG) portion of the line is expected by March'20.
2.	400/220 kV Keonjhar S/S.	
a.	Keonjhar (PG)-Keonjhar (220/33 kV) 220 kV D/C line	220 kV S.C line and Keonjhar S/S (220/33 kV), 2x20 MVA charged on 31.12.2018. 2 nd ckt; charged on 03.08.2019.
b.	Keonjhar (PG)-Turumunga (220/132 kV) 220 kV D/C Line.	By 2021. Order placed.
3.	400/220 kV Pandiabil Grid S/s	
a.	Pratapsasan(OPTCL)-Pandiabil (PG) 220 kV D/C line	December'2019

[Action:C.GM (Cont)]

C.12: Bypassing arrangement of LILO of 400kV Lines at Angul

LILO of Meramundali-Bolangir/Jeypore 400 kV S/C line and LILO of one Ckt of Talcher-Meramundali 400 kV D/C line has been done at Angul 765/400kV Sub-station. The bypass arrangement for these circuits is under implementation at Angul by Powergrid.

In 158th OCC, Powergrid informed that bypass arrangement would be completed by August 2019. OPTCL informed that 2nd circuit of 400 kV Meramundali-Mendhasal line would be commissioned by 1st week of August 2019.

In the 134th PSOC meeting O&M stated that 3rd ICT at Mendhasal is expected to be charged by end of July'19, after which charging of 2nd 400 kV Meramundali-Mendhasal ckt will be taken up.

Deliberations in the meeting

CGM (Const) stated that charging of 3rd ICT at Mendhasal is expected by end of August'2019. O&M may take steps for forest/tree clearing along the line.

[Action: CGM (O&M)]

C.13: Update on status of telemetry

CERC vide order dated 28.02.2016 on Petition No. 007/SN/2014 directed NLDC and respective RLDCs to update the status of telemetry every month at their respective websites and take up the issue of persistent non-availability of data from Generating Stations/substations at RPC meetings for appropriate action. Major issues are given below:

i.Regarding frequent intermittent of real time SCADA data from Talcher STPS Stage 1 & 2, NTPC agreed to provide additional ports by March 2019.

ii. Alternate path for Malda-Farakka OPGW link In 153rd OCC, Powergrid was advised to implement alternate OPGW link through 400 kV Kishenganj- Darbhanga-Muzaffarpur lines.

In 159th OCC, ERLDC informed that PMU data available at ERLDC is intermittent due to communication issues and PMU data reporting from PDCs at SLDCs is also intermittent. ERLDC opined that alternate OPGW link is required for reliable communication. OCC advised Powergrid to take the necessary action to resolve the issue. CERC vide order dated 28.02.2016 on Petition No. 007/SN/2014 directed, NLDC and respective RLDCs to update the status of telemetry every month

at their respective websites and take up the issue of persistent non-availability of data from Generating Stations/substations at RPC meetings for appropriate action.

Issues relating OPTCL Network:

Narsingpur data:

In the 132nd PSOC meeting CGM (Telecom) stated that survey work for Meramundali-Bhanjanagar line is under process. OPGW will be reached at site after completion of survey and preparation of drum schedule.

In the 134th meeting CGM (Telecom) stated that delivery of OPGW has already been started.

In the 135th PSOC meeting DGM (Telecom) stated that replacement of earth wire by OPGW in 220 kV Bhanjanagar-Meramundali is expected by December'2019

NALCO data: DGM (Telecom) stated that the vender list and rate will be provided to NALCO for placement of order by them.

In the 133rd PSOC meeting NALCO stated that the tower schedule has been prepared.

DGM (Telecom) stated that NALCO have proposed OPTCL to do the work on deposit basis.

Deliberations in the meeting

It was decided that NALCO shall submit a request letter to Telecom to take up the work.

[Action: Telecom / NALCO]

C.14: Mock Black start exercises in Eastern Region – ERLDC

Schedule and tentative date for conducting mock black start exercise in OHPC stations is as tabled.

Sl.	Name of Hydro Station	Schedule	Tentative Date	Schedule	Tentative Date
		Test-I		Test-II	
1	Upper Kolab	Last week of May-2019	Done on 19 th July19	Last week of January 2020	
3	Rengali	2nd week of June 2019	Done on June'19	Last week of November 2020	
4	U.Indravati	3rd week of June 2019	Sept' 2019	2nd week of February 2020	
6	Balimela	3rd week of October 2019	Done on 17 th July19	1st week of March 2020	
9	Burla	Last week of June 2019	Done on 20 th July' 2019	Last week of February 2020	

Deliberations in the meeting

SLDC stated that while conducting mock Black start exercise for Upper Kolab and Upper Indravati HEPs Muniguda Traction feeder is getting interrupted. It was suggested that feeding of Muniguda Traction S/S from Theruvali S/S through a separate dedicate line may be examined.

[Action: O&M/SLDC]

C.15: Collection of modeling data from Renewable as well as conventional energy generators: ERLDC

As a National Grid operator, POSOCO is continuously working for ensuring reliability and security of the Grid. With penetration of more and more renewable energy source the task is becoming complicated day by day. An accurate dynamic modeling of the National Grid needs modeling of conventional as well as renewable / distributed generation sources. World Bank has engaged Digsilent as consultant for assisting POSOCO for building dynamic model of the Grid. A guideline for dynamic data collection has been developed in consultation with Digsilent Pacific

team. All the utilities are requested to collect data from the grid scale renewable power plants as well as from conventional power plants under their jurisdiction and submit the same to ERLDC/ERPC as early as possible.

In the 132nd PSOC meeting, all generators as well as RE sources were requested to furnish data to SLDC for onward transmission to ERPC.

SLDC requested ERPC to forward the format for preparing the data. The format will be circulated to all RE & conventional generators in the State

In the 135th PSOC meeting, SLDC stated that the format was received on 18th July'19 and will be circulated soon.

Deliberations in the meeting

SLDC stated that the format has been forwarded to all entities. GRIDCO advised that a copy of the format may be forwarded to GRIDCO for necessary coordination.

[Action: SLDC/GRIDCO]

C.16: Submission of data in MERIT Order portal --CEA

CEA vide mail dated 9th July 2019 informed that the MERIT Order portal had been launched on 23rd June, 2017 by Honourable Minister of Power. One of the most important advantages of "Merit" Portal is transparent information dissemination pertaining to marginal variable cost and source wise purchase of electricity and indication of supply side reliability, adequacy, and cost of power procurement.

However, it has been observed that many of the states are not filling the data regularly and sometimes the data filled varies widely from the data available on the respective RLDCs daily reports.

It is requested that the states may be advised to fill the data regularly and check that correct data is filled on the MERIT Portal.

In the 135th PSOC meeting it was suggested that SLDC may ensure updating the injection schedule of all state generators in real time basis so that the data can be filled on the Merit Order Portal

Deliberations in the meeting

SLDC stated that the schedules are being updated and data is being filled in the portal. SLDC may deliberate the same in the OCC meeting.

[Action: SLDC]

C.17: 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 on the same to Chief Engineer, Distribution Planning & Development Division, CEA.

In 142nd OCC, ERLDC informed that, in line with Enquiry Committee Recommendation, cyber security audit is being conducted on regular basis for SCADA system installed at ERLDC and SLDC as well but cyber security audit for telecom infrastructure installed in Eastern Region is not being carried out.

OCC advised all the constituents to conduct the cyber security audit on telecom infrastructure installed in Eastern Region. It is further advised that compliance / mitigation of the points observed during the audit should also be completed for improvement of the telecom infrastructure in ER.

As suggested by CEA, a format has been circulated among ER constituents for furnishing the information of the respective systems for discussion in OCC Meeting. The format is enclosed at Annexure-E1.

OCC advised all the constituents to submit the information to ERPC as per Annexure-E1.

OPTCL has submitted the required data

Deliberations in the meeting

IT wing was requested to submit the quarterly report for the quarter ending September'2019.

[Action: SLDC]

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 **July'19**:

Sl. No	Name of Discom	No. of message issued	Over drawal (MU)	Deviation (%)
1	CESU	0	4.642	0.596
2	WESCO	0	22.154	3.306
3	NESCO	0	-3.735	0.702
4	SOUTHCO	0	-10.122	3.204
	Total	0	12.939	

It is noticed that CESU & WESCO were over drawn during the month, while NESCO & SOUTHCO have under drawn. **WESCO** has deviated **3.306%** followed by SOUTHCO 3.204% from the scheduled energy while **CESU & NESCO** have deviated **0.596 % & 0.702 %** respectively. DISCOMs may forecast their drawal in realistic approach to minimise deviation. Daily drawal profile of all DISCOMs is annexed.

SLDC/ Discoms may please deliberate.

D.2: Communication issues

The status of data communication from CGPs as deliberated in the 124th PSOC meeting meeting is as follows.

Sl.	Name of CGP	Present status
1	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.
2	IRE, Chatrapur	Data communication system yet to be established by the Plant

In the 117th PSOC meeting, Members opined that GCC should file a case soon against NINL & IRE before the OERC.

In the 119th PSOC meeting it was decided that GCC shall file a case against the defaulting CGP/ Consumers before the OERC.

XXXXXX

RT&C has filed a case before the OERC against the entities for non-compliance of the data communication provision. The case is yet to be listed for hearing.

In the 135th PSOC meeting it was deliberated that the case has already been heard by OERC on dated on dated 06.08.2019. The next date of hearing will be intimated.

Deliberations in the meeting

RT&C stated that the next hearing date has been fixed on 26th August'19

[Action: RT&C and Telecom]

D.3: Compliance of CEA Regulations for Grid Connectivity of Renewable Energy Sources.

As per CEA (Technical Standards for connectivity to Grid) Regulations, 2007, dated 21st 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.

SLDC has already forwarded the Regulations & a letter received from DoE, Govt. of Odisha to the Distribution Licensees.

A meeting was convened on 29.07.2017 by Director (Commercial) between all RE Generators, SLDC, GRIDCO, DISCOMs & Telecom to decide the strategy. It was decided that the RE generators shall suggest the mechanism to be adopted for real time data communication to SLDC & Telecom to examine the same. Another meeting was proposed to be convened in the month of August’17 to finalize the mechanism of data communication. In the 113th PSOC meeting, it was decided that GRIDCO will take follow up action with all the RE generators to provide real time generation data to SLDC. ERLDC has reminded again to intimate the status.

A meeting has been convened by Gridco in this regard with the RE generators, OPTCL, Telecom & SLDC. In the meeting, two Nos. of agencies presented their data acquisition logic from the RE sources. It was decided that each agency will take up a pilot project for data communication from one RE source to SLDC. On completion of the above project next course of application shall be decided.

In the 123rd PSOC meeting Telecom stated that M/S Secure meters could not complete the Demo, as M/S Chemtrol requires Rs.3.5 lacs to allow firewall access to them. M/s Chemtrol also interested to take up the work. GRIDCO may allow them for the pilot project. OPTCL may examine for Firewall access to avoid burden to the Solar projects.

In the 125th PSOC meeting GRIDCO have agreed to write a letter to M/s Chemtrol. It was decided that a committee shall be constituted with representatives of GRIDCO, O&M, Telecom & SLDC to take a decision.

In the 134th PSOC meeting, GRIDCO stated that M/s Chemtrol has successfully completed the pilot project i.e real time data communication for MGM Solar at Tangi.

A committee has been constituted with representatives of GRIDCO, O&M, Telecom & SLDC. This issue was also discussed in the 16th GCC meeting held on 09.08.2019. GRIDCO assured to make a demo of data communication from MGM Solar at Tangi to SLDC by end of August’19.

Deliberations in the meeting

GRIDCO stated that M/S Chemtrol has agreed to make a demo of data communication from MGM Solar at Tangi to SLDC on 29th August’2019

[Action: GRIDCO /SLDC]

D.4: Data communication from newly commissioned RE sources connected at 132 kV- SLDC

There are as many 8 Nos. of Solar projects with installed capacity of 272.5 MW have connected with OPTCL network through 132 kV lines. The real time data of these plants are yet to be received at SLDC control room. Since the generation quantum is quite substantial (to the tune of 0.6 MU during a day), this has an impact on real time generation monitoring.

In the 132nd PSOC meeting it was decided that SLDC shall convene a meeting with the defaulting Solar units and Telecom to discuss the issue.

In the 133rd PSOC meeting CGM (Telecom) stated that Vinto Solar data can be integrated only after laying of optical fiber, which has been proposed for PSDF funding

In the 134th PSOC meeting, CGM (Tel) stated that release of optical fiber has already processed. This issue was discussed in the 16th GCC meeting held on 09.08.2019, where Director (Commercial) suggested to prioritize data communication from Solar plants.

Deliberations in the meeting

CGM (Telecom) stated that the laying of optical fiber in in process.

[Action: Telecom]

D.5: Implementation of Automatic Meter Reading for OPTCL-Discom interface points.

In the 116th PSOC meeting, IT stated that out of 840 nos. of meters integrated, around data from 750 nos. of meters will be received each month. Data from the remaining 90 meters are to be collected manually.

In the 117th PSOC meeting IT stated that out of 840 nos. of meters integrated, data from 717 nos. of meters have been extracted for the month of December'17. Data could not be collected from 63 Nos. of meters, which were replaced, as the information was received by IT one day before. CGM (O&M) may instruct Secure meters Ltd to inform the replacement of meters to IT immediately.

In the 118th PSOC meeting, IT stated that out of 840 nos. of meters integrated, data from 754 nos. of meters have been extracted for the month of January'18. The extracted data will be compared with the M cubed meter reading. If found satisfactory, the project will be made go live.

In the 131st meeting IT stated that TCS has already developed the driver for Paralakhemundi and Balasore S/S meters. Data fetching is under testing stage.

In the 132nd PSOC meeting IT stated that EMD has already been shared. Report is expected by end of April19.

In the 133rd PSOC meeting, DGM (IT) stated that Paralakhemundi and Balasore S/S meter data has been tested. The software fetching data for other S/Ss will be tested

In the 134th PSOC meeting, IT stated that some error has been noticed in Parlakhemundi data. The same has been communicated to TCS. Reply is yet to be received.

In the 135th PSOC meeting IT stated that TCS has already rectified the error. TCS will make a presentation in this regard on dt. 27.07.2019.

Deliberations in the meeting

IT stated that the meter data has been checked and presentation done on 2nd August'2019. The same has been forwarded to SLDC.

[Action: IT / SLDC]

D.6: Colony consumption of POWERGRID S/Ss

In the 131st PSOC meeting SLDC stated that POWERGRID is consuming power for their colony, which is not reflected in the DISCOM bill. POWERGRID stated that they have applied to DISCOMs to make them consumer.

It was decided that SLDC shall convene a meeting between GRIDCO, POWERGRID & DISCOMs to discuss the issue.

In the 133rd PSOC meeting it was decided that all Discoms shall submit the details of their problems regarding making POWERGRID their consumer, to GRIDCO for raising the issue in the Commercial Committee meeting of ERPC.

In the 134th PSOC meeting it was decided that SLDC shall prepare the energy accounting considering consumption of POWERGRID. The DISCOMs may insist POWERGRID stations in

their respective control area to become their consumer. SLDC has prepared the energy Accounting of DISCOMs including drawal of POWERGRID.

In the 135th PSOC meeting it was deliberated that CESU and WESCO have written their problems to GRIDCO. NESCO and SOUTHCO were advised to submit their issues to GRIDCO. GRIDCO was requested to raise this issue in the Commercial Sub-Committee of ERPC.

Deliberations in the meeting

It was decided that GRIDCO shall write a letter to ERPC to convene a special meeting involving POWERGRID and add DISCOMs of the State to resolve the issue.

[Action: GRIDCO / DISCOMs]

D.7: Collection of modelling data for new Transmission elements as well as Generators for system study.

SLDC is conducting system study for real time operation and determination of ATC & TTC for the State system. For the said study modelling of all transmission elements as well as generators are required. O&M is requested to furnish the parameters of newly inducted transmission lines / Transformers such as conductor type, line length and resistance, reactance and susceptance etc. and percentage impedance for transformers. Generators are requested to furnish the similar parameters in respect of the generator.

In the 135th PSOC meeting SLDC stated that the format for data submission has already been forwarded to all Generators and O&M.

Deliberations in the meeting

All generators and O&M were requested to forward the data to SLDC.

[Action: SLDC/ All generators]

D.8: Submission of Meter data for consumers importing power through Open Access- SLDC

It is noticed that the DISCOMs are not furnishing the block wise meter data for the Industrial consumers importing power through Short Term open access transactions. Due to non-availability of such data SLDC is not able to prepare the Cross Subsidy Charge billing in time. All the DISCOMs are requested to ensure timely submission of the above data to SLDC.

Deliberations in the meeting

DISCOMs are requested to ensure timely submission of the meter data to SLDC in respect of the OA customers.

[Action: SLDC / DISCOMs]

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:

Sl. No	Transmission element details	Present Status
1	220 kV Jayanagar-Jeypore(PG) 2 nd DC line	October'2019
2	400 kV Meramundali-Mendhasal 2 nd ckt.	October'2019
3	132 kV Kesinga-Junagarh line	September'2019
4	220 kV Pandiabili-Pratapsasan line	March'20
5	132 kV Pratapsasan-Phulnakhara line	Dec'19
6	220/132/33 kV, Pratapsasan S/S	Dec'19
7	220/33 kV, Deogarh S/S	Jan'20
8	132/33 kV, Maneswar S/S	Feb'20
9	132/33 kV, Boriguma S/S	Feb'20
10	220/33 kV, 2x20 MVA Baliguda S/S	March'20
11	220/33 kV, 2x20 MVA Kalimela S/S	March'20

12	220/132/33 kV, Goda Chhak S/S (320 MVA)	March'20
13	220/132 kV Kesinga S/S	Mar'20
14	132/33 kV R.Udyagiri S/S	Mar'20
15	132/33 kV Patangi S/S	Aug'19
16	220/33 kV Laxmipur S/S 2 nd 20 MVA Tfr	Oct'19
17	132/33 kV, Agarapada S/S	Sept'19
18	132/33 kV, Mancheswar GIS	Dec'19
19	132/33 kV, Satasankha S/S	Dec'19

It was deliberated by Const. that WESCO may expedite takeoff arrangement from Jayapatna to avoid over loading of Junagarh S/S. SOUTHCO may follow up PMU for early completion of 33 kV Kasipur feeder. All the Discoms are requested to take necessary action for availing power supply from those S/Ss and prepare their action plan for takeoff arrangement. In the 16th GCC meeting CESU stated that they will draw load only after completion of 33/11 kV S/Ss taken up through ODSSP. NESCO shall draw loads from Betanati GSS only after commissioning of 2nd 20 MVA Tfr at Betanati.

[Action: CGM (Construction) / DISCOMs]

E.2: HT metering at DISCOM interface points.-SLDC.

As per the Central Electricity Authority (Installation and Operation of Meters) Amendment Regulations, 2010, the interface meters shall be installed at the High Voltage side of the Inter Connecting Transformer. Accordingly POWERGRID has implemented the amended Regulation. GRIDCO / OPTCL may examine for metering in the High Voltage side of the ICT, which is done in the Low Voltage side at present.

In the 134th PSOC meeting, SLDC stated that Gridco may convene a meeting with DISCOMs and OPTCL to implement CEA Regulation to reduce the loss level of State system and increase revenue of GRIDCO. Further OERC vide order dated 29.03.2019 in case No. 71/2018 in the matter of ARR and Transmission tariff of OPTCL at Para 181 directed OPTCL to take necessary steps for reduction of transmission loss by avoiding over loading as well as other innovative action.

This issue was also discussed in the 16th GCC meeting, where the DISCOMs highlighted the PPA provision for receiving power at 33 kV Voltage level by them. Director (Commercial) agreed to convene a meeting between DISCOMs, O&M & SLDC to discuss the issue. If required, GRIDCO shall approach the Hon'ble OERC for amendment of the PPA/ Supply Code if required to comply CEA Regulation.

Deliberations in the meeting

GRIDCO has agreed to convene a meeting in the month of September'19 to discuss the issue

[Action: OPTCL / GRIDCO]

E.3: HT metering in the Tertiary winding of ICT in PGCIL S/Ss

In the 134th PSOC meeting, SOUTHCO raised the issue of HT metering in the Tertiary winding of the ICTs of POWERGRID S/Ss to accounting their drawal, which was also supported by other DISCOMs. It was also decided that GRIDCO /RT&C may raise the issue in the Commercial sub-Committee of ERPC.

In the 135th PSOC meeting, SLDC suggested that GRIDCO and RT&C may raise this issue in the Commercial Sub-Committee meeting of ERPC.

Deliberations in the meeting

GRIDCO shall write to ERPC to convene a special meeting to discuss the issue.

[Action: GRIDCO / RT&C]

E.4: Major Events in the month of July'19

1. On 03.07.2019 at 15:57Hrs: 132 KV Bhadrak-Anandpur S/C Line charged.
2. On 11.07.19 at 17:25 Hrs : 220/132/33KV Grid S/S, Jaipatna charged by LILO arrangement in 220KV Indravati PH -Kasipur ckt. At 18:35 Hrs, 160MVA, 220/132 KV Auto-TRF-I charged, At 15:32 Hrs dt. 12.07.19 - 40 MVA, 132/33 KV Power Transformer charged.

3. On 31.07.19, at 14:28 Hrs.132/33 kV, 20 MVA,Tfr-1 at Khadagprasad S/S charged.

Members may note

E.5: Important Grid Incidences during the month of July'19.

There was no reportable incidents occurred in OPTCL network during the month.

E.6: Outage of major transmission Elements during the month of July'19. (above 10 hrs).

Deliberations in the meeting

Outage of major transmission elements during the month was reviewed. The outages are due to jumper snapping, clamp failure etc.

[Action: O&M]

E.7: Prolonged outage of Transmission elements

Sl No	Transmission line / element	Date of outage	Reason	Expected date of restoration
1	220 kV Samangara – Pandiavil ckt – I& II	03.05.19	Tower collapsed during the extremely severe cyclonic storm FANI.	Yet to be decided
2	220 kV Meramundali- Bhanjanagar ckt -II	17.02.19 / 09:54 Hrs	Conductor replacement work in progress.	2 months

E.8: Review of Outage Program of State Generators for the month of September'19:

Tentative Outage programme for State Generators for the month of **September'2019**

Sl.	Station	Unit	Period	Remarks
1	Burla	# 1 # 5 # 6	14.03.18 to continue 25.10.16 to continue 16.10.15 to continue	T&G coupling cover water leakage Under R,M & U Under R, M & U
2	Chiplima	# 3	15.10.15 to 30.09.19	Under R,M work
4	Rengali	# 2	12.12.18 to 12.09.19	Capital maintenance & replacement of runner disc.
3	U. Kolab	# 4	05.08.16 to 07.09.2019	Under R,M work
3	Balimela	# 1 # 2	05.08.16 to continue 20.11.17 to continue	Under R,M work Under R,M work

OHPC may deliberate

E.9: Generation Program for the month of September'19.

Generation schedule for the month of September' 19 furnished by OHPC are given below.

Name of Hydro Gen. Station	Generation Program (MW)		Reservoir Level as on 01.08.19	Reservoir Level as on 01.08.18	MDDL	High Flood Reservoir Level
	Sept'19 (1 st fortnight)	Sept'19 (2 nd fortnight)				
HPS-I, Burla	130	130	600.19 ft.	611.35 ft.	590 ft.	630 ft.
HPS-II, Chiplima	40	40	-	-	-	-
Balimela	330	330	1462.50 ft.	1478.50 ft.	1440 ft.	1516 ft.
Rengali	200	200	111.24 mtr.	116.45 mtr.	109.72mtr	123.5 mtr.
U.Kolab	320	320	849.22 mts.	850.60 mtr.	844 mtr	858 mtr.
U. Indravati	600	600	633.25 mtr.	634.73 mtr.	625mtr	642 mtr
MKD (O/D)	30	30	2723.35 ft.	2728.90 ft.	2685 ft.	2750 ft.
TOTAL	1650	1650				

Generation schedule may change depending on inflow & availability of machine.

SLDC / OHPC may deliberate

E.10: Anticipated power generation and demand for the month of September'2019.

Sl. No	Discom	Average	Peak
1	CESU	1100	1350
2	WESCO	1050	1200
3	NESCO	950	1150
4	SOUTHCO	450	500
5	Total Discom	3550	4200
	System Loss & others	150	200
	Total Demand	3700	4400
Availability			
1	Hydro	1400	1500
2	State Thermal	650	650
3	IPP, small hydro &RE	400	300
4	ISGS share (including OA& purchase)	900	1600
5	CGP support (OA)	350	350
6	Total availability	3700	4400
7	Surplus / Deficit	0	0

Members may discuss.

PART F: OTHER ISSUES

F.1: Email ID for PSOC

One email ID for PSOC has been created as psocodisha@gmail.com . All members are requested to communicate through the above mail.

F.2: Date and Venue of the next (137th) PSOC meeting.

F.3: Agenda of CESU

1. Gridco as well as OPTCL have already started billing to CESU for the PGCIL consumption from the month of May'2019 onwards. As PGCIL at Pandiabili has already become a consumer of CESU, also Executive Engineer, Khurda had already served the bill to PGCIL, Pandiabili for consumption of 0.04212 MU for the month of May'2019, PGCIL has not paid the bill to CESU.
2. In spite of repeated persuasion by Manager, TED, Chainpal, CESU the representative of PGCIL, Phulpada and Rengali unit are not responding to become a consumer of CESU by depositing the required security money. The demand note has already served to PGCIL by Executive Engineer, TED, Chainpal under CESU. It is requested to take necessary steps to impress upon PGCIL at Phulpada and Rengali unit to deposit the security amount so that the new consumer number can be generated and bill can be raised by CESU to PGCIL for their consumption.

Deliberations in the meeting

GRIDCO will write to ERPC for a special meeting. All DISCOMs agreed to attend the meeting.

[Action: GRIDCO / DISCOMs]

136th Power System Operational Co-ordination Committee Meeting
 [At 11:00 A.M. on dt. 21.08.2019]
 [At PTC, Chandaka, Bhubaneswar]

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