

Odisha Power Transmission Corporation Ltd.  
Bhubaneswar.



*Agenda*  
*for*  
123<sup>rd</sup> Power System Operational Coordination Meeting

Date: 28.07.2018  
Venue: PTC, Chandaka, Bhubaneswar

**Agenda for 123<sup>rd</sup> PSOC Meeting to be held on 28.07.2018 at PTC, Chandaka, Bhubaneswar**

**Item no. 1: Confirmation of the minutes of the 122<sup>nd</sup> PSOC Meeting held on 25.06.2018**

The minutes of meeting was circulated vide letter No. SGM (PS)-PI-15/2017/1277 <sup>(47)</sup> dated 12.07.2018 to all the members and also uploaded in the SLDC website. Members may offer their comments. If there is no comment, the minutes of the meeting may please be confirmed.

**PART A**

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

- B : Grid Performance for the month of June'2018
- C.1: Status of projects funded under PSDF scheme
- C.2: Automatic Under Frequency Load Shedding
- C.3: Shutdown clearance of 400 kV IBEUL – Jharsuguda D/C to start construction of OPGC MGR Corridor under crossing locations
- C.4: FLEXIBILITY IN GENERATION & SCHEDULING OF THERMAL POWER STATIONS TO REDUCE EMISSIONS-MOP, GOI ORDER
- C.5: Implementation of Web based PSP report in ERLDC
- C.6: Two days' Workshop at Upper Kolab /Balimele, Odisha
- C.7: Agenda point related to reporting of grid events by users, STU, CTU and SLDC to RLDC
- C.8: Agenda point related to load forecasting by SLDC
- C.9: Status of Implementation of islanding schemes in ER- Islanding scheme at IbTPS- OPGC Data
- C.10: Implementation of Automatic Demand Management Scheme
- C.11: 220 kV Inter-connecting lines of OPTCL with 400/220 kV Bolangir (PG), Keonjhar & Pandiabil S/s
- C.12: Preparation of crisis management plan for Cyber Security in Power Sector in line with CERT-IN.
- C.13: Certification through BIS as per IS 18001:2007 to all generating/ transmission units
- C.14: Status of Disturbance Recorder, Standalone Event Logger and Time Synchronization equipment.
- C.15: for GEOSPATIAL energy portal of Neeti Aayog-CEA
- C.16: 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: Implementation of Automatic Meter Reading for OPTCL-Discom interface points.
- D.5: Web based drawal / generation scheduling
- E.1: Commissioning status of New Transmission elements.
- E.2: Installation of ABT compliance Energy Meter at Ib TPS feeders & Generators / Furnishing of DC
- E.3: Compliance of CEA Regulations for Grid Connectivity of Renewable Energy Sources.
- E.4: Major Events in the month of June'18
- E.5: Important grid incidences during the month of June'18.
- E.6: Outage of major transmission Elements during the month June'18. (above 10 hrs).
- E.7: Review of Outage Program of State Generators for the month of August'2018
- E.8: Generation Program for the month of August'2018.
- E.9: Anticipated power generation and demand for the month of August'2018.
- F.1: Date and Venue of the next (123<sup>rd</sup>) PSOC meeting

## PART B: GRID PERFORMANCE

### Review of Grid Performance for the month of June'18.

#### A. Frequency:

##### Hourly frequency variation for the month of June'18.

Month	% of time frequency remained					Average
	<49.00	49.00-49.70	49.70-49.90	<b>49.90-50.05</b>	>50.05	
<b>Apr'18</b>	0.00	0.02	10.35	78.33	11.30	49.98
<b>May'18</b>	0.00	0.14	18.41	69.25	12.17	49.91
<b>June'18</b>	0.00	0.08	8.36	71.44	20.13	49.64

##### Maximum & Minimum frequency during the month of May & June18.

Month	Freq (Hz)	Date	Time
<b>May'18</b>	Maximum –50.13	03.05.18	04:00 Hrs
	Minimum – 49.69	05.05.18	22:45 Hrs
<b>June'18</b>	Maximum –50.16	03.06.18	08:00 Hrs
	Minimum – 49.68	19.06.18	22:15 Hrs

In the 121<sup>st</sup> PSOC meeting SLDC stated that the frequency profile indicated by SLDC is not matching with that of ERLDC frequency profile. Telecom was requested to investigate the same.

**Telecom may please discuss.**

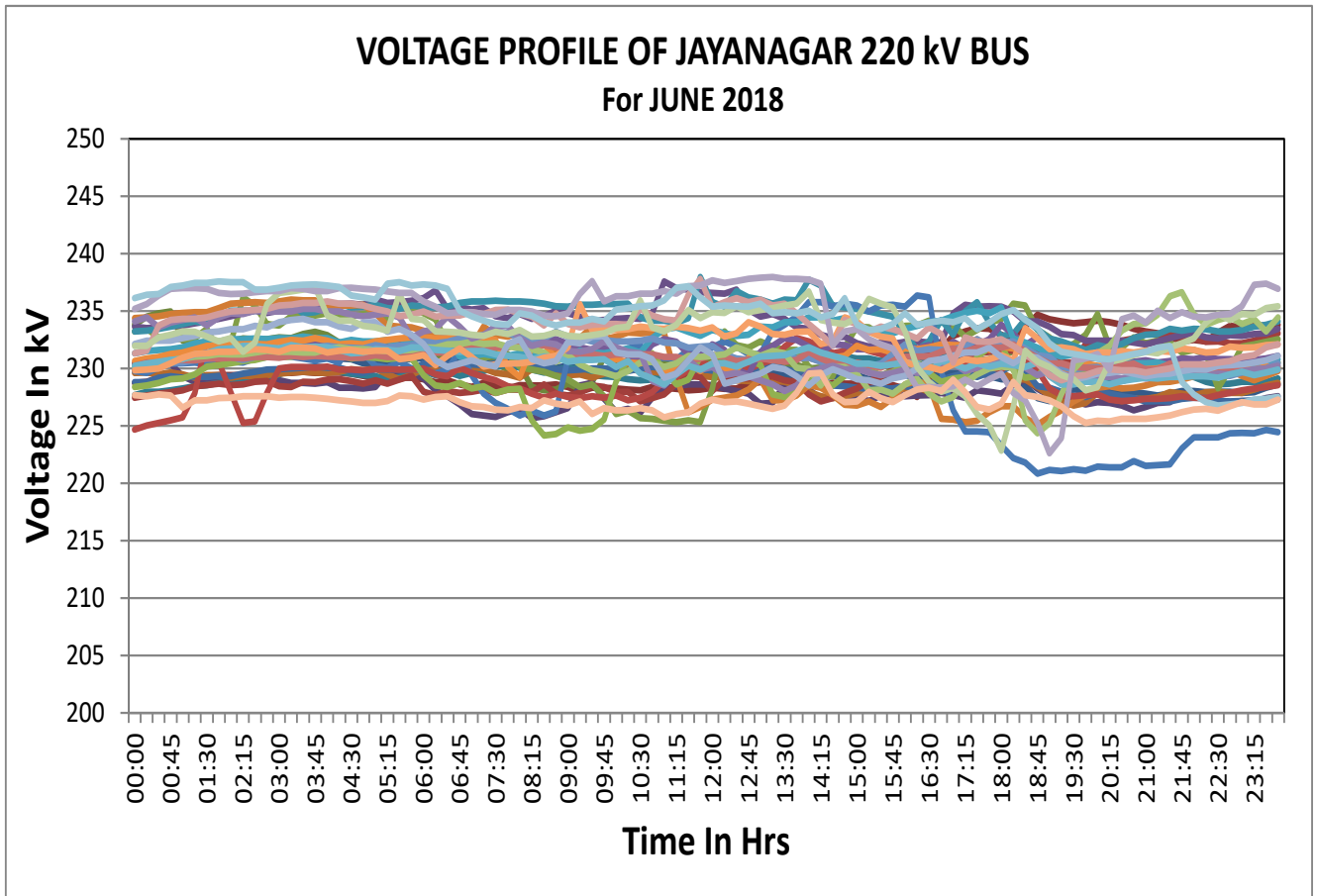
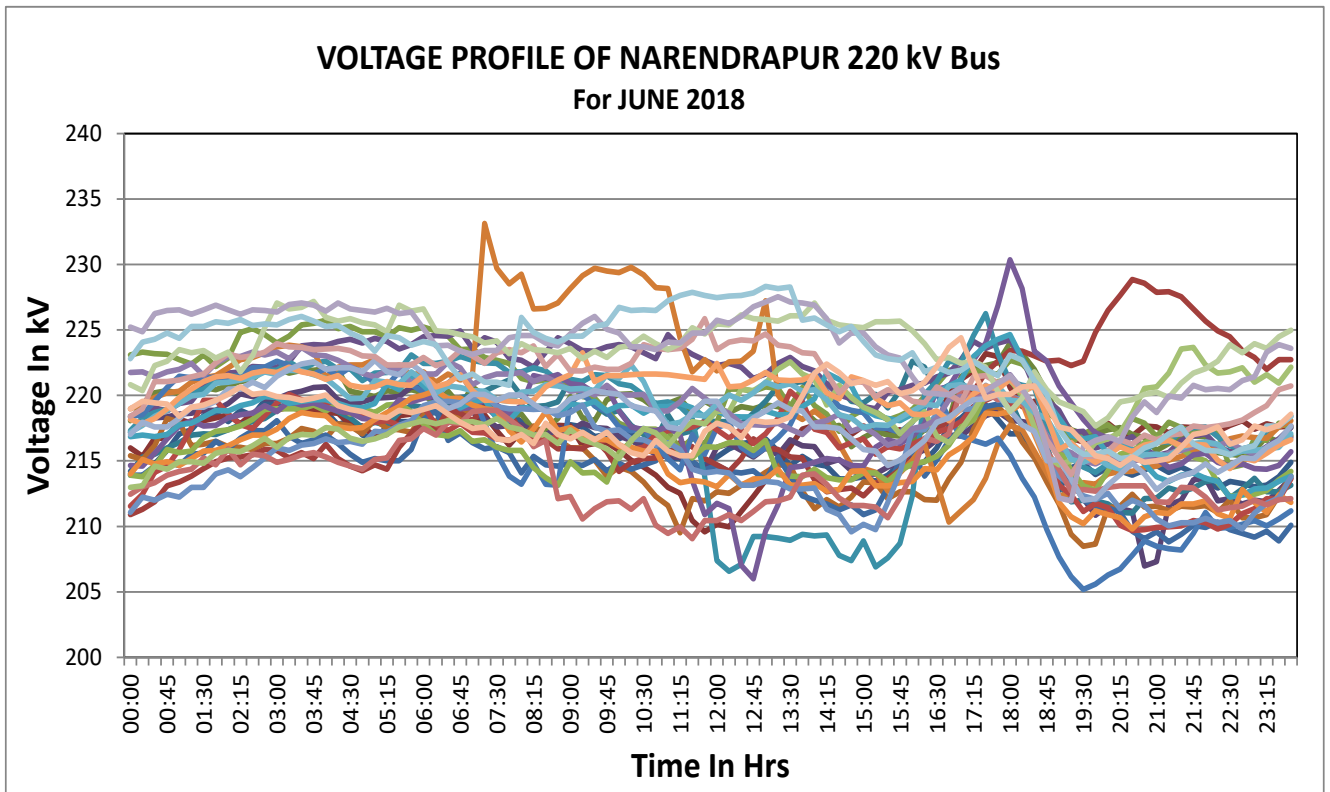
#### B. Grid Demand for the month of June'18

Month	Max. Consumption		Demand		Maximum Demand			Minimum Demand		
	MU	Date	MU	Avg. (MW)	MW	Date	Time	MW	Date	Time
May'18	98.61	24.05.18	2735	3798	4692	07.05.18	21:00	2113	14.05.18	12:00
<b>June'18</b>	98.45	01.06.18	2487	3455	4729	01.06.18	2:00	2173	29.06.18	14:00
<b>June'17</b>	82.72	03.06.17	2269	3151	4009	04.06.17	24:00	2091	15.06.17	18:00

#### C. Voltage Profile of 220 kV Buses in OPTCL system for the month of: June'18

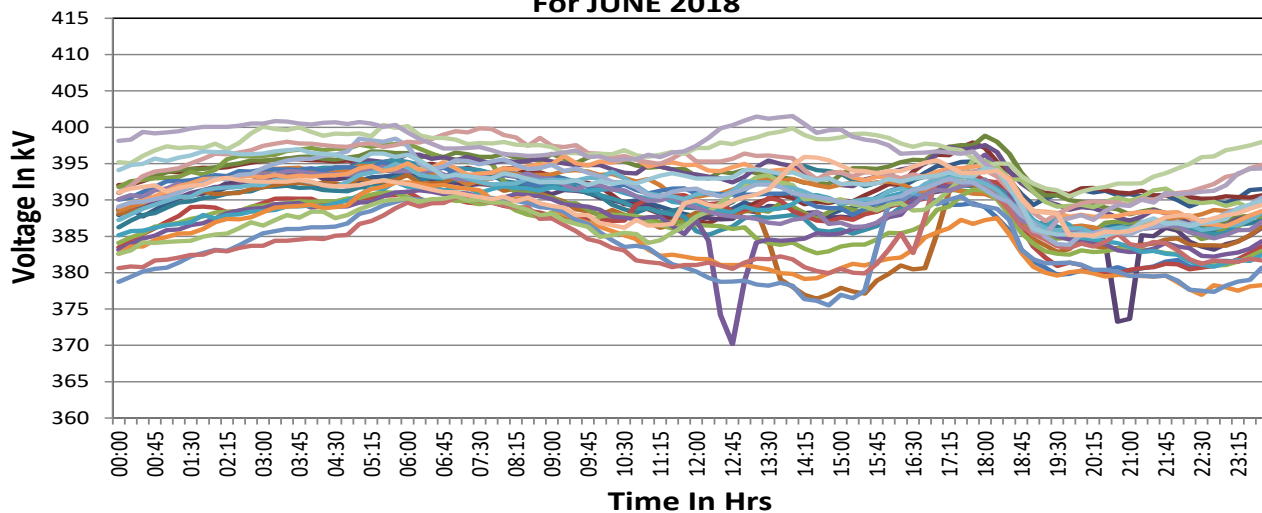
Sl. No	S/s Name	Maximum			Minimum		
		kV	Day	Time	kV	Day	Time
1	Atri	227.64	28	13:15	208.01	16	12:45
2	Balasure	234.28	26	5:00	211.25	15	23:00
3	Barkote	230.59	1	7:45	223.54	19	22:45
4	Bhadrak	<b>239.13</b>	26	5:00	210.96	14	20:30
5	Bhanjanagar	231.28	27	14:00	213.96	13	19:30
6	Bidanasi	229.14	25	7:00	216.27	19	15:15
7	Bolangir	231.80	29	12:45	212.46	21	16:00
8	Budhipadar	231.97	27	14:30	219.39	29	18:15
9	Chandaka	228.45	28	3:15	205.70	19	14:45
10	Cuttack	227.41	28	3:15	204.49	19	14:45
11	Duburi(O)	233.70	26	7:30	218.75	19	22:30
12	Duburi (N)	222.85	26	7:30	208.01	19	22:30
13	Jayanagar	237.98	11	11:45	220.83	13	18:45
14	Joda	229.37	1	17:00	215.46	13	19:30
15	Katapalli	230.76	8	5:00	218.46	21	16:00
16	Lapanga	232.20	8	5:00	223.20	19	20:30
17	Laxmipur	237.34	28	13:15	219.62	13	19:45
18	Mendhasal	230.01	28	3:15	208.19	19	14:45
19	Meramundali	225.68	1	17:00	216.27	18	23:15
20	Narendrapur	233.13	12	7:15	205.18	13	19:30
21	Nayagarh	228.51	28	3:15	208.76	19	14:45
22	Paradeep	233.30	26	7:30	<b>203.91</b>	19	22:30
23	Tarkera	231.05	27	6:00	221.06	13	19:45
24	Theruvalli	232.26	26	11:45	209.57	13	21:30
25	Samangara	226.95	28	13:15	207.44	16	12:45

The maximum Voltage of **239.13 kV** occurred at **Bhadrak** 220 kV bus, while **Paradeep** 220 kV bus has experienced the minimum Voltage of **203.91 kV**. The 220 kV Voltage profile of Jayanagar and Narendrapur and 400 kV Voltage profile of Mendhasal, Meramundali and New Duburi bus during the month of **June 2018** are indicated.



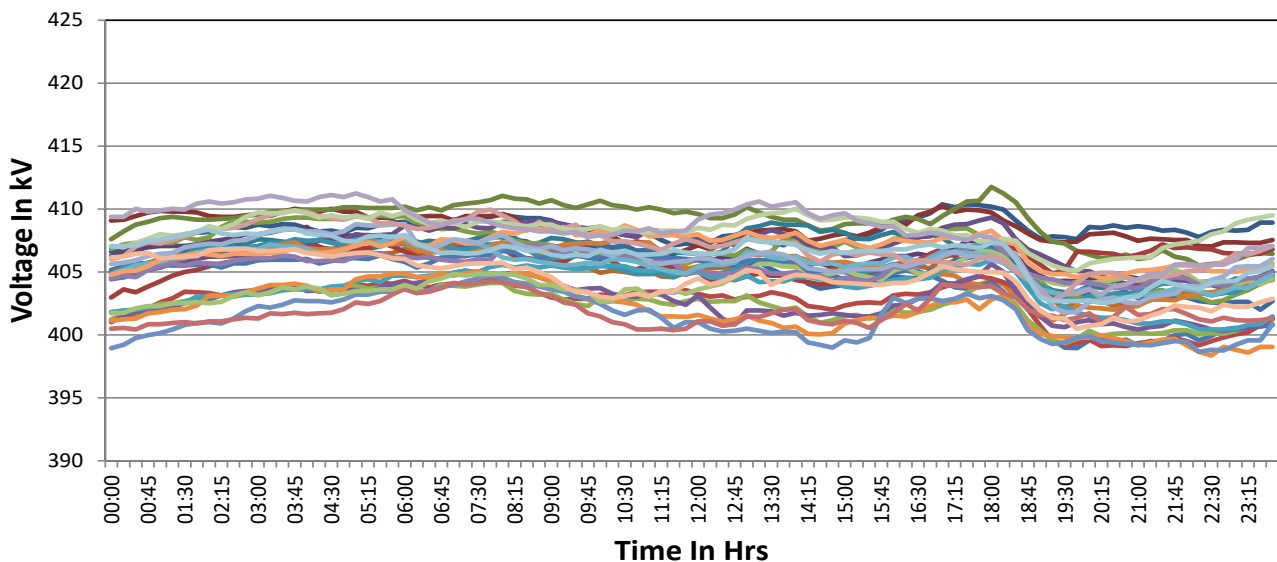
### VOLTAGE PROFILE OF MENDHASAL 400 kV BUS

For JUNE 2018



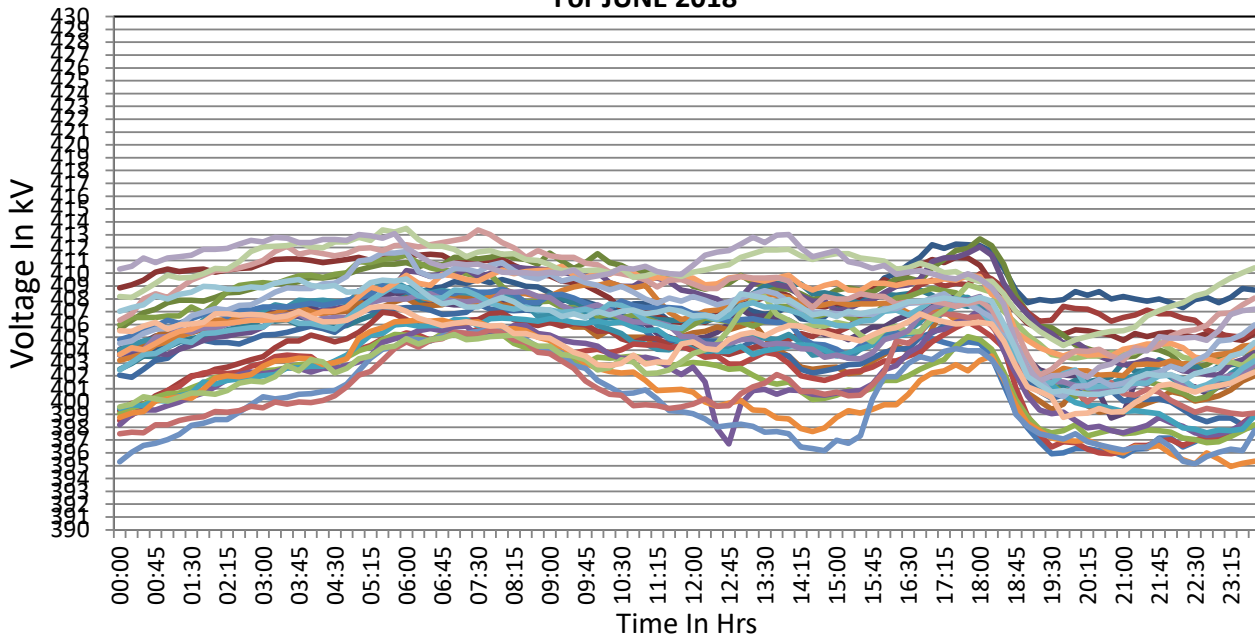
### VOLTAGE PROFILE OF MERAMUNDALI 400 kV BUS

For JUNE 2018



### VOLTAGE PROFILE OF NEW DUBURI 400 kV BUS

For JUNE 2018



Members may discuss.

**D. Loading of 220/ 132 kV Auto at 220 kV S/Ss in OPTCL system for the month of June-2018**

AUTO TRANSFORMER LOADING FOR THE MONTH OF								June'2018
Name of the 220 kV Sub-Station ( Feeding Sub-stations/Feeders )	Capacity MVA	Drawal details						REMARKS
		Maximum			Minimum			
		MW	Day	Time	MW	Day	Time	
<b>ATRI</b> {Banki, Khurda, Chandpur & Argul}	2x160	51.84	7	11:45	6.72	20	16:00	
		51.84	7	11:45	6.72	20	16:00	
<b>BALASORE 220/132 KV</b> { Balasore, Birla Tyre(I), Ispat Alloy(I), Jaleswar, Jaleswar(T)}	3x160	77.72	3	20:30	4.80	26	11:15	
		86.44	25	11:30	22.64	21	13:45	
		87.24	25	11:30	23.12	21	13:45	
<b>BHADRAK 220/132 KV</b> {Bhadrak area load, Bhadrak(T),Soro, FACOR (I), Dhamra Port}	1x100	54.96	22	21:15	10.36	1	18:00	
	1x160	97.32	22	21:15	10.32	10	18:15	
		YET TO BE COMMISSIONED						
<b>BHANJANAGAR 220/132 KV</b> { Bhanjanagar, Aska, Phulbani, Ganjam, Chatrapur}	1x160	93.20	11	16:15	11.44	8	19:30	
	1x160	82.08	11	16:15	9.92	8	19:30	
<b>BIDANASI 220/132 KV</b> {Bidanasi, Khurda }	1x160	42.92	20	13:45	12.28	5	15:15	
	1x100	30.08	20	13:45	8.56	5	15:15	
	1x100	29.96	20	13:45	8.68	5	15:15	
<b>BOLANGIR (SADAIPALLI) 220/132 KV</b> { Bolangir, Patnagarh, Sonapur, Sainatala, Khariar, Barpalli }	2x160	122.40	21	12:00	11.12	29	10:00	
		125.24	23	19:45	16.92	21	08:15	
<b>BUDHIPADAR 220/132 KV</b> { Jharsuguda, Jharsuguda Tr, Cemco(I), MCL, Sundergarh,Brajarajnagar, Rajgangpur}	2x160	85.96	30	19:45	18.44	8	02:15	
		85.76	30	19:45	18.60	8	10:45	
<b>CHANDAKA 220/132 KV</b> { Chandaka, Bhubaneswar, Nimapada, Ransinghpur, Puri,Kesura, Kaipadar Tr. }	1x100	70.80	4	12:30	3.60	21	18:45	
	1x160	121.92	4	12:30	16.52	5	06:45	
	1x100	75.88	4	12:30	23.12	21	18:45	
	1x160	116.88	4	12:30	15.16	26	12:00	
<b>CUTTACK</b>	1x160	80.92	18	19:45	10.64	26	06:15	
<b>DUBURI 220/132 KV</b> {Duburi, Bamnipal(I), BRPL, MESCO, Jajpur Road, Kalarangi, Jajpur Town}	1x160	33.80	29	20:00	8.64	27	10:48	
	1x100	46.16	3	14:15	8.64	25	18:15	
	1x100	44.04	3	14:15	8.24	25	18:15	
<b>JAYANAGAR 220/132 KV.</b> {Damanjodi(NALCO), Traction S/Ss, Tentulikhunti, Sunabeda, Jayanagar}	1x160	71.96	13	19:15	4.64	11	11:45	
	1x160	72.40	13	19:15	5.04	11	11:45	
<b>JODA 220/132 KV</b> { Joda,Tensa, FAP(I), Bolani(I), Nalda Tr.,Polasponga, *Rairangpur, Bhalulata traction}	3x100	56.00	20	04:15	22.80	2	16:15	*** - Alternate P/S from Kuche.
		55.16	20	04:15	22.72	2	16:15	
		55.12	20	04:15	20.04	19	16:30	
<b>KATAPALI 220/132 KV</b> {Chipilima,Bargarh, ACC,Sonepur & Katapali area load.}	1x100	35.60	26	11:45	6.92	16	12:15	Supported by Burla & Chipilima power.
	1x100	30.72	7	16:00	7.04	16	12:15	
	1x160	63.60	1	11:15	10.40	15	02:30	
<b>LAPANGA</b> {Kuchinda, Aryan Viraj, Shyam Metallics}	1x160	60.12	18	16:30	11.60	11	16:45	
		62.72	7	23:00	6.88	18	10:45	
<b>MERAMUNDALI 220/132 kv</b> {Meramundali Traction, Dhenkanal, Navchrome(I), Hind Metal, Aarti,BRG}	3x100	46.12	7	10:45	6.20	23	17:00	
		32.80	7	21:00	6.16	23	17:00	
		44.88	7	10:45	5.96	23	17:15	
<b>Mendhasal { Part area load of Khurda S/S}</b>	2x100	22.80	1	07:15	8.40	4	12:00	
		35.40	1	07:15	3.60	20	12:00	
<b>NARENDRAPUR 220/132KV</b> { Narendrapur, NarendrapurTr, Berhampur, Chhatrapur, Ganjam, Balugaon, Digapahandi, Mohana.}	2x160	109.40	20	09:15	31.68	16	18:00	
		109.08	20	09:15	14.24	16	18:00	
	1x100	62.80	20	09:15	17.96	16	18:00	
<b>PARDEEP 220/132 KV</b> { Paradeep, Kendrapada, Pattamundai, Chandikhol, Cuttack, Jagatsinghpur, Phulnakhara}	1x160	137.88	4	20:30	9.60	26	06:15	
	1x100	84.00	4	20:30	5.72	26	06:15	
	1x50							
<b>TARKERA 220/132 KV</b> { Rourkela, Rourkela Tr.,RSP(I), Chhend , Adhunik Metal, Rajgangpur, OCL(I), Rajgangpur Tr.}	4x100	54.80	6	15:45	7.68	4	15:15	
		64.76	4	15:30	15.68	7	17:30	
		63.24	4	15:30	11.04	12	18:00	
		62.96	4	15:30	11.84	12	18:00	
<b>THERUVALLI 220/132 KV.</b> {Theruvalli, IMFAL(I), JK(I), Junagarh, Kesinga,Powmex(I), Rayagada, }	2x100	73.32	21	19:45	14.52	26	11:30	Rayagada & Paralakhemundi can be fed from Machhkund system.
		62.20	21	19:45	13.08	6	10:00	
<b>TTPS 220/132 KV</b> { Chainpal, FCI (I), Angul, MCL Nandira(I), Rairak hole,Boinda,Kamakhyanager, Salarangi,Nuapatna, Choudwar }	1x160	64.00	21	15:15	0.00	20	04:30	
	1x160	64.00	21	15:15	0.00	20	04:30	
<b>SAMANGARA</b> { Puri, Nimapara & Konark}	1x100	68.92	28	16:30	12.44	21	19:00	

### E. DISCOM Drawal up to the month of June'18

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	Apr'18	745.479	734.495	770.403	19.655	750.748	16.253
	May'18	770.329	819.870	850.674	19.558	831.116	11.246
	<b>June'18</b>	745.4796	836.2541	848.4448	14.17983	834.265	-1.98911
WESCO	Apr'18	585.205	636.576	689.137	57.318	631.819	-4.757
	May'18	604.712	636.024	1042.198	361.670	680.528	44.504
	<b>June'18</b>	585.205	640.7663	995.1281	352.0462	643.0819	2.31564
NESCO	Apr'18	504.658	418.945	528.936	105.079	423.857	4.912
	May'18	521.4799	480.187	576.819	102.344	474.475	-5.712
	<b>June'18</b>	504.658	488.4483	598.3613	113.5535	484.8078	-3.6404
SOUTHCO	Apr'18	300.822	298.760	298.778	0	298.778	0.018
	May'18	310.8491	321.453	323.114	0	323.114	1.661
	<b>June'18</b>	300.8217	316.746	315.5136	0.57036	314.9432	-1.80285

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 up to the month of June'18

*Figures in MU*

Month	Thermal (TTPS+IBTSP)	OHPC & MKD	CGP Support	IPP Inj.	RE	ISGS	Total
April'18	535.10	421.70	362.53	198.95	9.69	872.26	2400.24
May'18	567.940	573.520	313.169	199.23	14.39	1066.64	2734.893
<b>June'18</b>	485.813	481.601	219.983	203.23	11.897	1084.87	2487.390
<b>Total</b>	1588.853	1476.821	895.682	601.41	35.977	3023.77	7622.523

### G. Drawal of Machhakund Power

The drawal of Machhakund power up to the month of **June'18** are as detailed:

Month	Total Generation		Odisha Drawl		AP Drawl	
	MU	Avg (MW)	MU	Avg (MW)	MU	Avg (MW)
Apr'18	37.162	51.61	18.613	25.851	16.943	25.532
May'18	48.888	65.70	22.424	30.140	24.492	32.919
June'18	43.185	59.98	19.692	27.35	21.635	30.048
<b>Total</b>	<b>129.235</b>		<b>60.729</b>		<b>63.07</b>	

In the 118<sup>th</sup> PSOC meeting, O&M stated that Machhakund drawal shall be increased after drawal of power from Podagada S/S by SOUTHCO.

In the 119<sup>th</sup> PSOC meeting Sr. G.M SLDC stated that there is no matching load available, in case more Nos of Machhakund units synchronized. Southco may explore their takeoff arrangement from newly commissioned Podagada 132/33 kV S/S to increase Machhakund drawal of the State.

In the 120<sup>th</sup> PSOC meeting Southco has assured to complete the work by 1<sup>st</sup> week of May'2018.

In the 122<sup>nd</sup> PSOC meeting it was deliberated that the takeoff arrangement from Podagada S/S is yet to be completed by SOUTHCO. SOUTHCO stated that the contractor is not responding.

It was suggested that OPTCL may pursue the matter.

**SOUTHCO may deliberate.**

## H. Under Frequency Relay operation in OPTCL System during the month of June'18.

Since, the frequency had never gone beyond the lowest setting of UFR, there was no UF Relay operation occurred during the month of **June'18**.

## I. Status of Open Access applications up to the month of June'2018

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'18	26	79	0	31	136	26	76	0	31	133	3
2	May'18	59	90	0	26	175	59	89	0	26	174	1
3	June'18	14	57	0	30	101	14	57	0	30	101	0
	<b>Total</b>	<b>99</b>	<b>226</b>	<b>0</b>	<b>87</b>	<b>412</b>	<b>99</b>	<b>222</b>	<b>0</b>	<b>87</b>	<b>408</b>	<b>4</b>

## PART C – Issues discussed in the 147<sup>th</sup> OCC meeting of ERPC held on 20.07.2018

### C.1: Status of projects funded under PSDF schemes

In the PSDF review meeting, 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 / OHPC is as given below:

Sl No	Name of Constituent	Name of Project	Date of approval from PSDF	Target Date of Completion	PSDF grant Approved (in Rs.)	Amount Drawn till date (in Rs.)	Status as updated in 145 <sup>th</sup> meeting
4	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	30.11.18	162.5 Cr.	37.79 Cr.	<i>Total contract awarded for Rs. 51.349 Cr</i>
7		Implementation of OPGW based reliable communication at 132kV and above substations	15.11.2017		25.61 Cr		Tender floated
13	OHPC	Renovation & up-gradation of protection & control system of 4 nos. OHPC sub-stations		U.Kolab-March 19 Balimela-Feb 2019 U.Indravati -Jan 19 Burla-Nov 2018, Chiplima Dec 2018	22.35 Cr.		<i>Tendering under process</i>
Projects under process of approval:							
	OPTCL	Installation of 125 MVAR Bus Reactor along with construction of associated bay each at 400kV Grid S/S of Mendhasal, Meramundali & New Duburi for VAR control & stabilisation of system voltage	28-08-17		31.94 Cr		Appraisal committee recommends for project cost of 30.23 Cr and 27.23 Cr for grant to monitoring



Projects recently submitted:							
	OPTCL	Implementation of Automatic Demand Management System (ADMS) in SLDC, Odisha	22-12-17 Date of submission		3.26 Cr Estt cost		Compliance to TSEG observation submitted.
	OPTCL	Protection up gradation and installation of SAS for seven numbers of 220/132/33kV Grid substations (Balasore, Bidanasi, Budhipadar, Katapalli, Narendrapur, New-Bolangir & Paradeep).	20.02.2018 Date of submission		41.1 Cr Estt cost		Compliance to TSEG observation submitted.

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

### **C.2: Automatic Under Frequency Load Shedding**

NPC vide letter dated 30 May 2018, informed that considering the grid size and assuming Power Number of 7000, the following two options of AUFLS are proposed.

#### **Option-1**

AUFLS scheme with 4 stages of frequency viz 49.2, 49.0, 48.8 & 48.6 Hz

AUFLS	Frequency (Hz)	Load relief in MW					
		NR	WR	SR	ER	NER	Total
Stage-I	49.2	3920	3360	3170	1380	170	12000
Stage-II	49.0	3950	3380	3190	1380	170	12070
Stage-III	48.8	3970	3400	3210	1390	170	12140
Stage-IV	48.6	4000	3430	3230	1400	170	12230
	<b>Total (MW)</b>	<b>15840</b>	<b>13570</b>	<b>12800</b>	<b>5550</b>	<b>680</b>	<b>48440</b>

#### **Option-2**

AUFLS scheme with 4 stages of frequency viz 49.4, 49.2, 49.0 & 48.8 Hz

AUFLS	Frequency (Hz)	Load relief in MW					
		NR	WR	SR	ER	NER	Total
Stage-I	49.4	3900	3340	3150	1370	170	11930
Stage-II	49.2	3920	3360	3170	1380	170	12000
Stage-III	49.0	3950	3380	3190	1380	170	12070
Stage-IV	48.8	3970	3400	3210	1390	170	12140
	<b>Total (MW)</b>	<b>15740</b>	<b>13480</b>	<b>12720</b>	<b>5520</b>	<b>680</b>	<b>48140</b>

In the 122<sup>nd</sup> PSOC it was decided to adopt the 2<sup>nd</sup> option. OPTCL may forward their views to ERPC accordingly.

**O&M may deliberate the status**

### **C.3: Shutdown clearance of 400 kV IBEUL – Jharsuguda D/C to start construction of OPGC MGR Corridor under crossing locations**

The issue of time limit extension for diversion works of 3 nos. towers of 400 kV IBEUL – Jharsuguda D/C at 4 nos. crossing locations to facilitate construction works of OPGC MGR

Corridor had been revised several times since June, 2017 onwards. Finally, ERPC, on the advice of CEA allowed the extension time limit up to 31.05.2018.

While OPGC was ready to start the construction works of MGR line from June, 2018 IBEUL reported one extension tower collapsed at location no. 45 on 29.04.2018, which would require 2 months' time for its restoration. In order to take the stock of the present status of ongoing works of the respective organisations, ERPC convened a Special meeting on 01.06.2018, wherein M/s OPGC pleaded to start the construction works of MGR line by opening of the conductor of the spans at the crossing points. Since the restoration of IBEUL line (under S/D) was not going to take place within 2 months and OPGC is ready to start the works in all respect, OPGC requested shutdown clearance of the line vide letter dated 02/07/2018.

In view of the facts, ERPC informed concerned utilities to attend the 147th OCC Meeting scheduled to be held on 20.07.2018 to discuss and finalise the issue.

In the meanwhile an email addressed to OPGC with a copy to ERPC has been received from IBEUL wherein it has been intimated that "IBEUL is under financial stress because of which the Company has been referred to NCLT under section 7 of Insolvency and Bankruptcy Code (IBC) by project lenders. The hearing for the same is scheduled for 16th July 2018 before NCLT, Hyderabad. Under these circumstances, the Company is unable to commit itself to make any financial commitments since all its dues to the creditors will be governed by the provisions of the IBC. Thus completion of balance works of the diversion of the 400 KV IBEUL-SNG DC Line at the four Railway Crossings of OPGC has been held up and IBEUL is in a fix and not in position to make any progress and make any commitment to any authority. However considering the urgency of work of OPGC for commissioning of their expansion project, I would request you to kindly convene a meeting in OPGC office at Bhubaneswar involving your site engineers and IBEUL to resolve the issues."

**SLDC, OPTCL, and OPGC may please deliberate and finalise.**

#### **C.4: FLEXIBILITY IN GENERATION & SCHEDULING OF THERMAL POWER STATIONS TO REDUCE EMISSIONS-MOP, GOI ORDER**

MoP vide letter No. 23/70/2017-R&R dated 05.04.2018 published a detailed mechanism of allowing Flexibility in Generation and Scheduling of Thermal Power Stations to reduce emissions. Subsequently, CEA vide its letter No. 7/X/VIP/GM/2018/923-27 dated 12.06.2018 requested all RPCs to make necessary changes in Energy Accounting to implement the above mentioned mechanism.

The concept of flexible utilization of coal as introduced by the Central Govt in year 2016, allows the use of coal within its basket in optimal manner. This avoids unnecessary coal transportation and reduces the power generation cost. In a similar manner, it has been decided by MoP that there should be some flexibility in Generation and Scheduling of Thermal Power Stations so that Discoms are able to meet their RPO without facing any additional financial burden.

Further, due to large scale integration of Grid connected renewable, which is generally infirm in nature, there is a need for balancing power to maintain security & stability of the Grid. Such

balancing has to be done by Discoms and Generators both. This flexibility will provide optimum use of RE by Power Generators and help reduce emissions.

The issue was discussed in 38th TCC/ERPC Meeting wherein, MS, ERPC informed that a workshop would be arranged at ERPC, Kolkata.

Accordingly, a workshop is scheduled to be held at ERPC Kolkata on 27.07.2018.

TCC advised all the constituents to nominate concern officers for detailed deliberation. Based on the discussion in the workshop, ERPC Secretariat, if necessary, would write a letter to CEA highlighting the issues needed to be addressed before implementation of the said mechanism.

**Members may discuss and nominate concern officer.**

### **C.5: Implementation of Web based PSP report in ERLDC**

ERLDC is currently preparing PSP report on daily basis which contains ISGS/IPP schedule & actual generated energy, inter-regional tie line energy exchange, energy consumption of states and energy generated by state generators (including DVC), voltages of important substations etc. The content in the report is being used by MOP, States and various other agencies for data compilation and preparation of other reports. This report is prepared during night shift hours as per the energy data submitted by all ISGS/IPPs, states, transmission licensees to ERLDC. Generally ERLDC received data from all users by 02:00 Hrs of night in different reporting formats(Ex-cell, Word, Mail, Over phone etc..) and prepared PSP report by 0400 hrs which is uploaded in ERLDC website and sent to MOP. However, due to submission of data in different formats by the users, it is very difficult to compile and validate such data during night hours before preparation of the PSP report. To improve the data reporting system, a new web based PSP reporting portal has been developed, wherein generators, transmission licensees & states can log-in to the portal and submit their energy data. Beta version of this software is already installed at ERLDC and parallel testing is going on. The new PSP web based portal will be operationalized with effect from 00:00 hrs of 01st August, 2018. In this regard all generators, transmission licensees & states are requested to nominate one nodal person to ERLDC in [erldcso@posoco.in](mailto:erldcso@posoco.in), who will co-ordinate with ERLDC nodal person and their nightshift executives to fill energy data. In the meantime it is requested to all generators, transmission licensees & states to instruct their night shift operators to enter the energy data using their user credential in ERLDC PSP web portal. Individual user id and password will be shared to respective nodal co-coordinators / control room through mail.

Nodal Persons from ERLDC side:

1. Shri Tushar Ranjan Mohapatra - (9433041873)
2. Shri Chandan Mallick – (9007059660)

**SLDC may discuss & note**

### **C.6: Two days' Workshop at Upper Kolab /Balimele, Odisha**

In 37th ERPC Meeting, it was decided to organise a two days' workshop at Upper Kolab / Balimela, Odisha covering emerging issues in the Power Sector (1st day) and Black Start &

Restoration Procedure (2nd day). OPGC, OHPC, GRIDCO, DISCOMS of Odisha, TSTPS, Powergrid Odisha etc. would be invited as participants for the above workshop.

**Members may note.**

**C.7: Agenda point related to reporting of grid events by users, STU, CTU and SLDC to RLDC**

As per IEGC section 5.9.4 (b) and 5.9.6 (a), all users, STU, CTU and SLDC are to send written report to RLDC for the events notified by IEGC section 5.9.5. in the format of draft written report as per IEGC section 5.9.6 (c). All users, STU, CTU and SLDC are requested to send flash report in given format to erldprotection@posoco.in/ erldccr@posoco.in/ erpcprotection@gmail.com followed by events mentioned in IEGC section 5.9.5.

**Members may note.**

**C.8: Agenda point related to load forecasting by SLDC**

For better grid management and shutdown planning, RLDCs needs to do short term load forecasting. Accuracy and effectiveness of load forecasting depend on input data. As per current practice, day ahead load forecasting is being done at ERLDC by analysing trend previous days demand. However, for further tuning and better accuracy of load forecasting result, demand estimation from SLDCs are to be done at their end and same need to be shared with ERLDC for estimation of Eastern Region demand.

**Member may discuss and Beneficiaries/States/SLDCs may share their demand forecasting methods.**

**C.9: Status of Implementation of islanding schemes in ER- Islanding scheme at IbTPS- OPGC**

The islanding scheme was discussed in 68th PCC Meeting held on 18-06-2018. PCC opined that the draft scheme submitted by Odisha was three years old and the draft scheme is needed to be reviewed with existing network configuration.

PCC decided to discuss the islanding scheme in next PCC Meeting and advised OPTCL to submit all the relevant details to ERPC and ERLDC.

**O&M / IbTPS may discuss**

**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.

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The latest status along with proposed logic as follows:

SI No	State/Utility	Logic for operation	ADMS	Implementation status/target	Proposed logic (if different from under implementation logic)
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4	Odisha	1. System Frequency < 49.9 Hz 2. Odisha over-draw > 150 MW 3. DISCOM over-draw > (40 MW)	10 Months	Logic 2 and 3 is AND or OR, in case it is AND then ADMS may not operated when discom are in schedule but GRIDCO is overdrawing due to less generation at state embedded generators
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In the 116<sup>th</sup> PSOC meeting, CGM (O&M) stated that since considerable time has already been lapsed SLDC may prepare the EoI without waiting for CPC.

In the 117<sup>th</sup> PSOC meeting it was decided that SLDC shall process for tendering.

In the 122<sup>nd</sup> PSOC SLDC stated that the tendering will be done by end of July'2018.

**SLDC may deliberate the status.**

### **C.11: 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 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 121<sup>th</sup> PSOC meeting the status has been updated as follows:

Sl.	Name of the transmission line	Completion schedule
<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 (PG) S/S.	Construction of 220 kV Sadeipali- Kesinga line has started. Expected by June'18. 220 kV Sadeipali-Bolangir (PG) portion of the line is expected by Dec'18.
<b>2.</b>	<b>400/220 kV Keonjhar S/S.</b>	
a.	Keonjhar (PG)-Keonjhar (220/33 kV) 220 kV D/C line	Keonjhar S/S (220/33 kV) by July'18.
b.	Keonjhar (PG)-Turumunga (220/132 kV) 220 kV D/C Line.	By 2019
<b>3.</b>	<b>400/220 kV Pandiabil Grid S/s</b>	
a.	Pratapsasan(OPTCL)-Pandiabil (PG) 220 kV D/C line	December 2018

### **C.12: Preparation of crisis management plan for Cyber Security in Power Sector in line with CERT-IN.**

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

In 142<sup>nd</sup> OCC, ERLDC informed that, in line with Enquiry Committee Recommendation, cyber security audit is being conducted on regular basis for SCADA system installed at ERLDC and SLDC as well but cyber security audit for telecom infrastructure installed in Eastern Region is not being carried out.

OCC advised all the constituents to conduct the cyber security audit on telecom infrastructure installed in Eastern Region. It is further advised that compliance / mitigation of the points observed during the audit should also be completed for improvement of the telecom infrastructure in ER.

In 37th TCC meeting, it was decided that a workshop would be conducted by CEA at ERPC for further benefit of ER Constituents.

In 144th OCC, ERLDC informed that they have already conducted a workshop with the help of NPTI, Durgapur on 21st March 2018.

A workshop on cyber security was conducted by CEA at ERPC, Kolkata on 09-05-2018.

As suggested by CEA, a format would be circulated among ER constituents for furnishing the information of their respective systems for discussion in OCC Meeting. The format is enclosed at Annexure-E2.

OCC advised all the constituents to submit the information to ERPC as per Annexure-E2.

In the 122<sup>nd</sup> PSOC meeting CGM (IT) stated that Audit report is yet to be received. Audit for the next FY will be commenced from July' 18.

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

### **C.13: 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.

As per the information received from the constituents the following generators certified with IS 18001:

- All NTPC stations in Eastern Region
- Teesta, NHPC
- All OHPC generating units
- All CESC generating units
- All units of WBPDC
- DGPC units

In the 117<sup>th</sup> PSOC meeting CGM (O&M) stated that draft project report for Mendhasal S/S has been submitted to BIS. The report will be approved in the meeting to be conducted by them.

In the 122<sup>nd</sup> PSOC meeting CGM (O&M) stated that Audit team is expected soon.

**Members may discuss**

### **C.14: Status of Disturbance Recorder, Standalone Event Logger and Time Synchronization equipment.**

The status of DR/EL and GPS as updated in previous OCCs is enclosed at Annexure-E.4.

Constituents are also requested to furnish their list of new DR/EL which are not included in the list.

**Members may note for necessary action.**

### **C.15: DATA FOR GEOSPATIAL ENERGY PORTAL OF NEETI AAYOG--CEA**

NITI Aayog is developing a user friendly GIS based Energy Map of India, which would provide true locations of all energy resources in India including power plants, coal and oil reserves, transmission lines etc.

CEA sought the information of name, voltage level, capacity, longitude and latitude of 33kV and 66 kV substations and lines.

The information may be shared with CEA vide email: cedpd-cea@gov.in.

All Discoms are requested to submit the above data to CEA with a copy to SLDC for forwarding to ERPC.

In the 122<sup>nd</sup> PSOC meeting it was deliberated that for submission of line data, detail mapping of the line is required, which involve a lot of expenditure. However, the Discoms may furnish the S/S data in 1<sup>st</sup> phase. SLDC may write to all Discoms in this regard.

**SLDC / DISCOMs may deliberate.**

### **C.16: Mock Black start exercises in Eastern Region**

The tentative schedule of black-start exercises for F.Y 2018-19 given by OCC is as follows

Sl.	Name of Hydro Station	Schedule	Tentative Date	Schedule	Tentative Date
		Test-I		Test-II	
1	Upper Kolab	Last week of May-2018	Done on 08.06.2018	Last week of January 2019	
3	Rengali	2 <sup>nd</sup> week of June 2018	August'18	Last week of November 2018	
4	U. Indravati	3 <sup>rd</sup> week of June 2018		2 <sup>nd</sup> week of February 2019	
6	Balimela	3 <sup>rd</sup> week of October 2018		1 <sup>st</sup> week of March 2019	
9	Burla	Last week of June 2018	Done on 07.06.2018	Last week of February 2019	

In the 120<sup>th</sup> PSOC meeting SLDC stated that ERPC has proposed to conduct a workshop at U. Kolab / Balimela, probably during the month of July'18.

In the 122<sup>nd</sup> PSOC meeting SLDC stated that mock black start exercise for Balimela will be done at the time of workshop conducted by ERPC at Upper Kolab/ Balimela.

**OHPC / SLDC may please 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 **May'18**:

Sl. No	Name of Discom	No. of message issued	Over drawal (MU)	Deviation (%)
1	CESU	0	-1.98911	-0.2379
2	WESCO	0	2.31564	0.3614
3	NESCO	0	-3.6404	-0.7453
4	SOUTHCO	0	-1.80285	-0.5692
	<b>Total</b>	<b>0</b>	<b>-5.11672</b>	

It is noticed that CESU, WESCO & SOUTHCO have over drawn while NESCO has 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
2	220/132kV, 100MVA Auto-2 at Bhadrak	Fire hazard on 31.05.2017	June-2018

**CGM (O&M) may update the progress.**

## D.3: Communication issues

The status of data communication from CGPs as deliberated in the 120<sup>th</sup> PSOC meeting meeting is as follows.

Sl.	Name of CGP	Present status
1	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.
2	IRE, Chatrapur	Data communication system yet to be established by the Plant

In the 117<sup>th</sup> PSOC meeting, Members opined that GCC should file a case soon against NINL & IRE before the OERC.

In the 119<sup>th</sup> PSOC meeting it was decided that GCC shall file a case against the defaulting CGP/ Consumers before the OERC.

In the 121<sup>st</sup> PSOC meeting G.M. (RT&C) stated that they have raised certain queries regarding the provision of providing data communication facilities to SLDC by the CGP / Industries. SLDC stated that the “**Procedure on Communication and Data Transmission**” approved by Hon’ble OERC vide orders, dated 23.09.2011 passed in case Nos. 41, 42 and 51/2011 followed by corrigendum order issued in letter No.2243, dated 01.12.201, published in the Odisha Gazette No. 485 Dated 29<sup>th</sup> March 2012 was circulated by RT&C wing of OPTCL vide letter No. R&T-REGN-08/2011/198 (8) dated 19.04.2012. RT&C may refer the said letter wherein the provisions have been clearly mentioned. Also RTC may take necessary initiative for filing Petition before the OERC.

In the 122<sup>nd</sup> PSOC meeting GCC stated that Telecom have forwarded a list of 8 Nos. of CGP/Industries who have not complied the data communication facilities. It was suggested that RT&C may file a case before the OERC.

**GCC / RT&C may please deliberate & update the progress.**

## D.4: Implementation of Automatic Meter Reading for OPTCL-Discom interface points.

In the 116<sup>th</sup> PSOC meeting, IT stated that out of 840 nos of meters integrated, around data from 750 nos of meters will be received each month. Data from the remaining 90 meters are to be collected manually.

In the 117<sup>th</sup> PSOC meeting IT stated that out of 840 nos of meters integrated, data from 717 nos of meters have been extracted for the month of December’17. Data could not be collected from 63 Nos of meters, which were replaced, as the information was received by IT one day before. CGM (O&M) may instruct Secure meters Ltd to inform the replacement of meters to IT immediately.

In the 118<sup>th</sup> PSOC meeting, IT stated that out of 840 nos. of meters integrated, data from 754 nos. of meters have been extracted for the month of January’18. The extracted data will be compared with the M cubed meter reading. If found satisfactory, the project will be made go live.



In the 119<sup>th</sup> PSOC meeting IT stated that Parameters of 16 Nos meters are showing wrong. DLMS data for the newly installed Secure meters are not coming. It was decided that O&M shall discuss the matter with Secure meters to resolve the issue.

In the 120<sup>th</sup> PSOC meeting IT stated that M/s Secure Meter is not responding to them. It was decided that O&M shall convene a meeting with M/s Secure meters to resolve the issue.

In the 121<sup>st</sup> PSOC meeting it was decided that SLDC shall write CPC and OPTCL to convene a meeting with TCS and Secure meters to discuss the issue.

In the 122<sup>nd</sup> PSOC meeting IT stated that they will study 2 Nos of sample meters.

**OPTCL/ SLDC may please deliberate.**

#### **D.5: Web based drawal / generation scheduling.**

In the 111<sup>th</sup> PSOC meeting it was decided that from 1<sup>st</sup> August 2017 the schedule submitted through web portal will be considered. The web based schedule will be implemented for TTPS and Ib TPS from 1<sup>st</sup> September'2017.

At present all State thermal generating stations including IPPs & CGPs are furnishing their schedule through web portal.

The following fetchers need to be incorporated in the software:

1. Provisions for acceptance of backing down schedule for past block.
2. Provision for automatic extraction of Power Exchange schedule from the worksheet for incorporation in the schedule of respective Generator / CGP.
3. Navigation between different web pages within the portal
4. Report generation in excel format with down loading provision.

In the 120<sup>th</sup> PSOC meeting it was decided that SLDC and IT may discuss the issue and resolve.

In the 122<sup>nd</sup> PSOC meeting SLDC stated that they have discussed the issue with IT and expected to resolve soon.

**IT/SLDC may update the progress.**

### **PART E: OPERATIONAL PLANNING**

#### **E.1: Commissioning status of new Transmission elements.**

The status of commissioning of new transmission elements deliberated in the meeting 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'18.
2	Commissioning of 400 kV Meramundali-Mendhasal 2 <sup>nd</sup> ckt.	Line is ready and shall be charged after commissioning of 3 <sup>rd</sup> ICT at Mendhasal. Expected by April'2018.
3	400/220 kV, 315 MVA 3 <sup>rd</sup> ICT at Mendhasal S/S	August'18
4	400/220 kV, 2x315 MVA Lapanga S/S	July'18
5	220/33 kV, 2x20 MVA Baliguda S/S	December'18
6	220/33 kV, 2x20 MVA Kalimela S/S	December'18
7	220/33 kV, 2x20 MVA Kasipur S/S	July'18
8	220/33 kV, 2x40 MVA Keonjhar GIS S/S	July'18
9	220/33 kV, 2x20 MVA Narasinghpur S/S	July'18
10	220/132 /33 kV, 2x100 MVA Aska S/S	December'18

11	220/132/33 kV, Bargarh (New) S/S (320 MVA)	<b>Charged during March'18</b>
12	220/132/33 kV, Goda Chhak S/S (320 MVA)	December'18
13	220/132/33 kV Jayapatana S/S(320 MVA)	December'18
14	220/132 kV Pratapsasan S/S(320 MVA)	March'19
15	220/132 kV Kesinga S/S (320 MVA)	December'18
16	400 KV IB - Lapanga D/C (SEL, Bhushan & L&T)	July'18
17	132/33 kV Ghense S/S	Charged during April'18
18	132/33 kV Dhenkikote S/S	<b>Charged on 24.02.2018</b>
19	132/33 kV Betanati S/S	July'18
20	132/33 kV Kantabanji S/S	<b>Charged on 28.02.18</b>
21	132/33 kV R.Udyagiri S/S	December'18
22	132/33 kV Chikiti S/S	August'18
23	132/33 kV Athagarh S/S	Charged on 31.05.2018

The Discoms were requested to take necessary action for availing power supply from those S/Ss and prepare their action plan for takeoff arrangement.

**CGM (Construction) / DISCOMs may please deliberate the status.**

### **E.2: Installation of ABT compliance Energy Meter at Ib TPS feeders & Generators / Furnishing of DC**

As per the provision in the Act, SLDC shall prepare the schedule and Energy Accounting in respect of IbTPS. It is learnt that the Main meter installed by IbTPS feeders is recording 30 minutes reading while Check meter provided by OPTCL is recording 15 minutes reading. Unless ABT compliance Main and Check energy meters installed in IbTPS feeders & Generators will record 15 min block energy injection, the energy accounting and PAFM cannot be computed. It is requested OPTCL / IbTPS to provide ABT compliance Main and Check meters in all the 220 kV IbTPS feeders & Generators.

In the 119<sup>th</sup> PSOC meeting CGM (O&M) stated that Ib TPS may deposit the required amount to release meters (for check meter).

In the 122<sup>nd</sup> PSOC meeting Ib TPS stated that this has already been approved by their Authority. The required amount will be deposited soon.

**SLDC / IBTPS may please deliberate the status.**

### **E.3: Compliance of CEA Regulations for Grid Connectivity of Renewable Energy Sources.**

As per CEA (Technical Standards for connectivity to Grid) Regulations, 2007, dated 21<sup>st</sup> February 2007, the pertinent clauses 6 (iii) & 6 (iv) (b) of general Connectivity Conditions shall be applicable to all the Generating Projects including the renewable, which are getting connected to the Grid at voltage level of 33kV & above. Subsequently, CEA have notified the CEA (Technical Standards for Connectivity of the Distributed Generation Resources) Regulations 2013 dated 30.09.2013. These Regulations are applicable for "Distributed Generation Resources", which means A Generating Station feeding electricity into the System at voltage level below 33kV. Needless to mention that these Regulations also cover the renewable projects connected to the Distribution Licensee's System at voltage level of below 33kV. The letter received from CEA is annexed herewith.

SLDC has already forwarded the Regulations & a letter received from DoE, Govt. of Odisha to the Distribution Licensees.

A meeting was convened on 29.07.2017 by Director (Commercial) between all RE Generators, SLDC, GRIDCO, DISCOMS & Telecom to decide the strategy. It was decided that the RE

generators shall suggest the mechanism to be adopted for real time data communication to SLDC & Telecom to examine the same.

A meeting has been convened by Gridco in this regard with the RE generators, OPTCL, Telecom & SLDC. In the meeting, two nos of agencies presented their data acquisition logic from the RE sources. It was decided that each agency will take up a pilot project for data communication from one RE source to SLDC. On completion of the above project next course of application shall be decided.

M/S Secura Meters Ltd has shown a demo for the pilot project on dated 09.07.2018. However, the data integration with SLDC VPS was not elaborated in the said demo.

**SLDC/GRIDCO may please deliberate the status.**

#### **E.4: Major Events in the month of June'18**

24.06.18: 132/33 kV, 12.5 MVA Tfr at Olavar S/S charged.

#### **E.5: Important Grid Incidences during the month of June'18.**

There is no reportable incident occurred during the month.

#### **E.6: Outage of major transmission Elements during the month of June'18. (above 10 hrs).**

Sl No	Transmission lines	Tripping Dt/time	Restoration Dt/time	Reason
1	220 kV Katapalli-Lapanga Ckt.-II	03.06.18 21:43	05.06.18 13:33	'R' ph. conductor snapped between Loc. No.- 92 & 93
2	Auto Trf.-I, Tarkera	13.06.18 03:53	13.06.18 17:38	Buchholz relay operated
3	220 kV Balimela-Jayanagar Ckt.-III	17.06.18 18:15	18.06.18 12:40	Bursting of 'B' ph. CT at Balimela end.
4	132 kV Rairangpur-Bangriposi Ckt.	19.06.18 20:04	20.06.18 15:13	Oil leakage in 'R' ph. CT at Rairangpur end
5	132 kV Budhipadar-Sundergarh Ckt.-II	21.06.18 16:44	23.06.18 12:04	'Y' ph. conductor snapped between Loc. No.-4 & 5

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

#### **E.7: Review of Outage Program of State Generators / Transmission elements for the month of August'18:**

Tentative Outage programme for State Generators for the month of **August'2018** are as follows:

Sl.	Station	Unit	Period	Remarks
1	Burla	# 1	14.03.18 to 31.08.18	T&G coupling cover water leakage Shaft seal problem Under R,M & U Under R, M & U
		# 2	25.05.18 to 31.07.18	
		# 5	25.10.16 to continue	
		# 6	16.10.15 to continue	
2	Chiplima	# 3	15.10.15 to continue	Under R,M & U Flood water inrush to turbine Flood water inrush to turbine
		# 1	22.07.18 to 31.07.18	
		# 2	22.07.18 to 31.07.18	
3	Balimela	# 1	05.08.16 to continue	Under R,M & U Programming for R&M Annual Maintenance
		# 2	20.11.17 to continue	
		# 5	10.08.18 to 25.09.18	
4	Rengali	# 3	07.07.18 to 31.07.18	Fault in 220 kV unit breaker
5	Upper Kolab	# 2	25.05.17 to continue	Upstream leakage & intake gate Problem
6	U. Indravati	# 3	10.07.18 to 17.08.18	Water leakage in penstock Annual Maintenance
		# 4	27.06.18 to 17.08.18	
5	TTPS	# 3	24.07.18 to 22.08.18	Annual Maintenance
6	Ib TPS	# 1	24.07.18 & continuing	GT bushing oil leakage. Turbine vibration problem
		# 2	18.07.18 to 01.08.18	

**OHPC / SLDC may deliberate.**

**E.8: Generation Program for the month of August'18.**

Generation schedule for the month of August'18 furnished by OHPC are given below.

Name of Hydro Gen. Station	Generation Program (MW)		Reservoir Level as on 01.07.18	Reservoir Level as on 01.07.17	MDDL	High Flood Reservoir Level
	Aug'18 (1 <sup>st</sup> fortnight)	Aug'18 (2 <sup>nd</sup> fortnight)				
HPS-I, Burla	120	120	<b>600.56</b>	<b>598.52</b>	590 ft.	630 ft.
HPS-II, Chiplima	40	40	-	-	-	-
Balimela	250	250	<b>1448.00</b>	<b>1458.30</b>	1440 ft.	1516 ft.
Rengali	140	140	<b>111.11</b>	<b>110.25</b>	109.72mtr	123.5 mtr.
U.Kolab	160	160	<b>845.84</b>	<b>848.47</b>	844 mtr	858 mtr.
U. Indravati	250	250	<b>627.00</b>	<b>628.94</b>	625mtr	642 mtr
MKD (O/D)	30	30	<b>2704.35</b>	<b>2707.80</b>	2685 ft.	2750 ft.
<b>TOTAL</b>	<b>990</b>	<b>990</b>				

Generation schedule may change depending on inflow & availability of machine.

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

**E.9: Anticipated power generation and demand for the month of August'2018.**

Sl. No	Discom	Average	Peak
1	CESU	1050	1250
2	WESCO	1000	1150
3	NESCO	750	950
4	SOUTHCO	350	450
<b>6</b>	<b>Total Discom</b>	<b>3150</b>	<b>3800</b>
	<b>System Loss &amp; others</b>	<b>150</b>	<b>200</b>
	<b>Total Demand</b>	<b>3300</b>	<b>4000</b>
<b>Availability</b>			
1	Hydro	990	1250
2	State Thermal	700	700
3	IPP, small hydro &RE	300	450
4	ISGS share (including OA& purchase)	1100	1300
5	CGP support (OA)	300	300
6	<b>Total availability</b>	<b>3300</b>	<b>4000</b>
7	<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 (124<sup>th</sup>) PSOC meeting.**