

Odisha Power Transmission Corporation Ltd.
Bhubaneswar.



Agenda
for
93rd Power System Operational Coordination Meeting

Date: 30.01.2016
Venue: PTC, Chandaka.

Agenda for 93rd PSOC Meeting to be held on 30.01.2016 at PTC, Chandaka

Item no. 1: Confirmation of the minutes of the 92nd PSOC Meeting held on 29.12.2015

The minutes of meeting was circulated vide letter No. SGM (PS)-PI-15/2015/4402⁽⁴¹⁾, dated 11.01.2016 to all the members and also uploaded in the SLDC website. No comment has been received from any of the members.

Members may offer their comments. If there is no comment, the minutes of the meeting may please be confirmed.

PART A

(List of items to be discussed for which the details are given in the subsequent parts)

- B : Grid Performance for the month of November'2015
- C.1: Charging of 220kV Raigarh (PGCIL)-Budhipadar line
- C.2: Status of PLCC system installed in Eastern Region
- C.3: Preparation of crisis management plan for Cyber Security in Power Sector in line with CERT-IN.
- C.4: Certification through BIS as per IS 18001:2007 to all generating/ transmission units.
- C.5: Pollution mapping for Eastern Region
- C.6: Dynamic data of Generator Models required in PSSE for Simulations -ERLDC
- C.7: Information regarding commissioning of new transmission element
- C.8: Mock Black start exercises in Eastern Region – ERLDC
- C.9: Restricted Governor Mode of Operation.
- C.10: 220 kV inter-connecting lines of OPTCL with 400/220 kV Bolangir (PG), Keonjhar & Pandiabil S/s
- C.11: Replacement / Repair of meters on various locations
- C.12: Non-payment of reactive energy charges by WBSETCL / WBSEDCL
- C.13: Restoration of SCADA data
- D.1: Non-compliance of drawal schedule by DISCOMs
- D.2: High Voltage at 400 kV Meramundali & Duburi S/S.
- D.3: Operation of Balimela Unit with minimum generation.
- D.4: Revival of Station transformer for station auxiliary supply at Balimela HEP
- D.5: Prolonged outage of transmission elements and tentative revival dates
- D.6: Communication issues
- D.7: Islanding scheme of IbTPS
- D.8: Web based drawal / generation scheduling.
- D.9: Implementation of Automatic Meter Reading for OPTCL-Discom interface points.
- D.10: DISCOM Issues
- E.1: Commissioning status of New Transmission elements.
- E.2: Energy Metering at Hydro Stations.
- E.3: TTPS Issue.
- E.4: Major Events in the month of December'15
- E.5: Important Grid Incidences during the month of December'15.
- E.6: Outage of major transmission Elements during the month of December'15. (above 10 hrs).
- E.7: Review of Outage Program of State Generators for the month of February'2016.
- E.8: Generation Program for the month of February'16.
- E.9: RSP (SAIL), Rourkela Issue.
- E10: Operating procedure for Odisha System.
- E.11: Anticipated power generation and demand for the month of February'2016.

PART B: GRID PERFORMANCE

Review of Grid Performance for the month of December'15.

(A) Frequency:

Hourly frequency variation for the month of December'15.

Month	% of time frequency remained				
	<49.00	49.00-49.70	49.70-49.90	49.90-50.05	>50.05
Oct'15	0.00	0.03	11.64	66.83	21.51
Nov'15	0.00	0.03	10.21	64.82	24.94
Dec'15	0.00	0.08	15.30	66.27	18.35

Maximum & Minimum frequency during the month of December'15.

Month	Freq (Hz)	Date	Time
November'15	Maximum – 50.19	15.11.15	21:45 Hrs
	Minimum – 49.72	06.11.15	06:30 Hrs
December'15	Maximum – 50.21	27.12.15	21:45 Hrs
	Minimum – 49.72	29.12.15	11:30 Hrs

(B) Grid Demand for the month of December'15.

Month	Demand		Maximum Consumption		Maximum Demand			Minimum Demand		
	MU	Avg. (MW)	MU	Date	MW	Date	Time	MW	Date	Time
Nov'15	2084	2895	75.36	05.11.15	3968	05.11.15	20:00	2097	14.11.15	15:00
Dec'15	2026	2723	70.06	01.12.15	3813	01.12.15	19:00	2042	16.12.15	15:00
Dec'14	1937	2604	65.99	15.12.14	3515	23.12.14	19:00	1869	19.12.14	15:00

Members may please discuss.

(C) Voltage Profile of 220 kV Buses in OPTCL system for the month of: December'15

Sl. No	S/s Name	Maximum			Minimum		
		kV	Day	Time	kV	Day	Time
1	Jayanagar	248.37	16	00:45	220.48	24	12:30
2	Theruvalli	239.65	16	01:45	210.38	15	17:30
3	Bhanjanagar	238.90	02	02:45	220.19	09	17:30
4	Chandaka	236.30	27	02:45	217.19	09	17:30
5	Narendrapur	226.20	17	11:45	182.26	18	08:15
6	Joda	240.95	03	14:00	227.82	21	17:45
7	Tarkera	237.69	14	03:00	229.20	02	17:30
8	Bhadrak	238.79	01	02:30	219.62	19	18:15
9	Paradeep	234.57	01	02:30	213.73	22	18:00
10	Budhipadar	237.92	14	02:30	228.57	16	19:15
11	Duburi(O)	240.69	01	02:30	224.52	19	18:00
12	Duburi (N)	231.45	01	02:30	216.04	19	17:45
13	Balasore	237.05	01	02:45	220.25	16	17:45
14	Meramundali	233.13	01	03:45	220.43	15	18:15
15	Bidanasi	237.17	30	03:15	222.50	11	17:30
16	Katapalli	235.55	01	13:15	217.83	31	18:45
17	Nayagarh	236.30	30	03:45	216.73	09	17:30
18	Mendhasal	235.38	27	02:45	217.77	09	17:30
19	Bolangir	236.94	16	16:15	204.66	31	18:15
20	Barkote	238.03	05	02:45	230.25	09	17:30
21	Laxmipur	246.75	16	01:45	215.23	24	13:45

The maximum Voltage of 248.37 kV occurred at Jaynagar 220 kV bus while Narendrapur, bus 220 kV bus have experienced the minimum Voltage of **182.26** kV. Bus Voltages at Samgara and Lapanga could not be incorporated due to non availability of energy meter in those S/Ss.

Members may discuss.

(D) Energy Generation / Import during the month of December'15

Source of Power	Energy (MU)
Thermal (TTPS+IB)	488.936
OHPC Stations including Machhkund share	159.774
IPP & CGP Support	663.559
ISGS drawal	713.930
TOTAL	2026.200

(E) Loading of 220/ 132 kV Auto at 220 kV S/Ss in OPTCL system for the month of Dec-15
AUTO TRANSFORMER LOADING FOR THE MONTH OF DECEMBER'2015

Name of the 220 kV Sub-Station (Feeding Sub-stations/Feeders)	Capacity MVA	Drawal details						REMARKS
		Maximum			Minimum			
		MW	Day	Time	MW	Day	Time	
JAYANAGAR 220/132 KV. {Damanjodi(NALCO), Traction S/Ss, Tentulikhunti, Sunabeda, Jayanagar}	1x160	67.04	8	6:00	11.52	1	14:00	
	1x160	102.68	24	9:00	10.44	1	15:00	
THERUVALLI 220/132 KV. {Theruvalli, IMFAL(I), JK(I), Junagarh, Kesinga, Powmex(I), Rayagada, }	1x100	68.28	24	18:30	4.16	23	10:00	Rayagada & Paralakhemundi can be fed from Machhkund system.
	1x100	65.20	24	18:15	4.80	23	11:00	
NARENDRAPUR 220/132KV { Narendrapur, Narendrapur Tr, Berhampur, Chhatrapur, Ganjam, Balugaon, Digapahandi, Mohana.}	1x160	129.72	10	9:15	5.44	17	11:45	
	1x160	106.68	18	18:30	6.64	2	9:45	
	1x100	NOT AVAILABLE						
BHANJANAGAR 220/132 KV { Bhanjanagar, Aska, Phulbani, Ganjam, Chatrapur}	1x160	116.84	24	8:45	3.56	18	7:15	
	1x160	130.44	18	18:00	8.68	24	7:45	
CHANDAKA 220/132 KV { Chandaka, Bhubaneswar, Nimapada, Ransinghpur, Puri, Kesura, Kaipadar Tr. }	1x100	71.60	10	8:00	16.16	8	10:00	
	1x160	120.24	28	9:45	22.80	10	8:15	
	1x100	78.24	10	8:15	7.60	20	9:00	
	1x160	121.04	10	8:15	10.04	28	9:15	
BIDANASI 220/132 KV {Bidanasi, Khurda }	1x160	NOT AVAILABLE						
	1x100	35.72	4	18:00	5.36	7	17:15	
	1x100	44	7	18:00	11.20	27	1:15	
TTPS 220/132 KV { Chainpal, FCI (I), Angul, MCL Nandira(I), Rairakhole, Boinda, Kamakhyanagar, Kalarangi, Nuapatna, Choudwar }	1x160	NOT AVAILABLE						
	1x160	NOT AVAILABLE						
MERAMUNDALI 220/132 kv {Meramundali Traction, Dhenkanal, Navchrome(I), Hind Metal, Aarti, BRG}	3x100	49.12	12	18:15	9.16	25	14:45	
		48.44	12	18:15	8.52	10	10:00	
		NOT AVAILABLE						
DUBURI 220/132 KV {Duburi, Bamnival(I), BRPL, MESCO, Jajpur Road, Kalarangi, Jajpur Town}	3x100	52.04	16	10:00	2.16	7	7:15	Auto-II under shutdown.
		UNDER SHUT DOWN						
		50.5	16	10:00	2.2	7	7:15	
JODA 220/132 KV { Joda, Tensa, FAP(I), Bolani(I), Nalda Tr., Polasponga, *Rairangpur, Bhalulata traction}	3x100	NOT AVAILABLE						*** - Alternate P/S from Kuchei.
		NOT AVAILABLE						
		NOT AVAILABLE						
BALASORE 220/132 KV { Balasore, Birla Tyre(I), Ispat Alloy(I), Jaleswar, Jaleswar(T)}	2x160	109.72	11	18:00	3.36	19	8:15	
		109.56	11	17:45	5.72	19	8:00	
BUDHIPADAR 220/132 KV { Jharsuguda, Jharsuguda Tr, Cemco(I), MCL, Sundergarh, Brajarajagar, Rajgangpur}	2x160	124.4	13	18:45	55.24	5	12:30	
		123	13	18:45	54.88	10	14:00	
TARKERA 220/132 KV { Rourkela, Rourkela Tr., RSP(I), Chhend , Adhunik Metal, Rajgangpur, OCL(I), Rajgangpur Tr.}	4x100	55.96	14	9:00	9.60	22	12:30	
		56.84	14	9:00	11.32	22	12:15	
		47.60	26	17:45	7.08	14	8:45	
		47.16	26	17:45	11.40	22	12:15	
KATAPALI 220/132 KV {Chipilima, Bargarh, ACC, Sonapur & Katapali area load.}	2x100	85.72	12	17:00	2.36	1	21:30	Supported by Burla & Chipilima power.
		85.32	12	16:45	1.64	1	13:15	
BHADRAK 220/132 KV {Bhadrak area load, Bhadrak(T), Soro, FACOR (I), Dhamra Port}	3x100	UNDER SHUT DOWN						Auto-I under shut down
		62.56	6	19:00	7.84	19	4:45	
		NOT AVAILABLE						
PARDEEP 220/132 KV { Paradeep, Kendrapada, Pattamundai, Chandikhol, Cuttack, Jagatsinghpur, Phulnakhara}	1x160	108.76	13	18:45	31.60	18	13:45	
	1x100	66.12	13	18:45	8.12	5	12:45	
	1x50	NOT AVAILABLE						
BOLANGIR (SADAIPALLI) 220/132 KV { Bolangir, Patnagarh, Sonapur, Saintala, Khariar, Barpalli }	2x160	56.08	1.00	18:00	13.68	5	12:45	
		55.48	1.00	18:00	13.40	5	13:00	
Lapanga	1x160	NOT AVAILABLE						
	1x160	NOT AVAILABLE						
Mendhasal	1x100	NOT AVAILABLE						
Samangara	1x100	NOT AVAILABLE						

(F) DISCOM Drawal up to the month of December'15

Name of DISCOM	Month	Approved Energy Drawal Prorated for the month (MU)	Scheduled Energy (MU)	Actual Energy Drawal (MU)	Open Access Import Schedule (MU)	Net Energy Drawal (MU)	Overdraw (MU)
		1	2	3	4	5=(3-4)	6=(5-2)
CESU	April'15	721.644	676.468	700.852	3.892	696.96	20.492
	May'15	745.699	741.683	803.331	4.582	798.749	57.066
	June'15	721.644	680.782	731.303	4.094	727.209	46.427
	July'15	745.699	682.482	747.814	4.552	743.262	60.78
	Aug'15	745.699	730.38	787.091	1.844	785.247	54.867
	Sept'15	721.644	668.276	716.483	1.247	715.236	46.96
	Oct'15	745.699	729.776	733.265	3.606	729.659	-0.117
	Nov'15	721.644	607.136	636.447	4.449	631.998	24.862
	Dec'15	745.699	572.148	596.675	4.497	592.178	20.03
WESCO	April'15	604.11	569.419	692.842	124.592	568.25	-1.169
	May'15	624.247	608.011	742.524	132.217	610.307	2.296
	June'15	604.11	571.331	677.972	107.811	570.161	-1.17
	July'15	624.247	550.147	716.622	102.587	614.035	63.888
	Aug'15	624.247	571.706	700.166	107.046	593.12	21.414
	Sept'15	604.11	530.99	668.478	96.912	571.566	40.576
	Oct'15	624.247	550.739	732.87	124.713	608.157	57.418
	Nov'15	604.11	524.758	655.613	116.562	539.051	14.293
	Dec'15	624.247	489.838	656.939	132.988	523.951	34.113
NESCO	April'15	431.507	412.235	432.73	17.888	414.842	2.607
	May'15	445.890	452.964	475.162	19.32	455.842	2.878
	June'15	431.507	428.938	458.649	23.262	435.387	6.449
	July'15	445.890	429.905	462.235	29.387	432.848	2.943
	Aug'15	445.890	460.083	495.915	31.255	464.66	4.57702
	Sept'15	431.507	417.33	486.661	38.715	447.946	30.616
	Oct'15	445.890	449.492	493.603	41.506	452.097	2.605
	Nov'15	431.507	380.024	443.309	68.066	375.243	-4.781
	Dec'15	445.890	382.554	437.523	64.787	372.736	-9.818
SOUTH CO	April'15	281.096	275.391	264.684	0	264.684	-10.707
	May'15	290.466	277.641	285.102	0	285.102	7.461
	June'15	281.096	253.054	263.675	0	263.675	10.621
	July'15	290.466	282.015	285.292	0	285.292	3.277
	Aug'15	290.466	285.264	290.409	0	290.409	5.145
	Sept'15	281.096	252.453	257.882	0	257.882	5.429
	Oct'15	290.466	279.951	281.598	0	281.598	1.647
	Nov'15	281.096	254.482	260.385	0	260.385	5.903
	Dec'15	290.466	258.079	265.705	0	265.705	7.626

The figures are as per EBC data. Energy drawal by SOUTHCO are excluding of energy consumed by NALCO at Damanjodi and IMFA at Theruvali.

Members may please discuss.

(G) Drawal of Machhakund Power

The drawal of Machhakund power up to the month of December'15 are as detailed:

Month	Total Generation (MU)	Odisha Drawal (MU)	AP Drawal (MU)
April'15	60.537	26.706	31.114
May'15	38.508	17.300	19.478
June'15	24.556	8.927	14.345
July'15	52.6518	24.036	26.266
August'15	60.393	29.393	28.749
September'15	43.426	18.045	23.316
October'15	54.825	25.288	27.537
November'15	52.776	23.079	27.339
December'15	51.372	26.510	22.520

Earlier, it was decided that Jayanagar S/S shall explore the drawal during off peak period by providing matching load.

SLDC stated that requisition for providing RVDU at Jayanagar control room has already been placed before Sr. G.M (Telecom).

Southco stated that Bisam Cuttack load cannot be extended from Akhusing due to Voltage problem, however Gumuda load, which is in the midway, can be fed from Akhusing S/S.

DGM, EHT (Const) Circle, Rayagada stated that, extending Rayagada traction supply from Theruvali is not feasible. He suggested for converting 132 kV Theruvali-Rayagada S/C line to DC, so that one ckt can be utilized for traction purpose. For the conversion prolonged shutdown of the said line (6 months) shall be required. It was decided that a separate meeting shall be convened between Construction, O&M, Gridco & SLDC to finalize the issue.

SLDC/ CGM (Const) / CGM (Telecom) / Southco Utility may deliberate the status.

(H) Under Frequency Relay operation in OPTCL System during the month of December'15.

Since, the frequency had never gone beyond the lowest setting of UFR, there was no UF Relay operation occurred during the month of **December'15.**

Members may note

PART C – Issues raised in 117th OCC meeting of ERPC held on 21.01.16

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

WRPC vide letter dated 21.10.15 & 18.12.15 informed that as per the study committee of WR's recommendations the LILO of 220 KV Raigarh(CSPTCL)-Budhipadar line at 400/200 KV PGCIL Raigarh s/s has been completed two months back and to save theft incidents the LILO for both the section has been idle charged from 11.08.2015. GM, WRLDC has taken up the matter with ERLDC and Odisha state to charge the line from Budhipadar end since PGCIL is ready for charging the both

portion of above line from Raigarh(PGCIL) end. The charging of 220 KV Raigarh (CSPTCL)-220 KV Raigarh (PGCIL)- Budhipadar line will provide additional inter regional link in addition to existing inter regional link between 220 KV Korba (E) and Budhipadar in this section.

Further, both CSPTCL and PGCIL are ready with the Chhattisgarh section. It is, therefore, requested to kindly look into the matter and arrange for charging of the said line at the earliest so that additional inter regional link in addition to existing inter regional link between 220 KV Korba(E) and Budhipadar in this section are available.

In the 117th OCC meeting of ERPC, ERLDC deliberated that OPTCL has to submit the required information in prescribed FORMATS for Budhipadar bay considering the 220kV Budhipadar-Raigarh (PG) as a new transmission element. Relay co-ordination for the said circuit at Budhipadar is required.

C.G.M (O&M) may deliberate.

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

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

In 115th OCC, all the constituents were requested to go through the details of their respective control area and give their comments/suggestion, if any, by next OCC.

In 116th OCC, JUSNL informed that they have submitted the cost estimation to their management for approval.

WBSETCL informed that they have referred the cost estimation to their communication wing.

OPTCL submitted that they are installing OPGW and they are planning to implement carrier protection using OPGW.

It was felt that implementing digital carrier protection using OPGW is much costlier than PLCC and advised OPTCL to review the proposal once again.

C.G.M (O&M) / C. G.M. (Telecom.) may deliberate.

C.3: 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.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 after attending the workshop at New Delhi on 15th January'2016, an action plan for crisis management will be prepared.

CGM (IT) may please deliberate the status.

C.4: 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 last meeting CGM (O&M) stated that BIS is not responding for certification. SLDC may be get clarified from ERPC whether ISO or BIS is required.

CGM (O&M) / SLDC may deliberate the status.

C.5: Pollution mapping for Eastern Region

The Pollution Mapping work in ER was started with on-site measurement of ESDD and NSDD.

The latest available status is as follows:

Utility	Scope	Installed Locations	Number of locations where 1 st set of Measurements Completed
OPTCL	164	102	99

OCC advised all constituents to complete the 1st set of measurements and send to Powergrid/ CPRI. Powergrid vide mail dated 5th November, 2015 requested to complete the 2nd set of measurements by end of November, 2015, as it is already passed 4 months after completion of 1st set of measurements for the most of the locations.

In the last meeting CGM (O&M) stated that only Southco locations are left due to non-availability of testing kit. Since CPRI is not responding for supply of more kits, the existing kits will be diverted to Discom locations after completion of measurement for O&M locations.

CGM (O&M) may update.

C.6: Dynamic data of Generator Models required in PSSE for Simulations -- ERLDC

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

In 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.

All generating utilities agreed to submit.

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

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

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

In the 117th OCC meeting, it was suggested that all the Generators shall forward the data to ERLDC at an early date.

OHPC/ OPGC/ TTPS / CGPs may deliberate.

C.7: Information regarding commissioning of new transmission element

1. 765kV New Ranchi-Dharamjaygarh-II first time charged at 16:41hrs of 24/12/15.
2. 400kV Meramundali-Sterlite-D/C first time charged at 19:33 and 19:34hrs respectively of 30/12/15

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

Sl. No.	Name of Hydro Station	Schedule (1 st)	Tentative Date	Schedule (2 nd)
1	U.Kolab	Last week of May, 2015	Done on 16/07/2015	Last Week of January, 16
2	Rengali	2nd week of June 2015	Done on 13/10/2015	January, 16
3	U. Indravati	3 rd week of June 2015	Done on 16/07/2015	2 nd week of February 2016
4	Balimela	1 st week of November,15	Done on 24/11/2015	1 st week of March 2016
5	Burla		Done on 19/01/2016	January 2016

SLDC / O&M / OHPC may deliberate.

C.9: Restricted Governor Mode of Operation.

The latest status of units of ER under RGMO is available at ERPC website (<http://www.erpc.gov.in/>) under Operation>Important data.

In 108th OCC, ERLDC informed that the RGMO/FGMO response of the generators needs monitoring on continuous basis.

OCC advised ERLDC to intimate the event of sudden drop in frequency to the generators and requested all generators to provide the RGMO/FGMO response data to ERLDC during the said incidents.

ERLDC informed that on 12.10.2015 there was sudden load loss of 900 MW in NR and they observed 0.11 Hz change in the grid frequency.

As per the data of ERLDC they have received the RGMO/FGMO response only from Burla, Kahalgaon, Teesta-V and SSL generators. The response of other generators are not satisfactory.

In the OCC meeting, reports received from OPGC & Chiplima PH have been handed over to ERLDC. In the OCC meeting, it was decided that hydro units of 10MW capacity & thermal units of 200MW capacity shall intimate the response of governor to ERLDC.

ERLDC intimated that a new web group was formed for sharing governor response of various generator in ER. The url of the group is https://in.groups.yahoo.com/neo/groups/er_gov_respons/info

ERLDC requested to send email ids (preferably Yahoo mail ids) of the Generators where invitation will be sent. Governor response for the event of 12-11-2015 at 23:05 hrs based on ERLDC SCADA data is already posted in the group.

CERC in the RoP dated 14.07.15 in Petition No. 84/MP/2015 filed by NRLDC has directed as under:

“10. The Commission also directed SLDCs to approach their respective SERCs to initiate appropriate action under the Act against the State generating stations which have not provided adequate primary response during both grid events reported by the petitioner.”

All Generators may deliberate.

C.10: 220 kV inter-connecting lines of OPTCL with 400/220 kV Bolangir (PG), Keonjhar & Pandiabil S/s

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

In 117th OCC, 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.	5 out of 14 completed. Severe ROW problem.
b.	LILO of one circuit of Katapalli-Sadeipalli 220 kV D/C line at Bolangir S/S.	End of March'16
2.	400/220 kV Keonjhar S/S.	
a.	Keonjhar (PG)-Keonjhar (OPTCL) 220 kV D/C line	Work order expected to be issued by Feb-16
b.	Keonjhar (PG)-Turumunga (OPTCL) 220 kV D/C Line.	Yet to be awarded
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)	After commissioning Pandiabili S/S by Powergrid.

CGM (Const) / CGM (O&M) may please update the status.

C.11: Replacement / repair of meters on Various Locations

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

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

In the 117th OCC meeting Powergrid assured to make the replacement of meter by end of Jan'16.

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

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

In the 117th OCC meeting Powergrid requested to intimate the details of metering requirement at Joda sub-station.

CGM (O&M) may please deliberate.

C.12: Non-payment of Reactive energy charges by WBSETCL/WBSEDCL

XXXXXX XXXXXXXX XXXXXXXX

ERPC Secretariat also pointed that Meramundali S/s is also injecting VAR during high voltage and therefore OPTCL is paying huge VAR charges.

OPTCL was advised to take appropriate action to control the VAR injection during high voltage at Meramundali S/s.

In the 117th OCC meeting it was deliberated by SLDC to examine lowering 400kV bus voltage at Angul PG sub-station by tap changing. However, SLDC, Odisha is taking action for isolation of 400kV circuits during high voltage condition.

Members may Discuss

C.13: Restoration of SCADA data

Updated latest status is circulated in the meeting. During deliberations in 99th OCC it was pointed out by most of the constituents that SCADA problem in many locations are due to behind the schedule progress of work on the part of CTU/PGCIL. OCC advised Powergrid / CTU to expedite and restore at least the priority RTUs by 31st July, 2014.

The status as updated in the SCADA meeting is as given below:

S/n	Name of RTU Locations	Latest status
1	Vedanta Ltd.(CGP)	No isolator status is available. MW/ MVAR not available for ICT-I & II, Station transformer / Smelter. CBs of Bus coupler not available. Bus-1 KV/ HZ not available.
2	Vedanta Ltd.(IPP) & SEZ	Frequent interruption of data noticed.
3	Nalco	OPTCL informed that RTU is reporting but intermittent since it was not configured properly. The issue was already taken up with Nalco and it will be resolved soon. OPTCL has resolved the issue. Some Unit generation polarity will be resolved by Feb 2015. Problem still not resolved
4	JSPL (Meramundali - 400)	Most of the data not available.

C.G.M. (Telecom.) / GCC / OPTCL / NALCO / Vedanta / JSPL may deliberate.

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 **December'15:**

Sl. No	Name of Discom	No. of message issued	Over drawal (MU)
1	CESU	24	20.030
2	WESCO	27	34.113
3	NESCO	15	-9.818
4	SOUTHCO	4	7.626
	Total	70	51.951

It is noticed that CESU & WESCO had overdrawn a substantial quantum of power to the tune of 24.8 & 14.2 MU respectively.

SLDC/ Discoms may please deliberate.

D.2. High Voltage at 400 kV Meramundali & Duburi S/S_ Reactive Power Injection by OPTCL

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

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

CGM (O&M) / SLDC / Gridco may deliberate

D.3. Operation of Balimela unit with minimum generation

It is noticed that Balimela HEP is requesting to keep one unit in the bar with minimum generation to maintain the tail race level for pumping water requirement for cooling purpose. This lead to injection of power at high frequency conditions with penalty. The State is losing water potential and revenue as well.

Members may deliberate

D.4: 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 last meeting, OHPC stated that revival of station supply from Balimele 220/33 kV S/S will be done by end of January' 2016.

OHPC may update.

D.5: 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	ne of transmission element	Reason of outage	Probable date of revival
1	220kV Jayanagar-Theruvali ckt-III breaker	Breaker already erected but not commissioned. Isolator problem	January'2016
2	220/132 kV, 100 MVA Auto-II at Duburi		Tendered for balance spares.

C.G.M. (O&M) may please update the status.

D.6: Communication issues

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

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

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

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

GCC / O&M / RT&C/ C.G.M. (Telecom.) may please deliberate.

(ii) Interruption of SCADA.

It is noticed that there is frequent interruption of SCADA System, resulting problem in real time operation. Action may be taken to avoid such frequent interruption of SCADA.

In the last meeting, Sr. G.M (Telecom) stated that Powergrid link between Rourkela-Kaniha is being used for data transfer. The link is not healthy due to heavy fibre loss. Powergrid have proposed to upgrade the existing SDH equipment to STM16. Work order has already been awarded.

Sr. G.M. (Telecom) stated that Powergrid will complete the work by 1st week of December'2015
In the last meeting it was decided that C.G.M. (PP) may raise this issue in the commercial sub-committee meeting of ERPC for passing on the penalty paid by Gridco by way of deviation charges to Powergrid.

C.G.M. (Telecom) / CGM (PP) may please update the status.

D.7. Islanding Scheme of Ib TPS

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

In the 91st meeting, Sr. G.M. (Telecom) stated that all works have been completed. It was decided that Sr. G.M (Telecom) shall intimate the same to Ib TPS and mark a copy to ERPC.

C.G.M. (Telecom) / Ib TPS may please update the status.

D.8: Web based drawal / generation scheduling.

SLDC is going to implement web based drawal / generation scheduling for Dist. Utilities and State generating stations including IPPs and CGPs soon. A demo has been organized on 29.07.15. In the last meeting, CGM (IT) stated that, web based generation scheduling module for State generating stations has been already been developed by IT wing. Modules for Discom and CGP / IPP shall be made available before the next PSOC meeting. After approval by the stake holders the same shall be go live from September'15. All Users were requested to forward their respective schedule in the prescribed format.

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

In the last meeting SLDC stated that the issues in the software, raised by SLDC need to be rectified before finalizing the training date.

CGM (IT) / SLDC may deliberate.

D.9: 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.

CGM (IT) may update the status.

D.10: DISCOM Issues**CESU**

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

B.

- (i) Mismatch of SCADA drawal with the billing meter data to the tune of 23 MU during December'15.
- (ii) Fixed data indicated on Dashboard may be linked with SCADA.
- (iii) Debit bill of CESU served by Gridco should not be linked with current bill, as decided in the meeting taken by CMD, Gridco.

CGM (IT) / C.G.M. (Telecom.) / CGM (O&M) / CESU may please deliberate.

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 June 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 March 2016.
4	Commissioning of 220/132 kV Cuttack S/S	Work in progress and expected to be completed by March 2016.
5	Commissioning of 132 kV Baripada (PG)-Jaleswar line	Work has already been started, which will be completed by June 2016.
6	Commissioning of 220/132 kV Kesinga S/S	Work under progress. Expected by September 2016.

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

Sl. No	Name of the sub-station	Probable month of commissioning	Name of DISCOM	Action taken by Discoms
1	132/33kV, 2x20 MVA Khajuriakota	March'16	CESU	
2	132/33kV, 2x40 MVA Kalunga	Charged	WESCO Utility	
3	220/33kV, 2x20 MVA Banei	Dec'16	WESCO Utility	
4	132/33kV, 2x20 MVA Padmapur	January'16	WESCO Utility	
5	132/33kV, 2x20 MVA Udala	Dec-16	NESCO Utility	Line existing

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

In the last meeting, it was suggested that WESCO shall explore the work for diversion of 11kV line at Sarsmal (Jharsuguda) and connecting 33 kV feeders with Lapanga Grid.

The progress in this regard may be placed in the next meeting.

All DISCOMS may update the status / CGM(O&M) & CGM(Const.) may please deliberate.

E.2: Energy Metering at Hydro stations.

In the last meeting, OHPC stated that billing for all the OHPC stations except Upper Kolab is being done from the newly installed energy meters. The energy meters at Upper Kolab are have been rectified in the mean time.

In the last meeting it was decided that Gridco may consider these meters for billing purpose & SLDC will prepare the energy accounting for all State Generators.

GRIDCO / OHPC / SLDC may please deliberate.

E.3: TTPS Issue.

Implementation of Feeder Metering

In the last 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.

As per the decision by Gridco the feeder metering has been implemented with effect from 1st October. SLDC has prepared the Deviation charge bill considering the feeder meter data for the month of October.

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 last meeting, TTPS stated that they have written to CEA for clearance to the feeder meter installation, in view of which the metering may be considered from 1st November’ 2015. Director (Commerce) stated that installation of feeder meters will be informed to CEA by Gridco and NTPC.

It is noticed that there are considerable time delay to the tune of 0.5 - 8 hours between the Generator meter & feeders resulting wide mismatch of both the meter data, which calls for time synchronization.

In the last meeting TTPS stated that they have written to CEA for clearance to the feeder meter installation. It was decided that TTPS shall forward a copy of the letter to Gridco. OPTCL may explore installation of new meters at TTPS feeders.

GRIDCO / OPTCL/ TTPS / SLDC may please deliberate.

E.4: Major Events in the month of December'15

30.12.2015: 400 kV Vedanta-Meramundali D/C line charged.

E.5: Important Grid Incidences during the month of December'15.

Important Grid Incidences during the month of December'15.

On 26.12.2015 at 16:48 hrs, 400 kV Mendhasal Ckt tripped pulling out 400/220 kV, 315 MVA ICT-I & II at Meramundali S/S. On investigation it was found that 'B' ph LA of 400 kV Mendhasal Ckt burst at Meramundali S/S.

E.6: Outage of major transmission Elements during the month of December'15. (above 10 hrs).

Outage of major transmission elements above 10 hours during the month of Dec-15 is as detailed.

Sl No	Transmission lines	Tripping Dt/time	Restoration Dt/time	Reason
1	132 kV Rajgangpur-OISL Ckt	10.12.15 04:42	10.12.15 17:37	'B' ph LA burst at OISL end.
2	132 kV Kalugaon- Budhipadar Ckt	16.12.15 10:00	17.12.15 13:35	Tree fell between Loc. No-22 and 23
3	400 kV Meramundali-Mendhasal Ckt	26.12.15 16:48	27.12.15 06:42	'B' ph LA burst at Meramudali S/S.

Major outages are due to LA bursting.

C.G.M. (O&M) may please deliberate.

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

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

Sl.	Station	Unit	Period	Remarks
1	Burla	# 2	08.02.16 to 15.07.16	Capital Maintenance
		# 4	25.01.16 to 24.02.16	Annual Maintenance
		# 6	17.02.14 to continue	Programming for R, M & U
2	Chiplima	#3	15.02.14 to continue	Programming for R, M &U
3	Balimela	# 1	31.01.13 to continue	TGB problem and started R,M & U
		# 6	18.01.16 to 11.02.16	Annual maintenance
4	Upper Kolab	# 1	29.07.15 to 31.01.16	Capital Maintenance
5	Rengali	# 2	06.01.16 to 05.02.16	Annual maintenance
6	Upper Indravati	# 3	23.11.15 to 30.04.16	Capital Maintenance

OHPC / SLDC may deliberate.

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

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

Name of Hydro Gen. Station	Generation Programme (MW)		Reservoir Level as on 15.01.15	Reservoir Level as on 15.01.16	MDDL	High Flood Reservoir Level
	Feb'16 (1 st fortnight)	Feb'16 (2 nd fortnight)				
HPS-I, Burla	15	15	624.451ft	623.73ft	590 ft.	630 ft.
HPS-II, Chipilima	10	10	-	-	-	-
Balimela	30	30	1507.70ft	1495.70ft	1440 ft.	1516 ft.
Rengali	25	25	120.92mt	118.07mt	109.72m	123.5 mtr.
U.Kolab	100	100	856.30mt	855.54mt	844 mtr	858 mtr.
U. Indravati	75	75	639.77mt	634.83mt	625mtr	642 mtr
MKD (O/D)	30	30	2742.80ft	2741.45ft	2685 ft.	2750 ft.
TOTAL	285	285				

Members may discuss.

E.9: RSP (SAIL), Rourkela Issue.

- (i) Review of relay settings of Tarkera grid to RSP 220kV feeders
- (ii) Clearance for construction of two 220kV bays at Tarkera grid sub-station and construction of 220kV D/C line.

In the last meeting, CGM (O&M) stated that WESCO has not intimated the proposal regarding enhancement of contract demand RSP. Field inspection report for feasibility of 220 kV bay at Tarkera is yet to be received.

RSP / O&M / WESCO may please deliberate

E.10: Operating procedure for Odisha System.

As per provision in the Regulation 5.1(4) of Odisha Grid Code, the draft Operating Procedure for Odisha System has been prepared and uploaded in the SLDC site (path: Document ⇨ information). Members are requested and forward their comments / suggestions to SLDC before 15th December 2015. No comments has been received from Members except OHPC. The final Operating Procedure shall be placed in the next meeting.

Members may discuss

E.11: Anticipated power generation and demand for the month of February'2016.

Sl. No	Discom	Average	Peak
1	CESU	850	1150
2	WESCO	880	1150
3	NESCO	730	980
4	SOUTHCO	370	550
5	Total	2830	3830
Availability			
	Hydro	285	1200
	State Thermal	600	600
	IPP, small hydro &RE	700	700
	ISGS share (including OA)	1000	1100
	CGP support (OA)	250	250
6	Total availability	2835	3850
7	Surplus / Deficit	5	20

PART F: OTHER ISSUES**F.1: Date and Venue of the next (94th) PSOC meeting**