

Odisha Power Transmission Corporation Ltd.
Bhubaneswar.



Agenda
for
99th Power System Operational Coordination Meeting

Date: 24.07.2016
Venue: Aditya Birla Seminar Hall, Lapanga.

Agenda for 99th PSOC Meeting to be held on 24.07.2016 at Aditya Birla Seminar Hall , Lapanga

Item no. 1: Confirmation of the minutes of the 98th PSOC Meeting held on 11.06.2016

The minutes of meeting was circulated vide letter No. SGM (PS)-PI-15/2015/1914⁽⁴⁴⁾ dated 08.07.2016 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 June'2016

C.1: Status of projects funded under PSDF scheme

C.2: Restoration of PLCC system of important lines

C.3: 220 kV inter-connecting lines of OPTCL with 400/220 kV Bolangir (PG), Keonjhar & Pandiabil S/s

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

C.5: Certification through BIS as per IS 18001:2007 to all generating/ transmission units.

C.6: Renewable Energy Generation in Eastern Region

C.7: Energy generation data management from renewable energy sources.

C.8: Compilation of data for meeting renewable energy targets.

C.9: Dynamic data of Generator Models required in PSSE for Simulations

C.10: Implementation of Automatic Demand Management Scheme (ADMS)

C.11: Mock Black start exercise

C.12: Issues raised in Operational Load Flow study of ERPC

D.1: Non-compliance of drawal schedule by DISCOMs

D.2: Revival of Station transformer for station auxiliary supply at Balimela HEP

D.3: Delay in restoration of Generating stations.

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

D.5: Communication issues

D.6: Web based drawal / generation scheduling.

D.7: Implementation of Automatic Meter Reading for OPTCL-Discom interface points.

D.8: Software for Deviation charge billing.

D.9: Tripping of units at IbTPS

D.10: DISCOM Issues

E.1: Commissioning status of New Transmission elements.

E.2: Energy Metering at Hydro Stations.

E.3: Installation of feeder meter at TTPS.

E.4: Major Events in the month of June'16

E.5: Important Grid Incidences during the month of June'16.

E.6: Outage of major transmission Elements during the month of June'16. (above 10 hrs).

E.7: Review of Outage Program of State Generators for the month of August'2016.

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

E.9: Anticipated power generation and demand for the month of August'2016.

F.1: Date and Venue of the next (100th) PSOC meeting

PART B: GRID PERFORMANCE

Review of Grid Performance for the month of June'16.

(A) Frequency:

Hourly frequency variation for the month of June'16.

Month	% of time frequency remained				
	<49.00	49.00-49.70	49.70-49.90	49.90-50.05	>50.05
Apr'16	0.00	0.19	19.59	71.66	8.56
May'16	0.00	0.04	10.30	75.53	14.13
June'16	0.00	0.06	11.59	78.29	10.06

Maximum & Minimum frequency during the month of June'16.

Month	Freq (Hz)	Date	Time
May'16	Maximum – 50.41	18.05.16	17:32 Hrs
	Minimum – 49.56	26.05.16	22:12 Hrs
June'16	Maximum – 50.17	10.06.16	17:00 Hrs
	Minimum – 49.70	16.06.16	20:15 Hrs

(B) Grid Demand for the month of May'16.

Month	Demand		Maximum Consumption		Maximum Demand			Minimum Demand		
	MU	Avg. (MW)	MU	Date	MW	Date	Time	MW	Date	Time
May'16	2329	3130	81.45	18.05.16	3965	18.05.16	20:00	1815	21.05.16	22:00
June'16	2291	3182	81.26	13.06.16	4052	24.06.16	21:00	2403	01.06.16	18:00
June'15	2279	3165	83.71	10.06.15	3974	09.06.15	21:00	2491	22.06.15	14:00

Members may please discuss.

(C) Voltage Profile of 220 kV Buses in OPTCL system for the month of: June'16

Sl. No	S/s Name	Maximum			Minimum		
		kV	Day	Time	kV	Day	Time
1	Jayanagar	245.83	19	14:15	219.56	10	17:45
2	Theruvalli	235.49	26	14:30	204.03	30	20:45
3	Bhanjanagar	237.57	1	15:45	201.55	30	20:00
4	Chandaka	238.09	1	14:45	181.28	30	19:45
5	Narendrapur	222.97	1	15:30	166.85	30	21:00
6	Joda	237.79	15	6:00	219.26	6	21:00
7	Tarkera	233.70	24	06:00	225.22	30	19:45
8	Bhadrak	237.00	15	6:00	194.85	11	21:00
9	Paradeep	232.78	16	07:00	190.52	11	21:15
10	Budhipadar	233.70	24	5:45	219.73	15	18:45
11	Duburi(O)	237.98	2	19:15	216.85	24	20:45
12	Duburi (N)	228.10	16	6:45	192.83	11	21:00
13	Balasore	236.88	15	16:00	198.08	11	21:15
14	Meramundali	227.41	26	13:30	216.33	10	20:45
15	Bidanasi	238.67	1	15:00	204.78	1	00:30
16	Katapalli	231.11	23	22:30	195.43	8	16:45
17	Nayagarh	235.90	1	15:45	189.31	30	20:00
18	Mendhasal	237.34	1	15:00	182.44	30	20:00
19	Bolangir	230.64	24	5:00	205.70	8	16:30
20	Barkote	233.94	24	5:45	224.70	2	23:00
21	Laxmipur	241.84	19	5:15	215.52	10	18:45

The maximum Voltage of **245.83** kV occurred at Jaynagar 220 kV bus while Narendrapur, 220 kV bus has experienced the minimum Voltage of **166.85** 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) Loading of 220/ 132 kV Auto at 220 kV S/Ss in OPTCL system for the month of June-16
AUTO TRANSFORMER LOADING FOR THE MONTH OF JUNE'2016**

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	75.88	20	18:30	3.28	20	16:15	
	1x160	76.08	20	19:30	14.88	3	6:15	
THERUVALLI 220/132 KV. {Theruvalli, IMFAL(I), JK(I), Junagarh, Kesinga,Powmex(I), Rayagada, }	1x100	73.64	14	19:45	8.28	8	17:30	Rayagada & Paralakhemundi can be fed from Machhkund system.
	1x100	69.64	14	19:30	8.12	8	17:30	
NARENDRAPUR 220/132KV {Narendrapur, NarendrapurTr, Berhampur, Chhatrapur, Ganjam, Balugaon, Digapahandi, Mohana.}	1x160	82.52	23	19:45	3.04	7	10:45	
	1x160	115.44	7	14:30	14.84	1	16:00	
	1x100	NOT AVAILABLE						
BHANJANAGAR 220/132 KV {Bhanjanagar, Aska, Phulbani, Ganjam, Chatrapur}	1x160	98.68	21	19:30	5.84	12	0:15	
	1x160	85.72	21	19:30	6.08	3	15:00	
CHANDAKA 220/132 KV { Chandaka, Bhubaneswar, Nimapada, Ransinghpur, Puri,Kesura, Kaipadar Tr. }	1x100	74.24	1	11:45	2.16	1	14:45	
	1x160	130.56	1	12:00	4.16	1	15:00	
	1x100	80.04	1	12:00	1.72	1	15:00	
	1x160	124.24	1	12:00	2.88	1	15:00	
BIDANASI 220/132 KV {Bidanasi, Khurda }	1x160	NOT AVAILABLE						
	1x100	50.64	2	12:45	2.80	16	6:30	
	1x100	50.68	2	12:45	3.12	1	0:15	
TTPS 220/132 KV { Chainpal, FCI (I), Angul, MCL Nandira(I), Rairakhole,Boinda,Kamakhyanager, Kalarangi,Nuapatna, Choudwar }	1x160							
	1x160							
MERAMUNDALI 220/132 kV {Meramundali Traction, Dhenkanal, Navchrome(I), Hind Metal, Aarti,BRG}	3x100	68.08	24	19:15	5.28	10	1:15	
		65.76	27	18:45	7.04	1	1:30	
DUBURI 220/132 KV {Duburi, Bamnupal(I), BRPL, MESCO, Jajpur Road, Kalarangi, Jajpur Town}	3x100	65.68	24	15:00	2.48	2	19:30	Auto-II under shutdown.
		66.40	24	15:00	2.84	2	19:30	
		63.48	24	15:00	3.36	21	10:15	
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	129.80	24	21:15	41.2	1	11:00	
		129.20	24	21:15	22.08	24	10:00	
BUDHIPADAR 220/132 KV { Jharsuguda, Jharsuguda Tr, Cemco(I), MCL, Sundergarh,Brajrajnagar, Rajgangpur}	2x160	120.44	9	12:15	5.84	13	11:45	
		105.20	9	12:15	31.64	23	21:30	
TARKERA 220/132 KV { Rourkela, Rourkela Tr.,RSP(I), Chhend , Adhunik Metal, Rajgangpur, OCL(I), Rajgangpur Tr.}	4x100	81.60	23	21:30	16.28	10	11:30	
		77.04	23	21:30	17.00	10	11:30	
		62.40	13	19:00	13.96	13	20:15	
		72.16	30	19:30	17.60	10	11:30	
KATAPALI 220/132 KV {Chipilima,Bargarh, ACC,Sonepur & Katapali area load.}	1x100	72.00	18	20:30	4.20	23	21:30	Supported by Burla & Chipilima power.
	1x100	71.36	18	20:30	4.92	23	21:30	
	1x160	NOT AVAILABLE						
BHADRAK 220/132 KV {Bhadrak area load, Bhadrak(T),Soro, FACOR (I), Dhamra Port}	3x100	50.56	30	21:00	4.12	2	20:00	
		48.00	30	20:45	3.44	2	19:45	
		NOT AVAILABLE						
PARDEEP 220/132 KV { Paradeep, Kendrapada, Pattamundai, Chandikhol, Cuttack, Jagatsinghpur, Phulnakhara}	1x160	125.76	13	14:15	32.96	3	14:00	
	1x100	89.16	16	10:15	12.20	13	11:30	
	1x50	NOT AVAILABLE						
BOLANGIR (SADAIPALLI) 220/132 KV { Bolangir, Patnagarh, Sonepur, Saintala, Khariar, Barpalli }	2x160	58.28	21.00	19:45	10.60	24	2:00	
		57.60	21.00	19:45	10.60	24	2:00	
Lapanga	1x160	NOT AVAILABLE						
	1x160	NOT AVAILABLE						
Mendhasal	1x100	NOT AVAILABLE						
Samangara	1x100	NOT AVAILABLE						

In the last meeting it was deliberated that procurement of meters was under process.
CGM (O&M) may please deliberate the status.

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

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'16	704.384	745.175	785.466	7.945	777.521	32.346
	May'16	727.863	754.537	769.278	14.893	754.385	-0.152
	June'16	704.384	704.384	760.387	12.791	747.596	43.212
WESCO	April'16	579.452	617.311	657.707	18.777	638.93	21.619
	May'16	598.767	634.558	679.648	25.441	654.207	19.649
	June'16	579.452	579.452	651.414	23.867	627.547	48.095
NESCO	April'16	447.945	472.674	544.157	70.768	473.389	0.715
	May'16	462.877	447.214	545.786	90.686	455.1	7.886
	June'16	447.945	447.945	568.294	93.911	474.383	26.438
SOUTHCO	April'16	285.205	285.017	284.863	0.007	284.856	-0.161
	May'16	294.712	287.919	279.859	1.193	278.666	-9.253
	June'16	285.205	285.205	273.405	0.696	272.709	-12.496

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.

(F) Energy Generation / Import during the month of June'16

Source of Power	Energy (MU)
Thermal (TTPS+IB)	499.45
OHPC Stations including Machhkund share	331.14
IPP & CGP Support	590.48
ISGS drawal	869.73
TOTAL	2290.81

(G) Drawal of Machhakund Power

The drawal of Machhakund power up to the month of **June'16** are as detailed:

Month	Total Generation		Odisha Drawal		AP Drawal	
	MU	MW	MU	MW	MU	MW
April'16	42.784	59.42	19.714	27.38	21.032	29.21
May'16	54.998	73.92	19.860	26.69	33.100	44.48
June'16	52.601	73.06	22.143	30.75	28.162	39.11
TOTAL	150.383	206.40	61.717	84.820	82.294	112.80

In the 98th PSOC meeting it was deliberated that:

- Director (Commercial) stated that Sr. GM (O&M) -I should explore optimization of Machhakund drawal.
- OHPC should raise the issue in the monthly joint meeting with Machhakund authority. Sr. G.M (O&M)-I should also participate in the monthly meeting.
- Southco may take initiative for installation of breaker for its distribution feeders emanating from Machhakund PH to prevent the units from tripping due to fault at distribution network.
- Southco stated that 33 kV Akhusing - Gumuda feeder has been charged.
- SLDC stated that the offer of M/s Chemtrol for installation of RVDU at Jayanagar control room, forwarded by CGM (Telecom), has already been sent to CMD.

SLDC/ Sr. GM (O&M) -I / CGM (Tel) / OHPC/ Southco Utility may deliberate the status.

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

Since, the frequency had never gone beyond the lowest setting of UFR, there was no UF Relay operation occurred during the month of **June'16**.

Members may note.

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

The status of different types of Open Access applications received and disposed by SLDC is as tabled.

Sl. No	Month	No of Applications received					No of Applications Disposed					No of App. Rejected
		Intra-State	Inter-State		Total	Intra-State	Inter-State		Total			
			Bilateral				PXI	Bilateral		PXI		
			ST	MT/LT				ST			MT/LT	
1	April'16	7	124	0	25	156	6	124	0	25	156	0
2	May'16	6	67	2	16	91	5	67	2	12	86	5
3	June'16	4	79	0	39	122	3	79	0	26	108	14
	Total	17	270	2	80	369	14	270	2	63	350	19

PART C – Issues raised in the 123rd OCC meeting of ERPC to be held on 26.07.2016

C.1: Status of projects funded under PSDF schemes

In the PSDF review meeting held on 29.04.16 at N. Delhi, it was advised to RPCs to monitor the status of all the projects funded by PSDF. Therefore, constituents are requested to update the status of projects which are being funded by PSDF in the desired format. The latest status as updated by WBSETCL, OPTCL & ERPC is as given below:

Sl No	Name of Constituent	Name of Project	Date of approval from PSDF	Target Date of Completion	Amount Approved (in Rs.)	Amount drawn till date (in Rs.)	Status as updated in 122 nd meeting
3	OPTCL	Renovation & Up-gradation of protection and control systems of Sub-stations in the State of Odisha in order to rectify protection related deficiencies.	11.05.15	10.05.17	162.5 Cr.	4.91 Cr.	Erection work of the already procured equipment is going on. LOA for eight different types of Testing equipment already placed worth about Rs.4 Cr. Placement of LOA for balance equipment is under process. Tender for Sub-station automation will be floated in July-2016.

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

C.2: Restoration of PLCC system of important lines

In 119th OCC, JUSNL informed that the following:

d) 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.

Member Secretary clarified that the issue of activation PLCC in JUSNL is very seriously taken by CERC. So in view of that other end like Joda of OPTCL & Santaldih of WB need to be restored with utmost care.

Therefore, OCC advised JUSNL, OPTCL and WBPDCCL to restore the PLCC system at Joda and Santaldih at the earliest with mutual coordination.

In 33rd ERPC Meeting, WBPDCCL and OPTCL agreed to settle the issue bilaterally with JUSNL.

JUSNL was advised to resolve the AMC related issues with West Bengal & Odisha. All are requested to inform the development to CERC.

However ERPC advised JUSNL, OPTCL and WBPDCCL to get the PLCC system restored for both the lines by July 2016 positively.

Subsequently, a special meeting was convened by JUSNL on 11.07.2016 at Ranchi to resolve the issue at the earliest.

The resolutions of the meeting held on 11.07.2016 are as follow:-

1. OPTCL and WBPDCCL agreed to purchase BPL make PLCC panel of Analog modified version and they will install and complete in all respect at their end.
2. JUSNL agreed to upgrade the existing BPL make analog PLCC panel to ensure compatibility with the panels to be installed at Joda and Santhaldih.
3. The proposal of handing over PLCC panel from JUSNL to OPTCL & WBPDCCL is being dropped here after the latest proposal of purchasing of Analog upgraded version of BPL make panel after being assured by the BPL representative Mr. Sujoy that up-gradation of analog version of BPL panel at Chandil and Ramchandrapur Grid is possible and would be compatible.
4. The representative of M/s BPL shown helplessness in providing the PLCC panel before 30th September 2016. Therefore, aforesaid time frame needs to be relaxed with due consent of CERC and for this support of ERPC would be required.
5. Member Secretary (EPPC) was contacted and the details of resolution was briefed over mobile. He suggested to cover the development of unavailability of panel within targeted period. The proposal is being framed to implement the direction of CERC under relaxed time frame with due persuasion of ERPC, JUSNL, OPTCL and WBPDCCL.

The participants in the meeting are agreed to the extent mentioned above in the best possible manner to comply the directive of CERC within the targeted period.

CGM (Telecom) may please update the status.

C.3: 220 kV inter-connecting lines of OPTCL with 400/220 kV Bolangir (PG), Keonjhar & Pandiabil S/s
PGCIL has already commissioned the 2x315MVA 400/220kV Bolangir S/s by LILoing of 400 kV Meramandali-Jeypore S/C line and 400/220 kV Keonjhar S/s with an objective of supplying power from ER grid to its adjoining areas in Odisha.

In 122nd 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.	Only 7 towers left (Severe ROW problem). By Dec, 2016.
b.	LILo of one circuit of Katapalli-Sadeipalli 220 kV D/C line at Bolangir S/S.	Charged on 04.05.16
2.	400/220 kV Keonjhar S/S.	
a.	Keonjhar (PG)-Keonjhar (OPTCL) 220 kV D/C line	By 2017
b.	Keonjhar (PG)-Turumunga (OPTCL) 220 kV D/C Line.	By 2019
3.	400/220 kV Pandiabil Grid S/s	
a.	Pratapsasan(OPTCL)-Pandiabil (PG) 220 kV D/C line	December 2017
b.	LILo of one circuit of Atri-Puri (Samangara) 220 kV D/C line at Pandiabil (PG)	September 2016

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

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 98th PSOC meeting IT stated that tender for consultancy has already been floated and will be opened on 4th July'2016.

CGM (IT) may please deliberate the status.

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 98th PSOC meeting O&M stated that the data required by BIS, Kolkata will be furnished.

CGM (O&M) may deliberate the status.

C.6: Renewable Energy Generators in Eastern Region

As per the information available at ERLDC following renewable generator are connected to the grid in Odisha, OPTCL SLDC are requested to confirm/update this list.

Sl. No.	Energy Source	Generator	Capacity (MW)	Voltage level
1	Solar PV	KISS	0.5	Self
2	Solar PV	Mahanadi Coalfields Ltd.	2.0	Self
3	Biomass	J.K. Paper Mills	25	Self
4	Solar PV	MBPS control & Power Systems Ltd.	1	Self
5	Solar PV	OCL India Ltd.	2.5	Self
6	Biomass	J.K. Paper Mills	5.4	Self
7	Solar PV	NTPC Talcher	10	11kV
8	Solar PV	Abacus holdings Pvt. Ltd.	1	11kV
9	Solar PV	Aftaab Solar Pvt. Ltd.	5	33kV
10	Solar PV	Jay Iron & Steels	1	11kV
11	Solar PV	M.G.M. Minerals Pvt. Ltd.	1	11kV
12	Solar PV	Molisati Vinimay Pvt. Ltd.	1	11kV
13	Solar PV	PANTIME Finance Company Pvt. Ltd.	1	11kV
14	Biomass	Rajratna Energy Pvt. Ltd.	1	11kV
15	Solar PV	S. N. Mohanty	1	11kV
16	Solar PV	Shri Mahabir Ferro Alloys Pvt Ltd.	1	33kV
17	Biomass	Shalivahan Green Energy Ltd	20	132kV
18	Solar PV	ACME Solar, Mursing, Bolangir	25	132kV
19	Solar PV	GEDCOL, Manmunda	10 + 5	33kV

SLDC / GRIDCO may please update the status.

C.7: 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. Constituents are requested to reconcile/confirmed the correct information at the earliest.

In 120th OCC, all the constituents were advised to submit the data to CEA as per the prescribed format with a copy to ERPC Secretariat.

CGM (PP), Gridco may kindly note.

C.8: 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.

In 120th OCC, Concerned State Utilities /Generating companies are requested to submit data of their respective control areas by 1st week of May, 2016.

CGM (PP), Gridco may kindly note.

C.9: 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.

In the 122nd OCC meeting of ERPC, ERLDC stated that OPGC, OHPC (Indravati, Burla, Rengali & Upper Kolab) and Vedanta (CGP) have not furnished the data.

OHPC / OPGC/ Vedanta / CGPs may deliberate.

C.10: Implementation of Automatic Demand Management Scheme

OPTCL vide mail dated 24.02.2016 pointed that Hon'ble CERC vide their order dated 31.12.2015 passed in Sou-motu Petition No.- 5/SM/2014 in the matter of non-compliance of Regulation 5.4.2 (d) of IEGC directed all Respondents (SLDCs) for implantation of ADMS in their respective control area. CERC have allowed dead line till 30.06.2016 to the Respondent for implementation of ADMS. Failing which they will be liable for action under Section 142 of the Act.

In response to the offer for providing consultancy for implementation of ADMS, two numbers firms have given presentation on dated 03.06.16 at PTC, Chandaka.

Subsequently, one of the above participants has responded to the financial bid which is under scrutiny.

Members may discuss & SLDC may update.

C.11: Mock Black start exercises in Eastern Region

The mock black start exercise in respect of Upper Kolab PH Upper Indravati PH has been successfully conducted on 16.07.2016. As per the schedule, mock black start exercise in respect of Rengali, & Burla were to be carried out during June-16.

OHPC / SLDC may deliberate.

C.12: Issues raised in Operational Load Flow study of ERPC

Issue of underutilization of transmission lines in OPTCL system mostly at the voltage level of 220kV & 400kV was discussed in the above meeting held on 21.07.16 at ERPC. These lines, mostly connected to the CGPs are responsible for reactive power injection which has a commercial impact as well as high bus voltage.

Members may discuss.

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 **June'16**:

Sl. No	Name of Discom	No. of message issued	Over drawal (MU)
1	CESU	41	43.212
2	WESCO	15	48.095
3	NESCO	29	26.438
4	SOUTHCO	18	-12.496
	Total	103	105.249

It is noticed that WESCO had overdrawn to the tune of 48.095 MU followed by CESU to the tune of 43.212 MU & NESCO to the tune of 26.438 MU while SOUTHCO has under drawn 12.496 MU.

SLDC/ Discoms may please deliberate.

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 98th PSOC meeting Southco stated that the meter will be installed by end of June'2016.

Southco may update.

D.3: Delay in restoration of generating stations.

It was noticed that IbTPS is taking considerable time to the tune of 8 to 11 hrs for restoration of its units even if tripped in normal conditions.

OPGC / SLDC may please deliberate.

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	of transmission element	Reason of outage	Probable date of revival
1	220 kV TTPS-Joda ckt-I	Replacement of conductor	Charged on 01.07.16
2	220 kV U.Kolab-Theruvai ckt.	Tower Collapse at Loc-483	Charged on 11.07.16
3	400kV Meramundali-Mendhasal ckt.	Tower Collapse at Loc-180, 181 & 182	June'2016
4	400kV Meramundali-New Duburi ckt.	Tower Collapse at Loc-8/0, 8/1 & 8/2	II- Charged on 18.06.16 I- Charged on 19.06.16
5	400kV Meramundali-Vedanta ckt.	Tower Collapse at Loc-34 & 35	June'2016

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

D.5: Communication issues

Installation of communication equipment by CGPs / Industries.

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

Sl.	Name of CGP	Present status
1	M/s IFFCO, Paradeep	Outdoor commissioning work completed. RTU was locally tested. 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	All data stopped reporting since March 2016
6	Vedanta(9X 135 MW)	Some CB / Isolators and kV / Hz point yet to be provided. No response.
7	JSPL, Angul	Status are not reporting.
8	BPSL	No DATA
9	CONCAST	No kV/Hz.
10	BSL	No Hz .
11	JSL	No Bus kV

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.

In the last PSOC meeting, GCC stated that they are preparing for filing case before the OERC.

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

D.6: Web based drawal / generation scheduling.

LDC is going to implement web based drawal / generation scheduling for Dist. Utilities and State generating stations including IPPs and CGPs soon.

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

In the 98th PSOC meeting, SLDC stated that the mock scheduling is in place. Feedback shall be issued to IT wing by end of June'2016.

Feedback has already been sent to IT wing vide letter dated 16.06.2016 which is yet to be complied.

CGM (IT) / SLDC may deliberate.

D.7: Implementation of Automatic Meter Reading for OPTCL-Discom interface points.

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

It was deliberated that that from 1st March onwards the AMR shall be made "Go live". Data will be available after one hour lapses of time.

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.

It was decided in the 96th PSOC that SLDC will finalize the checking and sent the report to IT by end of April'2016.

In the 98th PSOC meeting SLDC stated IT stated that TCS will complete the data communication by end of June'2016. However, the data cannot be used for commercial purpose, rather they are for monitoring purpose only.

SLDC / CGM (IT) may deliberate.

D.8: 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 98th PSOC meeting IT stated that there are some commercial issues, which need to be discussed separately. Director (Commercial) stated that the issues may be sorted out soon.

CGM (IT) may deliberate the status.

D.9: Tripping of units at IBTPS.

On 14th July'2016 at 16:33 Hrs, total blackout occurred at IbTPS end followed by tripping of both units. Unit-1 tripped on "over frequency" and Unit -2 tripped on "Loss of Excitation". As ascertained from Budhipadar Grid that there was a disturbance at Budhipadar Grid due to tripping of one of the Budhipadar-Tarkera ckts causing tripping of Bus-2 on Busbar differential and also tripping of both the Auto transformers connected to Bus-1 on "over current" relay indication. Proper analysis of the disturbance may be done to avoid reoccurrence in future.

OPGC / O&M / SLDC may deliberate.

D.10: DISCOM Issues

CESU

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

B.

- (i) Mismatch of SCADA drawal with the billing meter during May'16.
- (ii) Fixed data indicated on dashboard may be converted to variable for accurate drawal display.
- (iii) Provision of on line recording of drawal data for CESU on real time basis.
- (iv) Gridco to facilitate for realizing the long outstanding dues of CESU from WESCO & NESCO.
- (v) Suspected data of ESSAR, Kendrapada-Chandikhol, IMFA- I & II
- (vi) Implementation of UI bill instead of deviation charge bill.
- (vii) Instant revision of downward schedule.
- (viii) Adjustment of excess amount paid by CESU towards current bill.

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

WESCO

- (i) Revision of BST bill by deducting power import by 8 Nos Solar projects operating in WESCO.
- (ii) Inclusion of Vedanta SEZ drawal in WESCO schedule.
- (iii) Provision of major EHT consumer's drawal in the RVDU display.

CGM (Telecom) / GRIDCO / SLDC may please deliberate.

SOUTHCO

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

B.

- i. Display of Sunabeda drawal from Jayanagar through Jayanagar-Damanjodi line.
- ii. Display of 33 kV Khallikote, Manamunda Feeder drawal and Boudh S/S drawal
- iii. The UI bill prepared on ISGS drawal schedule but not on Discom drawal schedule
- iv. Energy bill is prepared on actual drawal by Gridco and simultaneously Deviation charge is being prepared by SLDC.

GRIDCO / CGM (Telecom) / SLDC 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 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 June' 2016.
4	Commissioning of 220/132 kV Cuttack S/S	Work in progress and expected to be completed by June' 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 December' 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	July' 16	CESU	Action being taken
2	220/33kV, 2x20 MVA Banei	Dec' 17	WESCO Utility	Stayed by Court.
3	132/33kV, 2x20 MVA Udala	Dec-17	NESCO Utility	Line existing
4	132/33 kV, 1x12.5 MVA, Mania	Charged	CESU	33 kV line not done by CESU

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

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

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 are have been rectified in the mean time.

In the 98th PSOC meeting, OHPC stated that energy meters have been installed at all hydro stations and billing is being done from these meters. Meter installed at Renhali PH for TTPS feeder is not functioning properly and need to be replaced. Further Indravati ICT-II main meter to be replaced as voltage drop is noticed. Check meter at Indravati ICT-II is yet to be installed.

It was decided that O&M shall take necessary action for rectification of energy meter at Rengali PH.

GRIDCO / OHPC / O&M / SLDC may please deliberate.

E.3: Installation of Feeder meters at TTPS.

22 Nos of Secure make Apex-100 Energy meters have been installed in all the feeders of TTPS. As reported by DGM, EHT (O&M) Division, Meramundali, TTPS have connected these meters to their server without taking the approval from OPTCL / SLDC /GRIDCO.

GRIDCO / OPTCL/ TTPS / SLDC may please discuss.

E.4: Major Events in the month of June'16

- 29.06.16 : 400kV Baripada (PG)-Mendhasal ckt made LILO at Pandiabil 400kV bus.
: 400kV Duburi (N)-Mendhasal ckt made LILO at Pandiabil 400kV bus

E.5: Important Grid Incidences during the month of June'16.

1. On 11.06.16 at 16:30 hrs 400 kV Baripada PG Ckt, 220 kV Nayagarh Ckt tripped at Mendhasal and 220 kV Bhanjanagar Ckt tripped at Bhanjanagar end.
2. On 11.06.16 at 19:52 hrs 220 kV Theruvali-Indravati Ckt-IV tripped at both ends. (At Theruvali on back up relay, 'R' ph to E/F At Indravati-Zn-I, dist-5.5 km, 'R' ph to E/F). At 19:59 hrs 220 kV Theruvali-Laxmipur Ckt-II tripped at Theruvali end only on D/P, Zn-III, dist 38.91 km, 'R' ph to 'Y' ph to E/F. At the same time 220 kV Theruvali-Indravati Ckt-I, II, III tripped at Theruvali end only. (Ckt-I-'R' ph to 'Y' ph dist -100.71 km, Ckt-II-'B' ph to 'R' ph, dist-91.18 km, Ckt-III-'R' ph to E/F, Zn-IV, dist-120.17 km). 220 kV Theruvali-Bhanjanagar Ckt-II tripped at Bhanjanagar end only on 'R' ph to E/F, Zn-IV, dist-385.54 km. 220 kV Theruvali-Narendrapur Ckt-1 interrupted as it was charged through tie breaker of Indravati Ckt-I and its own breaker was under S/D.

Members may please discuss.

E.6: Outage of major transmission Elements during the month of June'16. (above 10 hrs).

Outage of major transmission elements above 10 hours during the month of June'16 is as detailed.

Transmission lines	Tripping Dt/time	Restoration Dt/time	Reason
220 kV Bidanasi-Meramundali Ckt	01.06.16 00:12	01.06.16 15:54	Burning of incoming isolator at Bidanasi
220 kV Rengali-TTPS Ckt	01.06.16 15:43	03.06.16 11:53	'R' ph conductor snapped between Loc. No-94 and 95
220 kV Kaniha-TTPS Ckt	01.06.16 15:52	02.06.16 11:35	Line patrolling was done but no fault found.
400 kV Meramundali-JSPL Ckt-I	02.06.16 19:08	03.06.16 16:35	Earth wire snapped and fell on line on 'Y'ph at Loc. No-10
132 kV Jajpur Road-Jajpur Town Ckt	06.06.16 17:38	07.06.16 11:46	'B' ph insulator damaged at Loc. No-20.
220 kV Budhipadar-Korba Ckt-III	07.06.16 18:03	08.06.16 22:37	Earth wire snapped between Loc. No-306 and 307
220 kV Katapalli-Lapanga Ckt-I	09.06.16 12:28	09.06.16 23:22	'R' ph LA burst at Katapalli end
220 kV Budhipadar-Lapanga Ckt-I	14.06.16 20:43	16.06.16 17:03	'Y'ph CVT burst and 'Y' ph LA damaged at Budhipadar S/S
220 kV Joda-TTPS Ckt-II	15.06.16 13:15	16.06.16 14:25	'Y' ph LA punctured at TTPS
132 kV Meramundali-Aarti Ckt	16.06.16 05:38	16.06.16 16:42	Insulator puncture at Loc. No-83
132 kV Katapalli-Sambalpur-Rairakhola Ckt	17.06.16 16:11	21.06.16 13:32	Tree fell on line at Loc. No-172
132 kV TTPS-OPCL Ckt	25.06.16 19:56	27.06.16 11:15	'B' ph conductor snapped.
220 kV Theruvali-Bhanjanagar Ckt-I	29.06.16 21:52	01.07.16 16:28	'Y' ph conductor snapped between Loc. No-1026 to1027

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

E.7: Review of Outage Program of State Generators / Transmission elements for the month of August'16:

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

Sl.	Station	Unit	Period	Remarks
1	Burla	# 2 # 6 # 7	22.07.16 to 31.10.16 17.02.14 to continue 06.07.16 to 03.08.16	Capital Maintenance Programming for R, M & U Annual Maintenance
2	Chiplima	# 3	15.02.14 to continue	TGB problem and started R,M & U
3	Balimela	# 1	31.01.13 to continue	TGB problem Programming for R,M & U
4	Upper Indravati	# 3	23.11.15 to 31.07.16	Capital Maintenance
5	TTPS	# 5	25.07.16 to 13.08.16	Boiler Overhauling

OHPC / SLDC may deliberate.

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

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

Name of Hydro Gen. Station	Generation Programme (MW)		Reservoir Level as on 01.07.15	Reservoir Level as on 01.07.16	MDDL	High Flood Reservoir Level
	Aug'16 (1 st fortnight)	Aug'16 (2 nd fortnight)				
HPS-I, Burla	70	70	602.21ft	597.06 ft	590 ft.	630 ft.
HPS-II, Chipilima	40	40	-	-	-	-
Balimela	250	250	1487.70 ft	1477.40 ft	1440 ft.	1516 ft.
Rengali	50	50	113.85 mt	110.01 mt	109.72m	123.5 mtr.
U.Kolab	100	100	851.74 mt	848.39 mt	844 mtr	858 mtr.
U. Indravati	300	300	631.68 mt	630.39 mt	625mtr	642 mtr
MKD (O/D)	30	30	2727.20 ft	2713.00 ft	2685 ft.	2750 ft.
TOTAL	840	840				

OHPC may deliberate & Members may discuss.

E.9: Anticipated power generation and demand for the month of August'2016.

Sl. No	Discom	Average	Peak
1	CESU	1020	1400
2	WESCO	900	1250
3	NESCO	800	900
4	SOUTHCO	400	500
6	Total	3120	4050
Availability			
1	Hydro	840	1200
2	State Thermal	700	750
3	IPP, small hydro &RE	600	800
4	ISGS share (including OA)	1000	1100
5	CGP support (OA)	150	150
6	Total availability	3290	4000
7	Surplus / Deficit	170	50

Members may discuss.

PART F: OTHER ISSUES

F.1: Date and Venue of the next (100th) PSOC meeting