

Odisha Power Transmission Corporation Ltd.  
Bhubaneswar.



*Agenda*  
*for*  
94<sup>th</sup> Power System Operational Coordination Meeting

Date: 23.02.2016  
Venue: PTC, Chandaka.

**Agenda for 94<sup>th</sup> PSOC Meeting to be held on 23.02.2016 at PTC, Chandaka**

**Item no. 1: Confirmation of the minutes of the 93<sup>rd</sup> PSOC Meeting held on 30.01.2016**

The minutes of meeting was circulated vide letter No. SGM (PS)-PI-15/2015/466<sup>(42)</sup>, dated 19.02.2016 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 January'2016
- C.1: Charging of 220kV Raigarh (PGCIL)-Budhipadar line
- C.2: Status of PLCC system installed in Eastern Region
- 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: Replacement / Repair of meters on various locations
- C.7: Dynamic data of Generator Models required in PSSE for Simulations -ERLDC
- C.8: Mock Black start exercises in Eastern Region – ERLDC
- D.1: Non-compliance of drawal schedule by DISCOMs
- D.2: Revival of Station transformer for station auxiliary supply at Balimela HEP
- D.3: Prolonged outage of transmission elements and tentative revival dates
- D.4: Communication issues
- D.5: Islanding scheme of IbTPS
- 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: High Voltage at 400kV Meramundali & Duburi substation \_Reactive power injection by OPTCL
- 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 January'16
- E.5: Important Grid Incidences during the month of January'16.
- E.6: Outage of major transmission Elements during the month of January'16. (above 10 hrs).
- E.7: Review of Outage Program of State Generators for the month of March'2016.
- E.8: Generation Program for the month of March'16.
- E.9: Operating procedure for Odisha System.
- E.10: Automatic Demand Management Scheme (ADMS)- Implementation in OPTCL system.
- E.11: Anticipated power generation and demand for the month of March'2016.
- F.1: Date and Venue of the next (95<sup>th</sup>) PSOC meeting

## PART B: GRID PERFORMANCE

### Review of Grid Performance for the month of January'16.

#### (A) Frequency:

Hourly frequency variation for the month of January'16.

Month	% of time frequency remained				
	<49.00	49.00-49.70	49.70-49.90	<b>49.90-50.05</b>	>50.05
Nov'15	0.00	0.03	10.21	64.82	24.94
Dec'15	0.00	0.08	15.30	66.27	18.35
<b>Jan'15</b>	0.00	0.00	7.56	65.59	26.86

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

Month	Freq (Hz)	Date	Time
<b>December'15</b>	Maximum – 50.21	27.12.15	21:45 Hrs
	Minimum – 49.72	29.12.15	11:30 Hrs
<b>January'16</b>	Maximum – 50.20	20.01.16	02:00 Hrs
	Minimum – 49.80	14.01.16	08:15 Hrs

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

Month	Demand		Maximum Consumption		Maximum Demand			Minimum Demand		
	MU	Avg. (MW)	MU	Date	MW	Date	Time	MW	Date	Time
Dec'15	2026	2723	70.06	01.12.15	3813	01.12.15	19:00	2042	16.12.15	15:00
<b>Jan'16</b>	<b>2095</b>	<b>2816</b>	<b>70.71</b>	<b>30.01.16</b>	<b>3861</b>	<b>28.01.16</b>	<b>20:00</b>	<b>2117</b>	<b>28.01.16</b>	<b>14:00</b>
Jan'15	<b>1919</b>	2580	<b>64.20</b>	<b>23.01.15</b>	<b>3464</b>	<b>23.01.15</b>	<b>20:00</b>	<b>1787</b>	<b>02.01.15</b>	<b>03:00</b>

Members may please discuss.

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

Sl. No	S/s Name	Maximum			Minimum		
		kV	Day	Time	kV	Day	Time
1	Jayanagar	246.12	10	22:45	218.29	24	16:00
2	Theruvalli	236.01	11	03:15	207.90	14	18:15
3	Bhanjanagar	238.21	11	02:45	217.25	25	18:00
4	Chandaka	235.21	03	03:00	210.78	30	18:15
5	Narendrapur	221.98	11	03:15	175.91	13	18:00
6	Joda	244.78	19	11:15	222.80	12	18:45
7	Tarkera	237.17	20	04:00	227.24	27	18:45
8	Bhadrak	241.21	07	03:45	209.51	07	17:45
9	Paradeep	232.38	10	03:15	208.19	29	19:30
10	Budhipadar	238.61	20	03:45	224.64	07	18:30
11	Duburi(O)	237.17	02	03:00	219.62	29	19:30
12	Duburi (N)	222.27	11	03:45	207.03	30	18:45
13	Balasore	238.44	07	03:00	210.55	20	18:30
14	Meramundali	232.49	11	03:00	219.21	25	18:15
15	Bidanasi	237.75	11	03:00	219.16	30	18:30
16	Katapalli	237.63	20	04:15	211.71	06	18:45
17	Nayagarh	237.75	29	00:30	214.88	30	18:15
18	Mendhasal	234.51	02	03:00	212.86	30	18:30
19	Bolangir	238.09	20	03:45	198.78	25	18:45
20	Barkote	238.27	11	03:30	228.34	30	18:15
21	Laxmipur	242.54	10	23:45	215.35	24	17:00

The maximum Voltage of 246.12 kV occurred at Jaynagar 220 kV bus while Narendrapur, 220 kV buses have experienced the minimum Voltage of **175.91** 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 Jan-16  
AUTO TRANSFORMER LOADING FOR THE MONTH OF JANUARY'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	67.16	22	19:00	10.32	18	8:45	
	1x160	66.96	22	20:00	5.28	18	9:45	
THERUVALLI 220/132 KV. {Theruvalli, IMFAL(I), JK(I), Junagarh, Kesinga,Powmex(I), Rayagada, }	1x100	74.2	28	19:00	5.2	7	9:00	Rayagada & Paralakhemundi can be fed from Machhkund system.
	1x100	70.28	28	19:00	5.56	7	9:00	
NARENDRAPUR 220/132KV { Narendrapur, NarendrapurTr, Berhampur, Chhatrapur, Ganjam, Balugaon, Digapahandi, Mohana.}	1x160	109.00	12	8:00	36.92	27	16:15	
	1x160	131.24	27	6:15	36.72	5	13:45	
	1x100	NOT AVAILABLE						
BHANJANAGAR 220/132 KV { Bhanjanagar, Aska, Phulbani, Ganjam, Chatrapur}	1x160	91.4	3	18:00	42.4	2	23:15	
	1x160	132.52	26	18:15	23.36	12	14:30	
CHANDAKA 220/132 KV { Chandaka, Bhubaneswar, Nimapada, Ransinghpur, Puri,Kesura, Kaipadar Tr. }	1x100	60.92	28	18:00	23.68	10	14:45	
	1x160	107.32	28	18:15	42.24	10	14:45	
	1x100	66.88	28	18:15	15.88	9	9:15	
	1x160	103.08	28	18:15	40.28	10	14:45	
BIDANASI 220/132 KV {Bidanasi, Khurda }	1x160	NOT AVAILABLE						
	1x100	36.96	23	11:30	5.04	18	16:15	
	1x100	40.88	29	18:00	10.16	12	16:15	
TTPS 220/132 KV { Chainpal, FCI (I), Angul, MCL Nandira(I), Rairakhole,Boinda,Kamakhyannagar, Kalarangi,Nuapatna, Choudwar }	1x160	NOT AVAILABLE						
	1x160	NOT AVAILABLE						
MERAMUNDALI 220/132 kv {Meramundali Traction, Dhenkanal, Navchrome(I), Hind Metal, Aarti,BRG}	3x100	50.28	5	17:45	10.76	9	14:45	
		50.36	5	17:45	10.84	9	14:45	
		48.76	5	18:30	9.96	9	15:30	
DUBURI 220/132 KV {Duburi, Barnipal(I), BRPL, MESCO, Jajpur Road, Kalarangi, Jajpur Town}	3x100	62.44	19	12:15	1.04	30	14:00	Auto-II under shutdown.
		UNDER SHUT DOWN						
		60.60	19	12:15	1	30	14:00	
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	112.88	6	20:00	48.88	11	9:15	
		112.76	2	18:30	24.32	21	11:00	
BUDHIPADAR 220/132 KV { Jharsuguda, Jharsuguda Tr, Cemco(I), MCL, Sundergarh,Brajrajnagar, Rajgangpur}	2x160	101.32	2	18:45	37.88	28	13:15	
		101.4	2	19:00	17.84	28	11:45	
TARKERA 220/132 KV { Rourkela, Rourkela Tr.,RSP(I), Chhend , Adhunik Metal, Rajgangpur, OCL(I), Rajgangpur Tr.}	4x100	52.64	29	18:30	13.88	6	9:00	
		52.68	29	7:30	6.64	6	9:00	
		51.96	29	18:30	14.76	6	8:30	
		53.44	15	10:30	15.24	20	4:00	
KATAPALI 220/132 KV {Chipilima,Bargarh, ACC,Sonepur & Katapali area load.}	2x100	89.96	8	7:15	5.36	26	13:45	Supported by Burla & Chipilima power.
		89.36	8	7:15	2.96	28	0:00	
BHADRAK 220/132 KV {Bhadrak area load, Bhadrak(T),Soro, FACOR (I), Dhamra Port}	3x100	58.08	29	18:30	6.16	19	11:00	
		60.32	21	18:30	9.20	6	3:30	
		NOT AVAILABLE						
PARDEEP 220/132 KV { Paradeep, Kendrapada, Pattamundai, Chandikhol, Cuttack, Jagatsinghpur, Phulnakhara}	1x160	109.00	10	18:00	27.12	14	16:15	
	1x100	66.60	10	17:45	15.36	19	11:00	
	1x50	NOT AVAILABLE						
BOLANGIR (SADAIPALLI) 220/132 KV { Bolangir, Patnagarh, Sonepur, Sainatala, Khariar, Barpalli }	2x160	56.24	17.00	18:15	6.68	28	8:00	
		55.88	17.00	18:15	4.36	28	8:00	
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 up to the month of January'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'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
	<b>Jan'16</b>	<b>745.699</b>	<b>579.168</b>	<b>586.311</b>	<b>4.414</b>	<b>581.897</b>	<b>2.729</b>
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
	<b>Jan'16</b>	<b>624.247</b>	<b>542.391</b>	<b>677.377</b>	<b>123.847</b>	<b>553.53</b>	<b>11.139</b>
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
	<b>Jan'16</b>	<b>445.890</b>	<b>419.675</b>	<b>500.987</b>	<b>80.535</b>	<b>420.452</b>	<b>0.777</b>
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
	<b>Jan'16</b>	<b>290.466</b>	<b>262.208</b>	<b>265.313</b>	<b>0</b>	<b>265.313</b>	<b>3.105</b>

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

Members may please discuss.

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

Source of Power	Energy (MU)
Thermal (TTPS+IB)	503.602
OHPC Stations including Machhkund share	189.612
IPP & CGP Support	744.766
ISGS drawal	657.169
<b>TOTAL</b>	<b>2095.149</b>

**(G) Drawal of Machhakund Power**

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

Month	Total Generation		Odisha Drawal		AP Drawal	
	MU	MW	MU	MW	MU	MW
April'15	60.537	84.08	26.706	37.09	31.114	43.21
May'15	38.508	51.76	17.300	23.25	19.478	26.18
June'15	24.556	34.11	8.927	12.40	14.345	19.92
July'15	52.651	70.77	24.036	32.31	26.266	35.30
August'15	60.393	81.17	29.393	39.51	28.749	38.64
September'15	43.426	60.31	18.045	25.06	23.316	32.38
October'15	54.825	73.69	25.288	33.99	27.537	37.01
November'15	52.776	73.30	23.079	32.05	27.339	37.97
December'15	51.372	69.05	26.510	35.63	22.520	30.27
January'16	<b>50.821</b>	<b>68.31</b>	<b>27.415</b>	<b>36.85</b>	<b>21.077</b>	<b>28.33</b>

In the last meeting it was deliberated:

- To issue necessary instruction to Jayanagar Grid for reducing Machhakund drawal in case of over drawal to avoid hand tripping from Machhakund end.
- Offer from M/s Chemtrol is awaited for RVDU at Jayanagar S/S control room.
- Rly. Authority to ask for availing power supply at 220 kV Voltage level for their traction S/Ss, proposed to be fed from Rayagada and Sunabeda S/Ss.
- Construction of 33 kV Gumuda-Akhusing feeder has been completed. Inspection is left.
- Although decided in the coordination committee meeting, Machhakund authority is not taking up the maintenance work for Jayanagar feeder at their end. OHPC may coordinate.

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

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

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

**Members may note**

### **PART C – Issues to be raised in 118<sup>th</sup> OCC meeting of ERPC to be held on 26.02.16**

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

In the 117<sup>th</sup> OCC, OPTCL being the owner of the line, was advised has to submit B1 to B5 formats to ERLDC and review the protection settings at Budhipadar end for charging the line.

OPTCL vide letter dated 06.02.2016 intimated that they have not received any communication from PGCIL regarding proposal of LILO of 220 kV Raigarh (CSPTCL)-Budhipadar line at 400/220 kV PGCIL Raigarh S/S. OPTCL maintains 61 Kms of the line and rest of the line is being maintained by CSPTCL. According to OPTCL, in this case, the intending licensee i.e PGCIL/CSPTCL need to submit the requisite formats to ERLDC.

**OPTCL 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 117<sup>th</sup> OCC, OPTCL submitted that OPGW communication installation is under way and they are planning to implement carrier protection using OPGW.

In the last meeting C.G.M. (Telecom.) stated that a letter has been issued to PGCIL for joint verification regarding restoration of communication links for which OPTCL has laid OPGW. OPTCL will not go back with PLCC mode.

**C.G.M (O&M) / C. G.M. (Telecom.) may deliberate 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 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 117<sup>th</sup> OCC, OPTCL updated the completion schedule of inter-connecting system as follows:

<b>Sl. No.</b>	<b>Name of the transmission line</b>	<b>Completion schedule</b>
<b>1.</b>	<b>2 X 315MVA 400/220kV Bolangir S/s</b>	
a.	LILO of one circuit of Sadeipalli-Kesinga 220 kV D/C line at Bolangir S/S.	7 out of 14 completed. Severe ROW problem. Negotiation under progress.
b.	LILO of one circuit of Katapalli-Sadeipalli 220 kV D/C line at Bolangir S/S.	All work completed. Inspection left.
<b>2.</b>	<b>400/220 kV Keonjhar S/S.</b>	
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
<b>3.</b>	<b>400/220 kV Pandiabil Grid S/s</b>	
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.4: Preparation of crisis management plan for Cyber Security in Power Sector in line with CERT-IN.**

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

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

In the last meeting, CGM (IT) stated that the draft crisis management plan is under preparation.

**CGM (IT) may please deliberate the status.**

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

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

In 85<sup>th</sup> 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 it was decided that CGM (O&M) shall again write to BIS for certification.

**CGM (O&M) may deliberate the status.**

## **C.6: 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 two months. SLDC, Odisha vide mail dated 05.01.2016 have requested for early replacement / repair of meter at Mendhasal.

In the 117<sup>th</sup> OCC meeting, Powergrid assured to make the replacement of meter by end of Jan'16.

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

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

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

ERLDC informed that the SEM reading at both ends of 220 kV Joda-Ramchandrapur line is not matching and advised OPTCL to check for any tapping in the line. SEM for 220 kV Joda-Jindal is not required as it is an intra state line.

**CGM (O&M) may please deliberate.**

## **C.7: 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 114<sup>th</sup> OCC, the house was informed that the formats are available at ERPC website. ([www.erpc.gov.in](http://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 115<sup>th</sup> OCC, the data received only from NTPC Kahalgaon & Barh, NHPC Teesta-V, GMR and CESC.

In 116<sup>th</sup> 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 last meeting all Generators were requested to forward the data to ERLDC at an early date.

**OHPC/ OPGC/ TTPS / CGPs may deliberate.**



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

Sl. No.	Name of Hydro Station	Schedule (1 <sup>st</sup> )	Tentative Date	Schedule (2 <sup>nd</sup> )
1	U.Kolab	Last week of May, 2015	Done on 16/07/2015	Last Week of January, 16
2	Rengali	2 <sup>nd</sup> week of June 2015	Done on 09/02/2016	February, 16
3	U. Indravati	3 <sup>rd</sup> week of June 2015	Done on 16/07/2015	2 <sup>nd</sup> week of February 2016
4	Balimela	1 <sup>st</sup> week of November,15	Done on 24/11/2015	1 <sup>st</sup> week of March 2016
5	Burla		Done on 19/01/2016	January 2016

**SLDC / O&M / OHPC 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 **January'16:**

Sl. No	Name of Discom	No. of message issued	Over drawal (MU)
1	CESU	2	<b>2.729</b>
2	WESCO	10	<b>11.139</b>
3	NESCO	4	<b>0.777</b>
4	SOUTHCO	0	<b>3.105</b>
	<b>Total</b>	<b>16</b>	<b>17.750</b>

It is noticed that WESCO had overdrawn a the tune of 11.2 MU respectively.

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

**OHPC may update.**

**D.3: 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	me 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.
3	132 kV Jayanagar-Sunabeda line	For conversion to Double ckt	
4	220/132 kV, 160 MVA Auto-I at Bhanjanagar	Overhauling	
5	220 kV TTPS-Joda ckt-I	Replacement of conductor	
6	220 kV Meramundali-Bhanjanagar ckt-I	Replacement of conductor	

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

#### **D.4: 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

<b>Sl. No</b>	<b>of CGP</b>	<b>Present status</b>
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. Data base has already been prepared by OPTCL.
5	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.**

#### **D.5. 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 81<sup>st</sup> 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 last meeting it was decided that OPGC shall finalize the date and intimate to CGM (Telecom) for providing connectivity and testing.

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

#### **D.6: 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 CGM (IT) stated that the problems identified by SLDC have been rectified. A demo shall be given at SLDC on 4<sup>th</sup> February. After that all generators will be invited for a Demo. The Demo by IT is yet to be done.

**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.

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

In the last meeting CGM (IT) stated that from 1<sup>st</sup> March onwards the AMR shall be made “Go live”. Data will be available after one hour lapses of time.

**CGM (IT) may update the status.**

**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.

**CGM (IT) may deliberate**

**D.9: 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 2<sup>nd</sup> 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.

As per suggestion of SLDC in the 117<sup>th</sup> OCC meeting of ERPC, tap position at 765kV / 400kV Angul sub-station has been lowered as per instruction of ERLDC resulting control of voltage at Angul as well as at Meramundali sub-station, thereby reduction in reactive power injection charges.

**CGM (O&M) / Gridco may please deliberate.**

**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) Interruption of RVDU data. mismatch in dashboard and RVDU data.

**WESCO**

(i) Import of Solar projects is yet to be deducted from BSP bill of WESCO.

(ii) Frequent interruption of RVDU data causes monitoring problem. Dashboard may be kept in parallel operation along with RVDU.

(iii) Open Access, S/S Drawal and major EHT consumer drawal may be incorporated in the RVDU.

**NESCO**

ABT Dashboard is not working since January-16 till date. So, necessary action may kindly be taken for rectification. When RVDU data is not coming, Dashboard data is essential to monitor.

**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:

<b>Sl. No</b>	<b>Transmission element details</b>	<b>Present Status</b>
1	Commissioning of 220 kV Jayanagar-Jeypore 2 <sup>nd</sup> 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 <sup>rd</sup> 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.

<b>Sl. No</b>	<b>Name of the sub-station</b>	<b>Probable month of commissioning</b>	<b>Name of DISCOM</b>	<b>Action taken by Discoms</b>
1	132/33kV, 2x20 MVA Khajuriakota	March'16	CESU	Action being taken
2	220/33kV, 2x20 MVA Banei	Dec'16	WESCO Utility	Stayed by Court.
3	132/33kV, 2x20 MVA Padmapur	January'16	WESCO Utility	Line is ready
4	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, WESCO stated that diversion of 11 kV lines from Jharusuguda S/S will be done soon.

**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 last meeting, OHPC stated that there are mismatch in the recording for some of the energy meters. It was decided that OHPC shall identify those meters and intimate OPTCL. GRIDCO stated that energy meter for island feeder at Burla PH is yet to be installed. OPTCL shall take necessary action for installing / testing of those meters.

**GRIDCO / OHPC / SLDC may please deliberate.**

### **E.3: TTPS Issue.**

#### **Implementation of Feeder Metering**

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

TTPS in their letter No.045/GGM/TTPS, Dated. 20.11.2015 addressed to CGM (PP) Gridco pointed out that, as per clause 7(1), 1<sup>st</sup> 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, GRIDCO stated that, in response to the letter of GRIDCO, CEA has sought for some information such as location of Main, Check and Standby meters. TTPS was requested to comply those queries. OPTCL may take action for installation of feeder meters.

**GRIDCO / OPTCL/ TTPS / SLDC may please deliberate.**

### **E.4: Major Events in the month of January'16**

No report of major events has been received during the month.

### **E.5: Important Grid Incidences during the month of January'16.**

- (i) On 19.01.16 at 10:51 hrs while opening bus-II side isolator of 220 kV TTPS-Joda Ckt-I (idle charged) line all running units i.e. #1,#2, #3, #4, #5 & #6 tripped at TTPS along with all 220 kV/132 kV feeders emanating from TTPS. 220 kV Joda-Ramchandrapur Ckt tripped at Ramchandrapur end. 220 kV Joda-TSIL Ckt tripped at both ends on Over Voltage.
- (ii) On 26.01.16 at 20:23 hrs, 400 kV Meramundali-Vedanta IPP Ckt-II tripped on both ends on 'B' ph to E/F, dist-(-2.7 km) at Meramundali. Simultaneously 220 kV Bidanasi Ckt tripped on D/P, 'R' ph to E/F, dist-0.0 km, 220 kV Duburi Ckt-I tripped on D/P, 'R' ph to E/F, 220 kV side ICT-I tripped on D/P, O/C at Meramundali. At 21:01 hrs while charging 400 kV Vedanta IPP Ckt-II it tripped pulling out ICT-II from both sides at Meramundali. On investigation it was found that 400 kV Meramundali-Vedanta IPP Ckt-II 'B' ph reactor LA burst at Meramundali S/S.

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

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

Sl No	Transmission lines	Tripping Dt/time	Restoration Dt/time	Reason
1	132 kV Baripada-Baripada PG ckt	01.01.16 21:03	02.01.16 12:11	'Y' ph insulator damaged at Loc. No-3
2	132 kV Paradeep-IFFCO ckt-II	02.01.16 00:01	03.01.16 13:38	Heavy fog

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

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

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

Sl.	Station	Unit	Period	Remarks
1	Burla	# 1	26.01.16 to 24.02.16	Brake system rectification
		# 4	25.01.16 to 24.02.16	Annual Maintenance
		# 5	25.02.16 to 22.03.16	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
		# 8	03.03.16 to 04.04.16	Annual maintenance
4	Upper Kolab	# 1	29.07.15 to 17.05.16	Capital Maintenance
5	Rengali	# 5	11.02.16 to 10.03.16	Annual maintenance
		# 3	14.03.16 to 12.04.16	Annual maintenance
6	Upper Indravati	# 3	23.11.15 to 30.04.16	Capital Maintenance
7	TTPS	# 5	Ist week of March	ESP Work

**OHPC / SLDC may deliberate.**

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

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

Name of Hydro Gen. Station	Generation Programme (MW)		Reservoir Level as on 15.02.15	Reservoir Level as on 15.02.16	MDDL	High Flood Reservoir Level
	March'16 (1 <sup>st</sup> fortnight)	March'16 (2 <sup>nd</sup> fortnight)				
HPS-I, Burla	20	20	620.89ft	621.08ft	590 ft.	630 ft.
HPS-II, Chipilima	10	10	-	-	-	-
Balimela	90	90	1503.60ft	1490.30ft	1440 ft.	1516 ft.
Rengali	40	40	120.62mt	117.78mt	109.72m	123.5 mtr.
U.Kolab	150	150	855.30mt	854.37mt	844 mtr	858 mtr.
U. Indravati	105	105	638.44mt	634.30mt	625mtr	642 mtr
MKD (O/D)	30	30	2738.05ft	2737.65ft	2685 ft.	2750 ft.
<b>TOTAL</b>	<b>445</b>	<b>445</b>				

As per the Action Taken Report received from Department of Energy, Govt. of Odisha, vide Letter No. R&R-71/2015/1380 dated 16.02.2016, Average generation of Upper Kolab and Indravati shall be maintained as 100 MW and 75 MW respectively.

**OHPC may deliberate & Members may discuss.**

**E.9: 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 were requested and forward their comments / suggestions to SLDC before 15<sup>th</sup> December 2015. No comment has been received from Members except OHPC. It is again requested to forward comments on the said procedure. The final Operating Procedure shall be placed in the next meeting.

**Members may discuss.**

**E.10: Automatic Demand Management Scheme (ADMS)- Implementation in OPTCL system.**

Hon'ble CERC vide their order dated 31.12.2015 passed in Suo-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 implementation 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. Copy of the order has already been forwarded to CGM (O&M) and CGM (RT&C). OPTCL may take necessary action for implementation of the same.

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

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

Sl. No	Discom	Average	Peak
1	CESU	950	1300
2	WESCO	900	1200
3	NESCO	800	1000
4	SOUTHCO	400	550
5	OPEN ACCESS	200	200
<b>6</b>	<b>Total</b>	<b>3250</b>	<b>4250</b>
<b>Availability</b>			
	Hydro	450	1400
	State Thermal	750	750
	IPP, small hydro &RE	800	800
	ISGS share (including OA)	1000	1050
	CGP support (OA)	250	250
6	Total availability	3250	4250
<b>7</b>	<b>Surplus / Deficit</b>	<b>0</b>	<b>0</b>

**Members may discuss.**

**PART F: OTHER ISSUES**

**F.1: Date and Venue of the next (95<sup>th</sup>) PSOC meeting**