Odisha Power Transmission Corporation Ltd. Bhubaneswar.



Agenda
for

101st Power System Operational Coordination Meeting

Date: 27.10.2016

Venue: PTC, Chandaka, Bhubaneswar

Odisha Power Transmission Corporation Ltd. Bhubaneswar.

Agenda for 102nd PSOC Meeting to be held on 27.10.2016 at PTC, Chandaka, Bhubaneswar

Item no. 1: Confirmation of the minutes of the 101st PSOC Meeting held on 29.09.2016

The minutes of meeting was circulated vide letter No. SGM (PS)-Pl-15/2015/3990⁽⁴³⁾ dated 24.10.2016 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 September'2016
- C.1: Commissioning of New Transmission elements in Eastern Region
- C.2: Status of projects funded under PSDF scheme
- C.3: Preparation of Load Generation Balance Report (LGBR) of ER for 2017-18
- C.4: Restoration of PLCC system of important lines
- C.5: Status of construction of 400kV Sterlite Jharsuguda D/C sections
- C.6: 220 kV inter-connecting lines of OPTCL with 400/220 kV Bolangir (PG), Keonjhar & Pandiabil S/s
- 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: 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 September'16
- E.4: Important Grid Incidences during the month of September'16.
- E.5: Outage of major transmission Elements during the month September'16. (above 10 hrs).
- E.6: Review of Outage Program of State Generators for the month of November' 2016.
- E.7: Generation Program for the month of November'16.
- E.8: Anticipated power generation and demand for the month of November 2016.
- F.1: Date and Venue of the next (103rd) PSOC meeting

PART B: GRID PERFORMANCE

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

(A) Frequency:

Hourly frequency variation for the month of September'16.

Month	% of time frequency remained								
Monui	<49.00	49.00-49.70	49.70-49.90	49.90-50.05	>50.05				
July'16	0.00	0.04	6.92	80.09	12.95				
Aug'16	0.00	0.04	8.40	77.06	14.49				
Sept'16	0.00	0.01	6.64	76.00	17.35				

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

Month	Freq (Hz)	Date	Time	
Aug'16	Maximum – 50.23	10.08.16	13:00 Hrs	
	Minimum – 49.76	22.08.16	19:15 Hrs	
Sept'16	Maximum – 50.15	25.09.16	6:00 Hrs	
	Minimum – 49.74	19.09.16	18:45 Hrs	

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

Month	Dei	mand	Maximum Consumption		Ma	ximum Den	nand	Minimum Demand		
	MU	Avg.	MU	Date	MW	Date	Time	MW	Date	Time
		(MW)								
Aug'16	2341	3146	81.32	30.08.16	4105	29.08.16	22:00	2307	10.08.16	14:00
Sept'16	2233	3101	79.79	20.09.16	3936	01.09.16	22:00	2479	04.09.16	15:00
Sept'15	2258	3137	79.52	04.09.15	3849	09.09.15	22:00	2388	20.09.15	14:00

Members may please discuss.

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

Sl. No	S/s Name	Maximum			Minimum			
		kV	Day	Time	kV	Day	Time	
1	Jayanagar	<mark>244.44</mark>	24	13:00	222.85	01	11:00	
2	Theruvali	235.44	22	12:15	209.17	01	10:45	
3	Bhanjanagar	233.13	24	14:00	215.29	30	18:30	
4	Chandaka	231.40	05	04:45	206.40	30	18:15	
5	Narendrapur	223.72	22	12:15	188.85	01	11:30	
6	Joda	238.32	04	14:30	220.31	15	20:15	
7	Tarkera	235.26	17	10:00	205.13	10	18:00	
8	Bhadrak	233.70	05	04:15	212.00	30	18:15	
9	Paradeep	229.37	04	15:15	203.51	09	13:00	
10	Budhipadar	233.18	13	10:45	226.55	22	19:00	
11	Duburi(O)	235.21	05	04:15	218.00	30	18:30	
12	Duburi (N)	224.70	05	04:00	210.15	30	18:15	
13	Balasore	233.47	05	06:00	213.44	30	18:30	
14	Meramundali	227.99	04	14:45	217.94	30	18:30	
15	Bidanasi	234.69	04	14:30	218.41	20	19:30	
16	Katapalli	231.57	04	03:15	216.33	17	10:00	
17	Nayagarh	230.82	24	16:15	210.21	30	18:30	
18	Mendhasal	230.64	05	04:45	208.30	30	18:15	
19	Bolangir	235.49	12	15:15	215.17	01	08:45	
20	Barkote	238.55	20	19:15	227.47	01	19:00	
21	Laxmipur	242.36	24	13:00	219.39	01	11:00	

The maximum Voltage of **244.44** kV occurred at Jaynagar 220 kV bus while Narendrapur, 220 kV bus has experienced the minimum Voltage of **188.85** 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 Sept-16 AUTO TRANSFORMER LOADING FOR THE MONTH OF SEPTEMBER'2016

Name of the 220 kV Sub-Station	Capacity			Drawa	l details			REMARKS
(Feeding Sub-stations/Feeders)			Maximu			Minimu	n	
(MVA	MW	Day	Time	MW	Day	Time	
JAYANAGAR 220/132 KV.	1x160	49.8	30	18:45	6.20	27	16:30	
[Darnanjodi(NALCO), Traction S/Ss, Tentulikhunti, Sunabeda, Jayanagar]	1x160	49.8	30	18:45	6:43	27	16:30	
THERUVALLI 220/132 KV.	1x100	79.4	1	19:15	23.36	9	12:30	Rayagada & Paralakhemundi
{Theruvali, IMFAL(I), JK(I), Junagarh, Kesinga,Powmex(I), Rayagada, }	1x100	74.96	1	19:00	22.64	9	12:30	can be fed from Machhkund system.
NARENDRAPUR 220/132KV	1x160	111.88	16	18:45	11.68	23	17:30	oyuun.
{ Narendrapur, NarendrapurTr, Berhampur,	1x160	118.68	10	19:30	23.72	22	13:00	
Chhatrapur, Ganjarn, Balugaon, Digapahandi, Mohana.}	1x100	NOT AV	AILABL	Ē				
BHANJANAGAR 220/132 KV	1x160	99.36	6	18:45	29.48	3	13:30	
{ Bhanjanagar, Aska, Phulbani, Ganjam, Chatrapur}	1x160	86.68	6	18:45	25.48	3	13:30	
CHANDAKA 220/132 KV	1x100	66.76	15	9:00	26.84	24	16:15	
{ Chandaka, Bhubaneswar, Nimapada,	1x 160	114.68	19	15:00	44.68	15	7:30	
Ransinghpur, Puri,Kesura, Kaipadar Tr. }	1x100	73.20	15	19:15	28.76	24	16:15	
	1x160	112.84	15	9:15	46.36	24	16:15	
BIDANASI 220/132 KV	1x160	NOT AV	/AILABL	E				
{Bidanasi, Khurda }	1x100	46.12	3	11:45	6.32	27	14:45	
	1x 100	46.20	3	11:45	6.44	27	14:45	
TTPS 220/132 KV { Chainpal, FCI (I), Angul, MCL Nandira(I), Rairakhole,Boinda,Kamakhyanagar,	1x160							
Kalarangi,Nuapatna, Choudwar }	1x160							
MERAMUNDALI 220/132 kV	3x100	45.68	5	20:15	5.68	21	15:00	
{Meramundali Traction, Dhenkanal,		57.60	5	20:15	3.44	16	14:45	
Navchrome(I), Hind Metal, Aarti,BRG}		70.20	23	20:00	9.98	21	15:45	
DUBURI 220/132 KV	3x100	30.24	9	18:45	5.12	3	0:30	Auto-II under shutdown.
{Duburi, Bamnipal(I), BRPL, MESCO, Jajpur Road, Kalarangi, Jajpur Town}		30.52	9	18:45	5.16	3	0:30	
		29.32	9	18:45	4.88	3	0:30	
JODA 220/132 KV { Joda,Tensa, FAP(I), Bolani(I), Nalda	3x100	NOT AV	/AILABLI	E				"*" - Alternate P/S from Kuchei.
Tr.,Polasponga, *Rairangpur, Bhalulata			/AILABL					
traction}		NOT AV	/AILABL	E				
BALASORE 220/132 KV	2x160	125.32	15	11:00	20.48	23	10:00	
{ Balasore, Birla Tyre(I), Ispat Alloy(I), Jaleswar, Jaleswar(T)}		131.96	12	11:00	12.32	10	17:00	
BUDHIPADAR 220/132 KV { Jharsuguda, Jharsuguda Tr, Cemco(l),	2x160	79.6	1	20:00	4.84	11	9:30	
MCL, Sundergarh,Brajarajnagar,		79.36	1	20:00	4.08	11	9:30	
Rajgangpur} TARKERA 220/132 KV	4x100	52.36	28	8:30	7.84	10	16:15	
[Rourkela, Rourkela Tr.,RSP(I), Chhend,		54.12	28	8:30	5.52	22	15:45	†
Adhunik Metal, Rajgangpur, OCL(I),		42.52	20	20:45	6.08	23	19:30	1
Rajgangpur Tr.]		51.52	15	5:45	6.48	23	19:30	1
KATAPALI 220/132 KV	1x100	20.64	10	1:15	5.20	3	10:15	Supported by Burla & Chipilima
{Chipilima,Bargarh, ACC,Sonepur & Katapali area load.}	1x100	20.76	10	1:15	4.16	3	10:15	power.
	1x160	NOT AV	/AILABL	Ē				
BHADRAK 220/132 KV	3x100	71.80	30	18:00	14.00	29	9:00	
{Bhadrak area load, Bhadrak(T),Soro,		60.32	13	20:15	14.88	29	9:00	
FACOR (I), Dhamra Port}		NOT AV	/AILABL	Ē				
PARDEEP 220/132 KV	1x160	114.20	28	21:30	13.40	27	9:45	
{ Paradeep, Kendrapada, Pattamundai,	1x100	74.08	27	9:45	7.24	28	6:30	1
Chandikhol, Cuttack, Jagatsinghpur, Phulnakhara}	1x50	NOT AV	/AILABL	Ē				
BOLANGIR (SADAIPALLI) 220/132 KV { Bolangir, Patnagarh, Sonepur, Saintala,	2x160	121.92	19.00	19:15	7.24	28	6:30	
Khariar, Barpalli }		125.76		10:30	8.32	10	15:30	
Lapanga	1x160	NOT AV	/AILABL	E				

In the last meeting it was deliberated that procurement of meters was under process.

(E) DISCOM Drawal up to the month of September'16

Name of	Month	Approved	Scheduled	Actual	Open Access	Net Energy	Overdraw
DISCOM		Energy Drawal	Energy	Energy	Import	Drawal	(MU)
		Prorated for the	(MU)	Drawal	Schedule	(MU)	
		month (MU)		(MU)	(MU)		
		1	2	3	4	5=(3-4)	6=(5-2)
	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
CESU	June'16	704.384	728.317	760.387	12.791	747.596	19.279
CESU	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
	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
WEGGO	June'16	579.452	643.125	651.414	23.867	627.547	-15.578
WESCO	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
	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
MECCO	June'16	447.945	453.173	568.294	93.911	474.383	21.21
NESCO	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
SOUTHCO	April'16	285.205	285.017	284.863	0.007	284.856	-0.161
SOUTHED	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

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 Sept'16

Source of Power	Energy (MU)
Thermal (TTPS+IB)	512.27
OHPC Stations including Machhkund share	704.65
IPP & CGP Support	375.50
ISGS drawal	640.22
TOTAL	2232.65

(G) Drawal of Machhakund Power

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

Month	Total Generation		Odisha l	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	
TOTAL	343.267	468.61	151.899	207.45	177.364	242.00	

In the 101st PSOC meeting it was deliberated that:

Regarding installation of RVDU at Jayanagar control room, negotiation with M/s Chemtrol for issue of advance payment is under process, which is likely to be resolved within a short time.

High level meeting for discussion of Machhakund issue is yet to be held.

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 Sept'16.

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

Members may note.

(I) Status of Open Access applications up to the month of Sept'2016

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

Sl.	Month	No	No of Applications received					No of Applications Disposed				
No		Intra-	In	ter-Stat	e	Total	Intra-	Ir	nter-Stat	e	Total	App.
		State	Bila	teral	PXI		State	Bila	teral	PXI		Rejected
			ST	MT/				ST	MT/			
				LT					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
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
	Total	34	601	3	173	811	29	601	3	147	781	30

PART C – Issues raised in the 126th OCC meeting of ERPC held on 21.10.2016

C.1: Commissioning of new transmission elements in Eastern Region

- 1. 400/220kV, 500MVA ICT-III at Baripada was charged for the first time on no load at 14:28Hrs of 29/09/16 and subsequently loaded at 22:48Hrs of 30/09/16.
- 2. 125MVAr B/R at Baripada was charged for the first time at 05:52Hrs of 30/09/16.

C.2: 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:

SlNo	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.

It was deliberated that order has been placed by OPTCL for Rs. 20 crores.

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

C.3: 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....."

So, the planning of maintenance of generating units of various generating companies of the region as well as outage of transmission system on annual basis in respect of Eastern Region for the year 2017-18 is to be finalised by **31st December**, **2016**. To facilitate the preparation of LGBR of Eastern Region by ERPC Secretariat within the above schedule period, the following data/ information for the year **2017-18** in respect of the constituents/ generators of Eastern Region is required:

State and Central Sector Generators/ IPPs/CPPs

- i) The unit wise and station wise monthly energy generation proposed from existing units during 2017-18 (thermal/hydro/RES).
- ii) Annual maintenance programme for each of the generating units (thermal and hydro both).
- iii) Generating units under R&M/ long outage indicating date of outage and reasons of outage and expected date of return (thermal and hydro both).
- iv) Partial and forced outage figures (in %) of generating units for the last 3 years.
- v) Month wise peak demand (MW) restricted and unrestricted peak demand.
- vi) Month wise energy requirement (in MU).
- vii) Schedule of commissioning of new generating units during 2017-18 and unit-wise monthly generation programme (in MU).
- viii) Allocation of power from new generating units.

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).

Members may submit the data for LGBR by 31.10.2016.

It was deliberated that LGBR & annual planned outage plan shall be submitted by 1st week of November.

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

C.4: 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 WBPDCL (for Snataldih end) and OPTCL (for Joda end) to complete the PLCC schemes of both the above lines.

In 33rd ERPC Meeting, WBPDCL 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 WBPDCL 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, WBPDCL 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 101st PSOC meeting CGM (Telecom) stated that M/S BPL is asking 100 % payment, which needs to be approved by CMD. Also M/s BPL is claiming commissioning charges at Joda as well as at JUSNL end. However, they have agreed for commissioning charges at Joda end only.

It was deliberated in the OCC meeting of ERPC that OPTCL has agreed to the terms for delivery of the equipment by M/s BPL.

CGM (Telecom) may please update the status.

C.5: Status of construction of 400 kV Sterlite-Jharsuguda D/C sections

A special meeting, on the issues related to Vedanta Ltd. was held on 14.10.2016 in the presence of CEA, CTU, OPTCL, GRIDCO, Vedanta, ERLDC & ERPC

Minutes of Special Meeting on "Issues related to Vedanta Limited" held on 14th October, 2016 at ERPC, Kolkata

Member Secretary, ERPC welcomed CEA, CTU, Vedanta, OPTCL, GRIDCO, ERLDC and all other participants to the special meeting. He informed that this special meeting was convened on short notice to deliberate the issues related to Vedanta Limited.

He briefed the house that in the 125th OCC meeting held on 20.09.16 the Vedanta related issues were raised and OCC in its capacity deliberated in detail and decided the following:

- i) Vedanta has to get a fresh connectivity from CTU for their CPP units #1, 3 & 4 (as these units were converted from IPPs to CPPs) as per the decision of 11th Connectivity and LTA meeting of ER held on 13.06.2016.
- ii) Vedanta has to get NOC from SLDC Odisha for scheduling of their units through ERLDC.
- iii) Vedanta will be allowed to connect to CTU system only after submission of the above two documents.
- iv) ERLDC will start scheduling Vedanta CPP Units #1,3,& 4 only after getting a fresh NOC from SLDC Odissa and with grant of fresh connectivity by CTU.
- v) Till then Vedanta would be treated as an embedded customer under the jurisdiction of SLDC Odisha and may remain connected to grid through STU system only (as presently its units are connected to OPTCL system) and do their STOA transaction through SLDC Odisha.
- vi) In view of all of above, the NOC granted to Vedanta would stand revoked and fresh NOC could be issued subject to fulfillment of the stated conditions
- vii) Vedanta has to complete the dedicated line within the schedule (i.e. November, 2016) otherwise the LILO may be removed as per the decision of 33rd ERPC and the meeting convened by CEA held on 16.09.2016.

Deliberation in the meeting

Vedanta informed that they are actively perusing for the NOC from Odisha for the purpose of getting connectivity from CTU. Rounds of discussions were going on for with GRIDCO/ OPTCL officials on the terms and conditions for the NOC and it will be finalized within 2-3 days.

Further, Vedanta clarified that their present requirement is as follows:

☐ Getting connectivity for their 3x600 MW CPPs along with smelter load (Maximum of 2000 MW) from CTU, with provision to draw power upto 1000 MW (maximum).

☐ To meet their 900 MW (approx) smelter load from the CPPs.

☐ To supply 550 MW power to Odisha through STU network.

☐ Shifting of units from ISTS to STU system and vice versa are being done as per their convenience for supply of smelter load and power supply to Odisha.

Therefore, to meet their own requirement along with their commitment to supply Odisha as per terms of PPA between them, Vedanta is compelled to connect their three (3) units to STU network, keeping one unit as standby.

GRIDCO informed that several meetings are going on with Vedanta to sort out the issues related to NOC and power supply to Odisha. They were in a process to sign a modified PPA for getting power supply from Vedanta.

Further, OPTCL viewed that all CPP units (unit #1, 3 &4) and IPP unit (#2) of Vedanta Ltd along with SEZ (smelter) load shall be kept at 400 kV bus of Vedanta Ltd Switchyard without bus splitting and shall be connected to STU network through 400 kV Vedanta Ltd-Meramundali D/C line.

CTU clarified that as per connectivity regulations Vedanta can get connectivity either as 3x600 CPP generator provided their net exportable capacity is more than 250 MW or as a Bulk Consumer with load of 1000 MW. But connectivity for both injection of more than 250 MW and drawl of 1000 MW power is not permitted as per present CERC regulation on grant of Connectivity, LTA and MTOA.

Further, it was informed that for the purpose of scheduling Vedanta generation, the control area jurisdiction of Vedanta should be decided following the principle outlined in IEGC, i.e. if a generating station is connected both to ISTS and the State network, scheduling and other functions performed by the system operator of a control area will be done by SLDC, only if state has more than 50% Share of power .The role of concerned RLDC, in such a case, shall be limited to consideration of the schedule for interstate exchange of power on account of this ISGS while determining the net drawal schedules of the respective states. If the State has a Share of 50% or less, the scheduling and other functions shall be performed by RLDC.

During deliberation it emerged that Vedanta as a 4X600 MW plant has obligation to supply power more than 50% of its capacity within the home state of Odisha itself [900 MW (50% of 1800MW) for smelter load and 550 MW to Odisha state i.e. 1450MW total]. As such, it does not qualify to be a regional entity. Therefore even if Vedanta is connected to both CTU and STU system, it should be scheduled by Odisha SLDC. After detailed deliberation the followings were decided:

- 1. Control area jurisdiction of Vedanta will be shifted from ERLDC to SLDC, Odisha.
- 2. CPP units (unit #1, 3 &4) and IPP unit (#2) of Vedanta Ltd along with SEZ (smelter) load shall be kept at 400 kV bus of Vedanta Ltd Switchyard without bus splitting and shall be connected to STU network through 400 kV Vedanta Ltd-Meramundali D/C line.

There will be no need to operate the 400kV buses of Vedanta in split bus mode and they should be coupled by completing all the dias.

- 3. One unit shall be kept as standby till the completion of 400 kV Sterlite-Jharsuguda D/C line.
- 4. Vedanta Ltd shall be a State embedded entity for all purposes and requisite STU connection would be obtained by Vedanta Ltd i.r.o above.
- 5. The CTU connectivity of Vedanta may be kept in abeyance. The same may be closed/ withdrawn from the date of getting the STU connectivity.
- 6. On change of control area jurisdiction the NOC granted by ERLDC to Vedanta Ltd shall stand revoked.
- 7. After changeover of control area jurisdiction, the LILO point of 400 kV Rourkela-Raigarh at Vedanta will be interface point of Odisha STU till 30th November, 2016.
- 8. Subsequently, after the completion of 400 kV Sterlite-Jharsuguda D/C line the interface point of Odisha STU will be shifted to Jharsugada.
- 9. With the change of control area jurisdiction the status of 400 kV Sterlite-Jharsuguda D/C line will no more be a dedicated line. So, Vedanta agreed to hand over the line to OPTCL which can be treated as an ISTS tie of OPTCL.
- 10. Vedanta has to strictly adhere to the schedule for completion of 400 kV Sterlite– Jharsuguda D/C line (i.e. 30th November, 2016) as per the decision of 33rd TCC/ERPC and decided in the meetings

held in CEA on 16.9.16. In case 400kV Vedanta-Jharsuguda D/C line is not commissioned by that date, the LILO connection to Vedanta shall be withdrawn.

- 11. Due to change of control area jurisdiction from ERLDC to SLDC Odisha. Vedanta Ltd has to settle the following:
- I) ERLDC fees and charges shall be paid by Vedanta Limited as applicable up to the cutoff date.
- II) Previous dues up to cut off date of the pool accounts such as DSM charges along with interest, RTDA, any others has to be settled by Vedanta.
- III) Henceforth, any deviation of Vedanta Limited will be treated as deviation of OPTCL.
- IV) After changeover of jurisdiction if in future it is found that any amount in pool account had remained unaccounted by mistake against Vedanta Limited, Vedanta Limited will have to pay the amount into the pool account.
- V) For calculation of POC charges and losses Vedanta Limited generation will be considered as generation of Odisha.
- VI) Vedanta Limited has to get registered afresh at each RLDC for Short Term Open Access as embedded entity in OPTCL.
- VII) Reconciliation of accounts is also required to be done up to the cutoff date by Vedanta.
- VIII) OPTCL in coordination with Vedanta has to send weekly SEM data to ERLDC by Tuesday Noon.

Vedanta expressed that presently the 400 kV Vedanta- Meramundali D/C line is not stable and tripping frequently. Vedanta and OPTCL were advised to look into the matter and resolve the issues related to this line expeditiously. Till carrier aided distance protection scheme is implemented, entire length of the line should be covered in Zone-1 from both ends ERLDC stressed that the SPS for restricting power flow in 400kV Vedanta – Rourkella or Vedanta-

Raigarh line within 650 MW, should be kept in service. Vedanta agreed.

After changeover of the jurisdictional authority, it was felt that closed Bus operation would ensure greater reliability. In this regard CTU stated that with such a closed bus operation, the impact of increase of short circuit MVA levels at various buses would not be significant and would remain within limits. Further, it was decided that a system study may be carried out for the above arrangement and placed in the next OCC. It was also decided that the control area jurisdiction may be handed over to SLDC, Odisha w.e.f. 24.10.2016 as under the present circumstances Vedanta is not mandated to inject to the ISTS Grid and their NOC stands revoked w.e.f 24.10.16.

Meeting ended with vote of thanks to the chair.

As per the decision taken in the 126th OCC meeting, LILO point of 400 kV Rourkela-Raigarh at Vedanta has become interface point of Odisha STU with effect from 00:00 hrs of 24.10.2016.

M/s Vedanta shall collect weekly meter data from the LILO points and send to SLDC on each Monday positively for onward transmission to ERLDC.

Gridco shall develop metering logic for Vedanta for preparation of monthly Energy Accounting by SLDC.

GRIDCO / SLDC / Vedanta may deliberate

C.6: 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	December'2016
	kV D/C line at Pandiabil (PG)	

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

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.

In the 101st PSOC meeting, CGM (IT) stated that the price bid has already opened. Order for appointment of consultant is expected to be placed within 10 days.

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 100th PSOC meeting CGM (O&M) stated that "Expression of Interest" for providing consultancy has been floated.

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 r

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.

SLDC may instruct all the RE Sources to furnish their data to SLDC on daily basis as mentioned above. **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 Gujurat 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 Gujurat on 17.10.16 in the Conference Hall of GRIDCO. SLDC shall float tender for this purpose.

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.

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 is to be carried out during first week of November, 2016.

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 **Sept'16**:

Sl. No	Name of Discom	No. of message issued	Over drawal (MU)
1	CESU	14	17.598
2	WESCO	5	-20.609
3	NESCO	5	-5.279
4	SOUTHCO	2	-2.318
	Total	26	-10.608

It is noticed that CESU had overdrawn to the tune of 17.598 MU All other Discoms had 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	December 2016	
		& 182		

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 last meeting CGM (Telecom) stated that NINL has agreed to extend communication system with SLDC. He also stated that CERC is going to notify Communication Regulation soon. He further stated that the optical fibre between Meramundali-Kaniha was cut due to construction work, resulting interruption of data communication. Construction wing should intimate the shutdown work along with the tower schedule for keeping provision of optical fiber wire.

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 101st PSOC meeting IT stated that, the issues raised, has been rectified on 27th September. SLDC may fix a date for demo during 1st week of October. They have also posted one "Help" document.

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 101^{st} PSOC meeting DGM (IT) stated that out of 41 Nos. of CESU S/Ss, testing of data for 20 Nos S/S have been done. He also ensured for availability of 60 Nos S/S data by 2^{nd} October.

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.

CGM (IT) stated that memorandum for closure of M/S Infosys contract will be placed in the next BoD meeting of OPTCL. After closing the contract, fresh tender can be floated.

CGM (IT) may deliberate the status.

D.7: DISCOM Issues

CESU

A. CESU has identified technical issues relating to early completion of ongoing S/Ss, 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 September'16.
- (ii) Instant implementation of schedule revision.

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

WESCO

- A. The import quantum of GEDCOL solar has not been deducted from WESCO's BSP bill
- B. Fixed value of solar drawal by WESCO is not being removed from RVDU after 05:30 PM.

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	Work has already been started. Expected to be
	Jayanagar-Jeypore 2 nd DC line	completed by December' 2016.
2	Commissioning of 400 kV	Line is ready and shall be charged after
	Meramundali-Mendhasal 2nd ckt	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	Work in progress and expected to be completed
	Bidanasi-Cuttack line	by December' 2016.
4	Commissioning of 220/132 kV	Work in progress and expected to be completed
	Cuttack S/S	by December' 2016.
5	Commissioning of 132 kV	Work has already been started, which will be
	Baripada (PG)-Jaleswar line	completed by March 2017.
6	Commissioning of 220/132 kV	Work under progress. Expected by December'
	Kesinga S/S	2017.

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

Sl.	Name of the sub-station	Probable month	Name of	Action taken by
No		of commissioning	DISCOM	Discoms
1	132/33kV, 2x20 MVA Khajuriakota	December'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 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.

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

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

No report of major event has been received by SLDC.

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

On 22.09.16 at 15:38 hrs all the 220 kV feeders in Bus-II i.e. Budhipadar Ckt-II, RSP Ckt-II, Bisra PG Ckt-II, Rengali Ckt-II, Auto-II & IV at Tarkera tripped.

Members may please discuss.

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

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

Sl	Transmission lines	Tripping	Restoration	Reason
No		Dt/time	Dt/time	
1	132 kV Balasore-Baripada Ckt	03.09.16	04.09.16	'Y' ph insulator damaged at
		21:07	11:19	Loc. No-161
2	132 kV Joda-Bansapani Ckt	04.09.16	05.09.16	Problem at Bansapani traction
		09:51	14:55	S/S.
3	132 kV Raygada-Akhusing Ckt	14.09.16	15.09.16	Tree branch touched the line
		16:50	14:11	between Loc. No-415 to 416.
4	220 kV Budhipadar-Raigarh Ckt	20.09.16	22.09.16	'B' ph conductor snapped at
		21:44	19:12	Loc. No-26 and problem at
				Raigarh end.
5	132 kV Chhatrapur-Balugaon Ckt	21.09.16	22.09.16	'R' and 'Y' ph insulator
		02:14	18:31	damaged at Loc. No-269 and
				'Y' ph insulator damaged at
				Loc. No-271 and 272.

Major outages are due to insulator damage.

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

E.6: Review of Outage Program of State Generators / Transmission elements for the month of Nov'16:

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

Sl.	Station	Unit	Period	Remarks
1	Burla	# 2	22.07.16 to 30.11.16	Capital Maintenance
		# 5	25.09.16 to continue	Programming for R,M & U
		# 6	17.02.14 to continue	Under R, M & U
2	Chiplima	# 3	15.02.14 to continue	TGB problem and started R,M & U
3	Balimela	# 1	31.01.13 to continue	Programming for R,M & U
		# 5	02.11.16 to 30.11.16	Annual Maintenance
4	Upper Kolab	# 1	11.09.16 to 25.11.16	Stator inter turn fault
5	Upper Indravati	# 4	01.11.16 to 25.11.16	Annual Maintenance

OHPC / SLDC may deliberate.

E.7: Generation Program for the month of November'16.

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

Name of Hydro Gen.	Generation Programme		Reservoir	Reservoir	MDDL	High Flood
Station	(MW)		Level as	Level as		Reservoir
	Nov'16	Nov'16	on	on		Level
	(1st fortnight)	(2 nd fortnight)	01.10.15	01.10.16		
HPS-I, Burla	70	70	630.00ft	629.95 ft	590 ft.	630 ft.
HPS-II, Chipilima	40	40	-	-	-	-
Balimela	100	100	1499.90 ft	1505.40 ft	1440 ft.	1516 ft.
Rengali	60	60	119.16 mt	122.58 mt	109.72m	123.5 mtr.
U.Kolab	100	100	856.31 mt	856.31 mt	844 mtr	858 mtr.
U. Indravati	250	250	636.18 mt	639.11 mt	625mtr	642 mtr
MKD (O/D)	40	40	2748.2 0	2746.40 ft	2685 ft.	2750 ft.
TOTAL	660	660				

In the present spilling condition, non-availability of units at Burla HEP result in wastage of water.

OHPC may deliberate & Members may discuss.

E.8: Anticipated power generation and demand for the month of November'2016.

Sl. No	Discom	Average	Peak
1	CESU	1000	1450
2	WESCO	900	1150
3	NESCO	850	1000
4	SOUTHCO	420	500
6	Total	3200	3950
Availab	ility		
1	Hydro	660	1500
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	3210	4200
7	Surplus / Deficit	190	10

Members may discuss.

PART F: OTHER ISSUES

F.1: Date and Venue of the next (103rd) PSOC meeting.