

Odisha Power Transmission Corporation Ltd.
Bhubaneswar.



Agenda
for
103rd Power System Operational Coordination Meeting

Date: 25.11.2016
Venue: PTC, Chandaka, Bhubaneswar

Agenda for 103rd PSOC Meeting to be held on 25.11.2016 at PTC, Chandaka, Bhubaneswar

Item no. 1: Confirmation of the minutes of the 102nd PSOC Meeting held on 27.10.2016

The minutes of meeting was circulated vide letter No. SGM (PS)-PI-15/2015/4214⁽⁴³⁾ dated 09.11.2016 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 October'2016

- C.1: Status of projects funded under PSDF scheme
- C.2: Preparation of Load Generation Balance Report (LGBR) of ER for 2017-18
- C.3: Restoration of PLCC system of important lines
- C.4: Status of construction of 400kV Sterlite - Jharsuguda D/C sections
- C.5: 220 kV inter-connecting lines of OPTCL with 400/220 kV Bolangir (PG), Keonjhar & Pandiabil S/s
- C.6: Non-commissioning / non-functional status of bus-bar protection at important 220 kV Sub-stations
- C.7: Preparation of crisis management plan for Cyber Security in Power Sector in line with CERT-IN.
- C.8: Certification through BIS as per IS 18001:2007 to all generating/ transmission units.
- C.9: Reporting of Energy generated from renewable resources on daily basis
- C.10: Implementation of Automatic Demand Management Scheme (ADMS)
- C.11: Tie bay of 125 MVAR bus-reactor & 400kV Indravati –Indravati PG
- C.12: Mock Black start exercise in Eastern Region

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

- D.2: Prolonged outage of transmission elements and tentative revival dates
- D.3: Communication issues
- D.4: Web based drawal / generation scheduling.
- D.5: Implementation of Automatic Meter Reading for OPTCL-Discom interface points.
- D.6: Software for Deviation charge billing.
- D.7: Energy Generation & Outage of Units
- D.8: DISCOM Issues

E.1: Commissioning status of New Transmission elements.

- E.2: Energy Metering at Hydro Stations.
- E.3: Major Events in the month of October'16
- E.4: Important Grid Incidences during the month of October'16.
- E.5: Outage of major transmission Elements during the month October'16. (above 10 hrs).
- E.6: High Voltage problem at BPPL 132kV bus
- E.7: Unbalanced power flow through 220kV New Duburi-JSL ckt-I & II due to tripping of bus-coupler breaker
- E.8: Review of Outage Program of State Generators for the month of December'2016.
- E.9: Generation Program for the month of December'16.
- E.10: Anticipated power generation and demand for the month of December'2016.

F.1: Date and Venue of the next (104th) PSOC meeting

PART B: GRID PERFORMANCE

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

(A) Frequency:

Hourly frequency variation for the month of October'16.

Month	% of time frequency remained				
	<49.00	49.00-49.70	49.70-49.90	49.90-50.05	>50.05
Aug'16	0.00	0.04	8.40	77.06	14.49
Sept'16	0.00	0.01	6.64	76.00	17.35
Oct'16	0.00	0.00	4.62	71.27	24.11

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

Month	Freq (Hz)	Date	Time
Sept'16	Maximum – 50.15	25.09.16	6:00 Hrs
	Minimum – 49.74	19.09.16	18:45 Hrs
Oct'16	Maximum – 50.17	02.10.16	14:00 Hrs
	Minimum – 49.83	20.10.16	02:15 Hrs

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

Month	Demand		Maximum Consumption		Maximum Demand			Minimum Demand		
	MU	Avg. (MW)	MU	Date	MW	Date	Time	MW	Date	Time
Sept'16	2233	3101	79.79	20.09.16	3936	01.09.16	22:00	2479	04.09.16	15:00
Oct'16	2252	3026	78.31	04.10.16	3995	04.10.16	21:00	2319	26.10.16	15:00
Oct'15	2363	3177	79.64	19.10.15	4157	16.10.15	19:00	2435	13.10.15	14:00

Members may please discuss.

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

Sl. No	S/s Name	Maximum			Minimum		
		kV	Day	Time	kV	Day	Time
1	Balasore	235.73	27	06:00	211.53	20	18:00
2	Barkote	234.97	10	1:00	225.28	18	18:30
3	Bhadrak	235.55	27	04:45	209.17	05	12:30
4	Bhanjanagar	236.36	04	15:15	216.10	05	18:00
5	Bidanasi	236.36	31	02:45	205.93	05	18:30
6	Bolangir	228.39	06	19:45	201.66	03	15:30
7	Budhipadar	223.82	31	03:00	226.31	21	19:00
8	Chandaka	230.88	27	02:45	202.24	04	18:30
9	Duburi(O)	232.67	27	06:00	215.46	05	18:45
10	Duburi (N)	220.60	27	06:00	203.97	05	18:45
11	Jayanagar	242.71	18	02:45	221.29	07	17:30
12	Joda	236.87	11	14:00	218.71	05	19:30
13	Katapalli	231.74	08	06:00	218.35	07	01:15
14	Laxmipur	240.57	18	02:45	216.73	07	17:30
15	Mendhasal	231.51	10	16:45	202.01	04	18:45
16	Meramundali	231.34	10	16:45	217.60	05	18:15
17	Narendrapur	231.40	29	08:15	181.17	07	17:30
18	Nayagarh	232.32	10	16:45	199.53	04	18:45
19	Paradeep	231.11	27	06:00	199.99	05	18:45
20	Tarkera	235.26	10	01:15	223.49	28	18:30
21	Theruvali	233.99	18	01:45	206.74	07	17:30

The maximum Voltage of **242.71** kV occurred at Jaynagar 220 kV bus while Narendrapur, 220 kV bus has experienced the minimum Voltage of **181.17** 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 Oct-16
AUTO TRANSFORMER LOADING FOR THE MONTH OF OCTOBER'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	91.04	5	20:15	5.04	24	15:15	
	1x160	109.16	3	20:00	5.00	24	15:15	
THERUVALI 220/132 KV. {Theruvai, IMFAL(I), JK(I), Junagarh, Kesinga,Powmex(I), Rayagada, }	1x100	78.40	6	18:30	14.52	21	11:00	Rayagada & Paralakhemundi can be fed from Machhkund system.
	1x100	74.20	6	19:00	14.36	21	11:00	
NARENDRAPUR 220/132KV { Narendrapur, NarendrapurTr, Berhampur, Chhatrapur, Ganjam, Balugaon, Digapahandi, Mohana.}	1x160	108.44	26	17:30	8.56	10	15:00	
	1x160	114.20	29	19:30	21.32	19	17:30	
	1x100	NOT AVAILABLE						
BHANJANAGAR 220/132 KV { Bhanjanagar, Aska, Phubani, Ganjam, Chatrapur}	1x160	126.56	13	10:45	13.64	27	12:15	
	1x160	101.32	3	19:45	11.88	27	12:15	
CHANDAKA 220/132 KV { Chandaka, Bhubaneswar, Nimapada, Ransinghpur, Puri,Kesura, Kaipadar Tr. }	1x100	70.60	22	20:00	13.72	10	16:45	
	1x160	124.44	22	20:15	24.76	10	17:00	
	1x100	78.56	22	20:15	15.36	10	16:45	
	1x160	83.52	3	18:45	24.24	10	16:45	
BIDANASI 220/132 KV {Bidanasi, Khurda }	1x160	NOT AVAILABLE						
	1x100	37.00	31	18:00	7.80	5	18:15	
	1x100	37.04	31	18:00	5.64	17	15:00	
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	60.16	31	18:00	3.96	10	15:00	
		58.64	31	18:00	4.48	10	15:00	
		NOT AVAILABLE						
DUBURI 220/132 KV {Duburi, Bamnipal(I), BRPL, MESCO, Jajpur Road, Kalarangi, Jajpur Town}	3x100	47.6	11	11:45	5.12	10	15:30	Auto-II under shutdown.
		30.88	18	10:45	5.24	8	8:30	
		46.12	11	11:45	5.2	10	15:30	
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	125.52	4	20:30	18.8	22	8:00	
		124.72	4	20:15	11.6	4	12:45	
BUDHIPADAR 220/132 KV { Jharsuguda, Jharsuguda Tr, Cemco(I), MCL, Sundergarh,Brajarajagar, Rajgangpur}	2x160	82.96	31	17:30	24.24	6	17:30	
		82.68	31	17:30	24.04	6	17:30	
TARKERA 220/132 KV [Rourkela, Rourkela Tr.,RSP(I), Chhend, Adhunik Metal, Rajgangpur, OCL(I), Rajgangpur Tr.]	4x100	51.04	10	18:45	3.48	10	1:30	
		52.20	10	18:45	4.28	10	1:15	
		51.84	10	18:45	3.52	10	1:30	
		50.84	10	18:45	4.24	10	1:15	
KATAPALI 220/132 KV {Chipilima,Bargarh, ACC,Sonepur & Katapali area load.}	1x100	34.36	10	15:30	0.04	1	0:15	Supported by Burla & Chipilima power.
	1x100	28.60	31	17:45	0.04	1	0:15	
	1x160	NOT AVAILABLE						
BHADRAK 220/132 KV {Bhadrak area load, Bhadrak(T),Soro, FACOR (I), Dhamra Port}	3x100	61.84	22	17:30	13.08	27	4:30	
		59.56	22	20:45	7.92	5	11:45	
		NOT AVAILABLE						
PARDEEP 220/132 KV { Paradeep, Kendrapada, Pattamundai, Chandikhol, Cuttack, Jagatsinghpur, Phulnakhara}	1x160	114.80	5	19:00	12.32	25	10:15	
	1x100	73.80	25	10:15	15.76	5	22:00	
	1x50	NOT AVAILABLE						
BOLANGIR (SADAIPALLI) 220/132 KV { Bolangir, Patnagarh, Sonepur, Saintala, Khariar, Barpalli }	2x160	122.00	31.00	18:15	23.92	6	19:45	
		121.36	31.00	18:15	24.00	6	19:45	
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 up to the month of October'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	728.317	760.387	12.791	747.596	19.279
	July'16	727.863	736.383	752.465	13.163	739.302	2.919
	Aug'16	727.863	731.392	749.383	16.214	733.169	1.777
	Sept'16	704.384	692.808	727.25	16.844	710.406	17.598
	Oct'16	727.863	684.054	719.361	19.376	699.985	15.931
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	643.125	651.414	23.867	627.547	-15.578
	July'16	598.767	629.509	675.567	31.735	643.832	14.323
	Aug'16	598.767	607.205	658.853	43.023	615.83	8.625
	Sept'16	579.452	570.415	581.591	31.785	549.806	-20.609
	Oct'16	598.767	562.624	588.719	30.95	557.769	-4.855
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	453.173	568.294	93.911	474.383	21.21
	July'16	462.877	464.223	637.112	160.664	476.448	12.225
	Aug'16	462.877	464.344	565.592	106.664	458.928	-5.416
	Sept'16	447.945	466.494	549.786	88.571	461.215	-5.279
	Oct'16	462.877	477.866	572.348	106.136	466.212	-11.654
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	269.339	273.405	0.696	272.709	3.37
	July'16	294.712	275.04	285.042	0.196	284.846	9.806
	Aug'16	294.712	281.303	290.572	5.995	284.577	3.274
	Sept'16	285.205	278.812	279.315	2.821	276.494	-2.318
	Oct'16	294.712	277.521	279.892	4.25	275.642	-1.879

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 Oct'16

Source of Power	Energy (MU)
Thermal (TTPS+IB)	538.23
OHPC Stations including Machhkund share	455.36
CGP Support	211.04
IPP Support	460.26
ISGS drawal	586.77
TOTAL	2251.67

(G) Drawal of Machhakund Power

The drawal of Machhakund power up to the month of **October'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
July'16	61.250	82.32	27.531	37.00	31.460	42.28
August'16	65.386	87.88	30.816	41.42	31.871	42.84
September'16	66.248	92.01	31.835	44.21	31.739	44.08
October'16	67.765	91.081	31.269	42.028	33.822	45.459
TOTAL	411.032	559.691	183.168	249.478	211.168	287.459

In the 102nd PSOC meeting it was deliberated that:

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

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

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 Oct'16.

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

Members may note.

(I) Status of Open Access applications up to the month of Oct'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	155	1
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
4	July'16	4	118	0	35	157	3	118	0	30	151	6
5	Aug'16	8	127	0	23	158	7	127	0	21	155	3
6	Sept'16	5	86	1	35	127	5	86	1	33	125	2
7	Oct'16	7	78	0	38	123	6	78	0	38	122	1
	Total	41	679	3	211	934	35	679	3	185	902	32

PART C – Issues to be discussed in the 127th OCC meeting of ERPC on 29.11.2016

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 OPTCL is as given below:

SI 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.

In the 102nd PSOC meeting O&M stated that Rs. 14.61 Crs is yet to be released. Further, order for Rs. 20.00 crore has been placed.

SLDC stated that OPTCL may include the cost of ADMS for PSDF funding. It was decided that SLDC shall prepare the DPR and submit to CGM (O&M) for inclusion in PSDF.

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

C.2: Preparation of Load Generation Balance Report (LGBR) of ER for 2017-18.

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

a) “The RPC Secretariat shall be primarily responsible for finalization of the Annual Load Generation Balance Report (LGBR) and the annual outage plan for the following financial year by **31st December of each year**. The LGBR shall be prepared by the respective RPC Secretariat for Peak as well as Off-peak scenarios”.

b) “Each SLDC shall submit LGBR for its control area, for Peak as well as Off-Peak scenario, by **31st October** for the next financial year, to respective RPC Secretariat”.

c) “RPC Secretariat shall then come out with draft LGBR and draft outage plan for the next financial year by **30th November** of each year for the regional grid taking”

d) “The outage plan shall be finalized in consultation with NLDC and RLDCs. The final LGBR after considering comments/observations of the stakeholders shall be prepared by RPC Secretariat by **31st December of each year**. The.....”

XXXXXXXXXX

STU

Month wise annual planned outage of transmission systems (Transmission lines 220kV and above/ICTs/Reactors/other elements).

It is therefore requested to please send the above information (as applicable) on or before **31.10.2016** for compilation of data and preparation of **LGBR of ER for the year 2017-18**.

Information should be submitted in the form of soft copy through email (mail ID: rpc.erpc@gov.in / mserpc-power@nic.in).

In the last meeting SLDC stated that the LGBR for the State shall be submitted by 1st Week of November. O&M may explore preparation of Annual outage of transmission elements by 1st week of November'16.

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

C.3: 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.

In 33rd ERPC Meeting, WBPDC and OPTCL agreed to settle the issue bilaterally with JUSNL. JUSNL was advised to resolve the AMC related issues with West Bengal & Odissa. All are requested to inform the development to CERC.

However ERPC advised JUSNL, OPTCL and WBPDC 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.

In 123rd OCC, OPTCL informed that they received the invoice from BPL and they are charging Rs. 1.8 lacs / year for AMC, which is not reasonable as the AMC charges for 5 years is more than the panel cost of Rs.5.1 lacs.

In 124th OCC, WBPDC informed that PLCC panels will be delivered by BPL in September'16.

OPTCL informed that they agreed to the BPL estimate and placing the order.

In 125th OCC, OPTCL informed that the order has been placed for PLCC panels without 5 years AMC.

In the last meeting CGM (Telecom) stated that M/s BPL had agreed for 50 % advance payment. Accordingly order was placed on 5th October. On 24th October, M/S BPL is asking for 100% advance payment. CGM (O&M) may intimate the same to ERPC. This issue may also be raised in the TCC meeting of ERPC.

CGM (Telecom) may please update the status.

C.4: Status of construction of 400 kV Sterlite-Jharsuguda D/C sections

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

In 34th TCC held on 18.11.16, Vedanta explained the status of construction with a presentation. Vedanta informed that significant progress has been made in last 5 months and the line will be commissioned by March, 2016. Vedanta requested to extend the removal of the LILO till March, 2017 as final commitment.

OPTCL added that since Vedanta has made substantial progress during last 5 months and the dead line for removal of the LILO may be extended till February, 2017.

TCC agreed and advised Vedanta to submit a fresh undertaking in affidavit form to CTU and ERPC stating that the dedicated line will be completed by 28.02.2017 with no further extension. Failing which, CTU/ERLDC is authorized to open the LILO with effect from 01.03.2017.

GRIDCO / SLDC /Vedanta may deliberate

C.5: 220 kV inter-connecting lines of OPTCL with 400/220 kV Bolangir (PG), Keonjhar & Pandiabil S/s

PGCIL has already commissioned the 2x315MVA 400/220kV Bolangir S/s by LILOing of 400 kV Meramandali-Jeypore S/C line and 400/220 kV Keonjhar S/s with an objective of supplying power from ER grid to its adjoining areas in Odisha.

In 126th OCC of ERPC, OPTCL updated the completion schedule of inter-connecting system as follows:

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

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

C.6: Non-commissioning / non-functional status of bus-bar protection at important 220 kV Sub-stations

Bus Bar Protection not available (record as per third party protection audit)

Sl No	Name of Substation	Bus Bar protection status	Date of audit	Present Status
1	220 kV Mermandali	Not functional	30-Dec-12	<i>Commissioned in March-15</i>

CGM (O&M) may please deliberate

C.7: Preparation of crisis management plan for Cyber Security in Power Sector in line with CERT-IN.

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

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

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

CGM (IT) may please deliberate the status.

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

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

In 85th OCC, NTPC informed that NTPC-Farakka has been certified with IS 18001. Other constituents including OHPC requested to interact with BIS with intimation to ERPC and get certified as per CEA direction. The matter is getting reviewed by highest authorities with top priority.

In the 101th PSOC meeting CGM (O&M) stated that “Expression of Interest” for providing consultancy has been floated. In 102nd meeting CGM (O&M) stated that time will be extended since no response has been received.

CGM (O&M) may deliberate the status.

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

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

a) Grid connected RES whose scheduling and metering is done as regional entity:
Maximum / Time and energy injected (MWh) for the previous day (from the SEM meters on a daily basis till the AMR is commissioned/working)

b) Grid connected RES which is under State purview:

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

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

It was deliberated that SLDC shall provide the data in respect of the RES connected to grid with dedicated feeder.

In the 102nd meeting it was decided that SLDC and Gridco shall write to all RE generators to furnish their hourly energy injection data to SLDC by 20:00 hrs through email. SLDC shall forward the same to ERLDC by 01:00 hrs of the next day.

SLDC / GRIDCO 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.

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

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

In the 102nd meeting it was decided that SLDC shall convene a meeting with all Distribution Utilities and OPTCL for finalization of identification of feeders and grouping. These feeders will be included in the ADMS.

Members may discuss. Discoms / CGM (Telecom) / SLDC may deliberate.

C.11:Tie bay of 125MVAR Bus reactor and 400kV Indravati-Indravati and Indravati(PG):

Under outage wef 18/03/16 due to R-Ph pole bursting of Tie CB. Due to non-availability of the tie bay, the Buses are coupled only via the tie bay of 400kV Rengali-Indravati and 400kVIndravati-Jeypore at Indravati and any outage of the lines would result in decoupling of the Buses.

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

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

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

In the 102nd meeting CGM (O&M) stated that the installation of tie breaker will be done by November’2016. The 400 kV Indravati-Indravati (PG) line has taken over by OPTCL. Minor maintenance of the bay and associated equipments will be done by the respective Grid owner. However, the cost will be borne by the equipment owner.

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

C.12: Mock Black start exercises in Eastern Region

Mock black start exercise in respect of Balimela PH was conducted on 23.11.2016. It is observed that all the utilities may try to minimize the operational time.

OHPC / SLDC 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 Oct'16:

Sl. No	Name of Discom	No. of message issued	Over drawal (MU)
1	CESU	9	15.931
2	WESCO	4	(-) 4.855
3	NESCO	4	(-) 11.654
4	SOUTHCO	1	(-) 1.879
	Total	18	(-) 1.457

It is noticed that CESU had overdrawn to the tune of **15.931** MU All other Discoms were under-drawn during the month.

SLDC/ Discoms may please deliberate.

D.2: Prolonged outage of transmission elements and tentative revival dates

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

Sl.No	Name of transmission element	Reason of outage	Probable date of revival
1	400kV Meramundali-Mendhasal ckt.	Tower Collapse at Loc-180, 181 & 182	December 2016

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

D.3: 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	BPSL	No kV
6	CONCAST	No kV/Hz.
7	BSL	No Hz & status data.
8	JSL	No Bus kV / Hz (for Bus-2)
9	TSIL	No data
10	VISA	CB & Status data are not available
11	Paradeep	Data not available at ERLDC
12	Bolangir (New)	Data not available at ERLDC

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

In the 102nd meeting it was deliberated that CGM (Const) has made a circular to intimate all shutdowns to Telecom wing. CGM (RT&C) has intimated OERC regarding non compliance of data communication facility to SLDC by CGPs. CGM (RT&C) stated that they have already intimated the list of CGPs / Bulk consumers not complying with the provisions of data communication with SLDC.

CGM (Telecom) / GCC/RT&C may update the status

D.4: Web based drawal / generation scheduling.

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

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

In the 102nd PSOC meeting SLDC stated that all the generators have been intimated. Response from GMR and IMFA has been received. IT may make provision for taking a draft print out of the schedule submitted by the users. SLDC shall finalize a date towards 2nd week of November'16 for making a presentation to all generators.

CGM (IT) / SLDC may deliberate.

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

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

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

In the 100th PSOC meeting CGM (IT) stated that by end of August'2016 testing of all meters of CESU control area will be completed for billing purpose. SLDC may check August data from both the meters.

In the 102nd PSOC meeting, DGM (IT) stated that, meter data for 54 nos of S/Ss have been sent to SLDC. SLDC stated that due to server problem the testing has been delayed. However, the server problem has been resolved. O&M shall intimate the replacement of meters to IT wing.

SLDC / CGM (IT) may deliberate.

D.6: Software for Deviation charge billing.

Hon'ble OERC may notify "Intra State Deviation settlement and related matters" Regulation at any time. For implementation of the regulation, required software for Deviation Charge billing need to be developed and tested. CGM (IT) may take necessary steps for development of the software.

In the 102nd PSOC meeting, CGM (IT) stated that OPTCL BoD have approved for closure of contract with Infosys. SLDC may submit their new requirement if any, along with the left out works.

CGM (IT) may deliberate the status.

D.7: Energy generation and outage of units.

SLDC is preparing the monthly generation report for submission to CEA and ERPC. It is noticed that the monthly unit wise generation / Auxiliary consumption data in respect of State hydro, Thermal and IPPs connected to State network are not being forwarded to SLDC by the respective generating stations. A lot of time is being consumed in persuading to the generating stations for sending the generation data of last month. All the Generators are requested to forward their generation data along with a consolidated report of unit outage for last month by 3rd day of the month. The schedule date of submission of the generation report to CEA is 8th day of the month.

Generators may discuss

D.8: DISCOM Issues

CESU

- (i) The actual drawal for the month of October-16 was 699.9848 MU where as the SCADA drawal data received from SLDC was 694.160 MU. There is a difference of 5.8244 MU. SLDC may take necessary action for accurate display of drawal data through SCADA. For example actual drawal of CESU on 21.10.2016 at 18:00 Hrs was 1189 MW and displayed data was 1031.93 MW. Also on 22.10.2016 at 03:45 Hrs, the actual drawal data was 828.48 MW against displayed data 990.20 MW.
- (ii) Suspected data at Meramundali, Bidanasi, Paradeep ATs & Balugaon- Chatrapur line.

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

NESCO

- (i) Total drawl of Auto and feeders from Sl. No. 01 to 26, displayed on RVDU is no match with total drawl of NESCO Utility.
- (ii) Provision of storing of drawl data for NESCO Utility on real time basis.
- (iii) Sum of OA schedule given by SLDC on daily basis of a month is no match with final OA schedule given by SLDC of that particular month at the month end.

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. Expected by March'2017.
3	Commissioning of 220 kV Bidanasi-Cuttack line	Work in progress and expected to be completed by December' 2016.
4	Commissioning of 220/132 kV Cuttack S/S	Work in progress and expected to be completed by December' 2016.
5	Commissioning of 132 kV Baripada (PG)-Jaleswar line	Work has already been started, which will be completed by March 2017.
6	Commissioning of 220/132 kV Kesinga S/S	Work under progress. Expected by December' 2017.

132/33kV Grids charged during 2014-15

Sl. No.	Name of Grid	Date of Charging	Provision for no of bays	Feeder Status
1	Argul	06.05.14	4	1. IIT 2. IIT 3. NISER 4. NISER
2	Barbil	02.08.14	5	1. Barbil 2. Bhadrasahi 3. Vacant 4. Vacant 5. Vacant
3	Kuchinda	24.11.14	5	1. Kuchinda 2. Laikera 3. Laida(Proposed) 4. Jamankira(proposed) 5. Kusumi(proposed)
4	Nuapada	27.12.14	5	1. Bishra 2. Khariar Road 3. Vacant 4. Vacant 5. Vacant
5	Boud	28.01.15	5	1. Prunacuttack 2. Boud 3. Badhiapada 4. Chatrang(proposed) 5. Jampalaka(proposed)
6	Sarasmal	13.03.15	4	1. Industrial 2. Kolabira 3. ODSSP(proposed) 4. Vacant
7	Banki	26.03.15	4	5. Banki 6. Sunadei 7. Vacant 8. Vacant
132/33kV Grids charged during 2015-16				
8	Dabugaon	10.04.15	4	1. Dabugaon 2. Papdahandi 3. Medina 4. Kosamguda
9	Umerkote	10.04.15	4	1. Umerkote 2. Adhikariguda 3. Beheda 4. Vacant
10	Konark	29.06.15	4	1. Gop 2. Konark 3. ODSSP(proposed) 4. ODSSP(proposed)
11	Lapanga	11.08.15	4	1. Vacant 2. Vacant 3. Vacant 4. Vacant
12	Kalunga	07.09.15	5	1. IDC 2. Industrial 3. Kalunga 4. Mahaveer Ferro
13	Marshaghai	16.10.15	5	1. Luna 2. Mahakalpada 3. Lift Irrigation(proposed) 4. Vacant 5. Vacant
14	Somnathpur	11.12.15	4	1. HIL 2. Vacant 3. Vacant 4. Vacant
15	Atri	24.02.16	4	1. Vacant 2. Vacant 3. Vacant 4. Vacant
16	Padampur	24.02.16	5	1. Padampur 2. Gaisilat(proposed) 3. Paikmal(proposed) 4. Melchamunda(proposed) 5. Vacant
17	Mania	31.03.16	5	1. Vacant 2. Vacant 3. Vacant 4. Vacant 5. Vacant

132/33kV Grids charged during 2016-17 (till 01.11.16)				
18	Puri(Samangara)	30.05.16	5	1. Sriramnagar 2. Sriramnagar 3. Gabakunda 4. Vacant 5. Vacant
19	Bangiriposi	03.10.16	4	1. Bangiriposi 2. Vacant 3. Vacant 4. Vacant
132/33kV Grids expected to be charged from Nov 16 to March 17)				
20	Infocity-II	16-Nov	5	
21	Khajuriakata	16-Dec	5	
22	Chandaka B	16-Dec	5	
23	Malkangiri	16-Dec	5	
24	Olavar	17-Jan	5	
25	Potangi	17-Feb	5	
26	Podagada	17-Mar	5	
27	Bonai	16-Nov	5	
28	Kashipur	17-Mar	5	
29	Bhograi	17-Mar	5	
30	R. Udayagiri	17-Mar	5	
31	Tushura	17-Mar	5	

Distribution Utilities have to provide their action plan take-off arrangement.

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 is being done from the newly installed energy meters.

On completion of the above energy accounting for hydro stations will be taken up by SLDC. In the 101st PSOC meeting OHPC stated that TTPS feeder meter at Rengali PH is yet to be changed. Sr. G.M. Indravati PH stated that ICT-II meter at Indravati is not recording correctly. O&M may take necessary action for rectification of the meters at those hydro stations, so that energy accounting for hydro stations will be taken up by SLDC.

In the 102nd PSOC meeting, OHPC stated that defective meter at Rengali –TTPS feeder has been replaced. OHPC has requested M/s Alstom to check the PT of ICT-II at Indravati.

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

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

132kV Burla Chiplima Tie-2 made LILO at Katapali sub-station on 22.10.2016.

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

- i. On 05.10.16 at 18:10 hrs 220 kV Bhanjanagar Ckt-II, 220 kV TTPS Ckt-I & II, 220 kV Kaniha Ckt-I & II, 220 kV Bidanasi Ckt, 220 kV Duburi Ckt-I & II, 220 kV Nalco Ckt-I & II tripped at Meramundali on 'R' ph, 'Y' ph, 'B' ph due to PT fuse failure.
- ii. On 10.10.16 at 15:28 hrs 400 kV Meramundali-Vedanta Ckt-II tripped at Mermundali on D/P, dist 32.5 km and at Vedanta on D/P, Zn-I, 'R' ph, dist 203.4 km. Simultaneously 400 kV Meramundali-Vedanta Ckt-I tripped at Vedanta end only.

At 16:35 hrs while charging 400 kV Meramundali-Vedanta Ckt-II at Meramundali S/S, 400 kV Angul Ckt-I and ICT-I at Meramundali tripped. On investigation it was found that 'R' ph jumper from wavetrapp to isolator of 400 kV Meramundali-Vedanta Ckt-II snapped at Meramundali S/S.

iii. On 28.10.16 at 16:39 hrs Bisra PG Ckt-I, Auto-I, 220 kV bus coupler breaker at Tarkera tripped due to 'B' ph line isolator damage at Bisra PG end.

Members may please discuss.

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

Outage of major transmission elements above 10 hours is as detailed.

Sl No	Transmission lines	Tripping Dt/time	Restoration Dt/time	Reason
1	220 kV Balasore-New Duburi Ckt	14.10.16 10:31	15.10.16 14:28	'R' ph insulator damaged at Loc. No-129
2	132 kV Balasore-Soro Ckt	22.10.16 10:50	23.10.16 14:45	'R' ph, 'B' ph insulator damaged at Loc. No-103

Major outages are due to insulator damage.

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

E.6: High Voltage problem at BPPL 132kV bus (agenda by BPPL)

- 1) It has been noticed that maximum system voltage in Aarati-Chowduar circuit(LILO at TS ALLOYS switching station) remain 143 kV, when Grid Demand is less (during 22:00 hrs to 06:00 hrs), sometimes it increases more which is leading to tripping of unit-2 of BPPL causing a lot of losses.
- 2) It has been observed since 14th Nov onwards, the Voltage profile of Aarati-Chowduar at LILO 132 kV bus, not remained within permissible limit during day hours too, since inter -connected 132kV Choudwar -Bidanasi circuit remains disconnected, hence SLDC is requested to ensure the above linked circuit always to be in connected condition.
- 3) LILO of Bidanasi-Chandaka circuit has not been synchronized with main bus of Chandaka S/S at Chandaka end (BPPL-Chandaka ckt), as a result, BPPL power station gets only one path (BPPL-Bidanasi) to evacuate and in case, above path gets disturbed, BPPL's Power Station remains in islanding position and is unable to evacuate power in spite of healthy condition of BPPL which leads to a lot of financial loss.

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

E.7: Unbalanced power flow through 220kV New Duburi-JSL ckt-I & II due to tripping of bus-coupler breaker (Agenda by JSL, Duburi)

On 05.10.2016 (Time Block: 22:00 – 22:15) a LILO Power Flow has taken place in JSL Double Circuit Line which is connected parallel to OPTCL Duburi New 400 / 220 kV Grid, during tripping of BUS COUPLER Breaker at Duburi New Grid End as JSL Generators (2 Nos) connectivity were at different BUS by OPTCL Duburi New Grid and due to tripping of BUS COUPLER, there was an unbalance power flow as per the Energy Meter Readings. This needs to be checked and confirmed.

C.G.M. (O&M) / JSL, Duburi may please deliberate.

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

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

Sl.	Station	Unit	Period	Remarks
1	Burla	# 2 # 5 # 6	22.07.16 to 31.12.16 25.09.16 to continue 17.02.14 to continue	Capital Maintenance Programming for R,M & U Under R, M & U
2	Chiplima	# 3	15.02.14 to continue	TGB problem and started R,M & U
3	Balimela	# 1 # 7	31.01.13 to continue 05.12.16 to 31.12.16	Programming for R,M & U Annual Maintenance
4	Rengali	# 2	01.12.16 to 30.04.17	Dismantling of TG runner disc with collar
5	Upper Kolab	# 1 # 2	11.09.16 to continue 25.12.16 to 31.12.16	Stator inter turn fault Annual Maintenance
6	Upper Indravati	# 1	01.12.16 to 31.12.16	Annual Maintenance

OHPC / SLDC may deliberate.

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

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

Name of Hydro Gen. Station	Generation Programme (MW)		Reservoir Level as on 01.11.15	Reservoir Level as on 01.11.16	MDDL	High Flood Reservoir Level
	Dec'16 (1 st fortnight)	Dec'16 (2 nd fortnight)				
HPS-I, Burla	25	25	627.10ft	630.06 ft	590 ft.	630 ft.
HPS-II, Chipilima	15	15	-	-	-	-
Balimela	150	150	1501.10 ft	1507.20 ft	1440 ft.	1516 ft.
Rengali	30	30	119.14 mt	123.00 mt	109.72m	123.5 mtr.
U.Kolab	30	30	856.00 mt	856.65 mt	844 mtr	858 mtr.
U. Indravati	50	50	635.22 mt	639.28 mt	625mtr	642 mtr
MKD (O/D)	40	40	2747.95 ft	2747.40 ft	2685 ft.	2750 ft.
TOTAL	340	340				

OHPC may deliberate & Members may discuss.

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

Sl. No	Discom	Average	Peak
1	CESU	950	1150
2	WESCO	800	1050
3	NESCO	700	900
4	SOUTHCO	400	500
6	Total	2850	3600
Availability			
1	Hydro	340	1000
2	State Thermal	750	750
3	IPP, small hydro &RE	800	800
4	ISGS share (including OA)	850	1000
5	CGP support (OA)	150	150
6	Total availability	2890	3700
7	Surplus / Deficit	40	100

Members may discuss.

PART F: OTHER ISSUES

F.1: Date and Venue of the next (104th) PSOC meeting.