Odisha Power Transm ission Corporation Ltd. Bhubaneswar.



Agenda
for

121th Power System Operational Coordination Meeting

Date: 26.05.2018

Venue: PTC, Chandaka, Bhubaneswar

Odisha Power Transmission Corporation Ltd. Bhubaneswar.

Agenda for 121th PSOC Meeting to be held on 26.05.2018 at PTC, Chandaka, Bhubaneswar

Item no. 1: Confirmation of the minutes of the 120th PSOC Meeting held on 28.04.2018

The minutes of meeting was circulated vide letter No. SGM (PS)-Pl-15/2017/1457 ⁽⁴⁷⁾ dated 05.05.2018 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 April'2018
- C.1: Status of projects funded under PSDF scheme
- C.2: Adopting adequate precautionary measures to prevent alert state operation-ERLDC
- C.3: Accounting of State drawal from sub-station of PGCIL / ISTS Licensee in ER
- C.4: Improved telecom infrastructure for cyber security
- C.5: Auxiliary power consumption by Powergrid Substations-GRIDCO
- C.6: Commissioning of breaker at 400/220 kV Indravati (OHPC) S/s
- C.7: 220kV Interconnecting line of OPTCL with 400/220kV Bolangir PG, Keonjhar & Pandiabil s/s
- C.8: Time correction of SEMs in ER-Replacement of heavily drifted SEMs
- C.9: Prolonged outage of Power System elements in ER.
- C.10:Preparation of crisis management plan for Cyber Security in Power Sector in line with CERT-IN.
- C.11: Certification through BIS as per IS 18001:2007 to all generating/transmission units.
- C.12: Status of Disturbance Recorder, stand alone Event Logger & time synchronization equipment
- C.13: Implementation of Automatic Demand Management Scheme
- C.14: Mock Black start exercise in Eastern Region
- C.15: Implementation of Islanding Scheme.
- C.16: Multiple tripping of 400 kV Transmission lines emanating from Meramundali S/S& issue of Auto reclosure
- D.1: Non-compliance of drawal schedule by DISCOMs
- D.2: Deviation Charges against DISCOMs
- D.3: Prolonged outage of transmission elements and tentative revival dates
- D.4: Communication issues.
- D.5: Implementation of Automatic Meter Reading for OPTCL-Discom interface points.
- D.6: Web based drawal / generation scheduling
- D.7: DISCOM Issues
- D.8: Rectification / Replacement of Defective Meters at different interface points.
- D.9: Power Supply Interruption to RSP
- 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 April'18
- E.5: Important grid incidences during the month of April'18.
- E.6: Outage of major transmission Elements during the month APril'18. (above 10 hrs).
- E.7: Review of Outage Program of State Generators for the month of June'2018
- E.8: Generation Program for the month of June'2018.
- E.9: Anticipated power generation and demand for the month of June'2018.

F.1: Date and Venue of the next (122nd) PSOC meeting

PART B: GRID PERFORMANCE

Review of Grid Performance for the month of April'18.

A. Frequency:

Hourly frequency variation for the month of April'18.

Month		% of tin	ne frequency re	emained		Average
Monu	<49.00	49.00-49.70	49.70-49.90	49.90-50.05	>50.05	
Feb'18	0.00	0.00	7.09	78.50	14.41	49.99
Mar'18	0.00	0.00	9.39	78.69	11.92	49.98
Apr'18	0.00	0.02	10.35	78.33	11.30	49.98

Maximum & Minimum frequency during the month of April'18.

Month	Freq (Hz)	Date	Time
March'18	Maximum –50.11	31.03.18	07:00 Hrs
	Minimum – 49.78	26.03.18	15:15 Hrs
April'18	Maximum –50.22	30.04.18	07:04 Hrs
	Minimum – 49.63	23.04.18	10:45 Hrs

Members may please discuss.

B. Grid Demand for the month of April'18

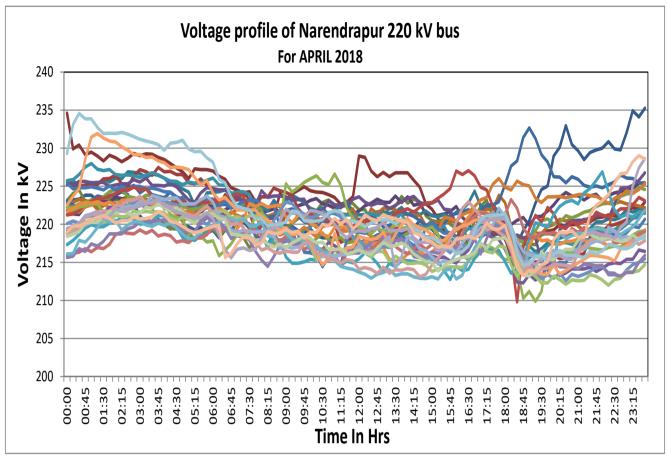
Month	Max.		Demand		l Ma	ximum Den	nand	Minimum Demand			
1,1011111			Bemana		1,10	1.10 Domaila					
	Consumption										
	MU Date		MU	Avg.	MW	Date	Time	MW	Date	Time	
	1110	Dute	1110		111 11	Dute	1 11110	111 11	Dute	111110	
			(MW)								
Apr'18	92.65 23.04.18		2400	3860	4430	22.04.18	21:00	2348	01.04.18	24:00	
Apr 10	92.05 23.04.18		4400	3000	4430	44.04.10	21.00	2340	01.04.10	24.00	
A 217	00.04		2402	2462	4000	04.04.4	24.00	2466	00 04 45	0= 00	
Apr'17	88.91 27.04.17 2493 3463		4299 26.04.17 24:00			2466	03.04.17	07:00			
_											

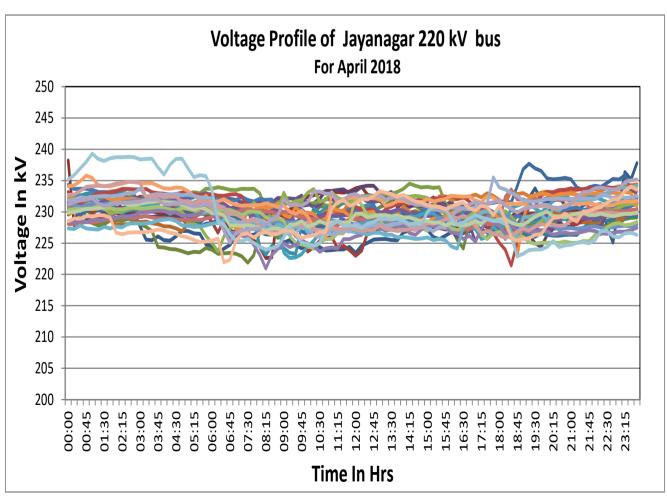
A. Voltage Profile of 220 kV Buses in OPTCL system for the month of: April'18

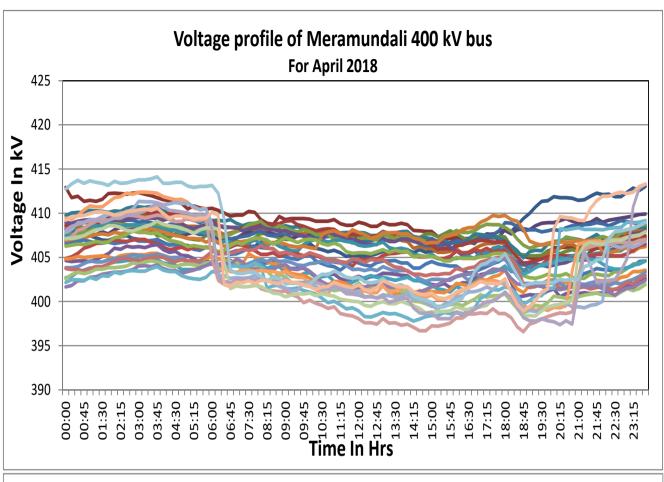
Sl. No	S/s Name	N	I aximun	1	Minimum			
		kV	Day	Time	kV	Day	Time	
1	Atri	232.49	1	23:45	231.67	23	14:30	
2	Balasore	235.55	1	21:45	214.59	20	20:30	
3	Barkote	230.47	1	22:00	223.10	12	12:45	
4	Bhadrak	238.27	1	23:45	214.02	21	22:30	
5	Bhanjanagar	235.44	1	23:45	215.86	16	18:30	
6	Bidanasi	234.92	1	19:00	214.08	19	16:00	
7	Bolangir	230.13	1	19:30	199.76	5	16:45	
8	Budhipadar	228.74	1	19:00	219.91	23	18:45	
9	Chandaka	232.95	1	23:45	212.81	23	14:30	
10	Cuttack	232.26	1	19:00	211.07	19	16:00	
11	Duburi(O)	235.49	1	23:00	211.59	17	18:45	
12	Duburi (N)	224.81	1	23:15	209.86	21	22:30	
13	Jayanagar	239.30	29	01:00	220.95	22	8:15	
14	Joda	233.24	1	19:15	211.77	26	15:00	
15	Katapalli	229.26	1	19:15	214.13	5	17:00	
16	Lapanga	231.34	30	19:15	221.23	5	17:00	
17	Laxmipur	239.13	29	01:00	220.48	14	18:30	
18	Mendhasal	234.11	1	23:45	214.65	23	14:45	
19	Meramundali	227.87	1	23:45	217.42	26	18:45	
20	Narendrapur	235.26	1	23:45	209.80	14	18:30	
21	Nayagarh	233.42	1	23:45	213.44	16	18:30	
22	Paradeep	234.51	1	19:30	207.84	24	20:15	
23	Tarkera	231.63	1	22:00	224.58	28	15:45	
24	Theruvali	233.01	29	01:00	210.21	14	18:30	
25	Samangara	233.47	1	23:45	212.23	26	14:45	

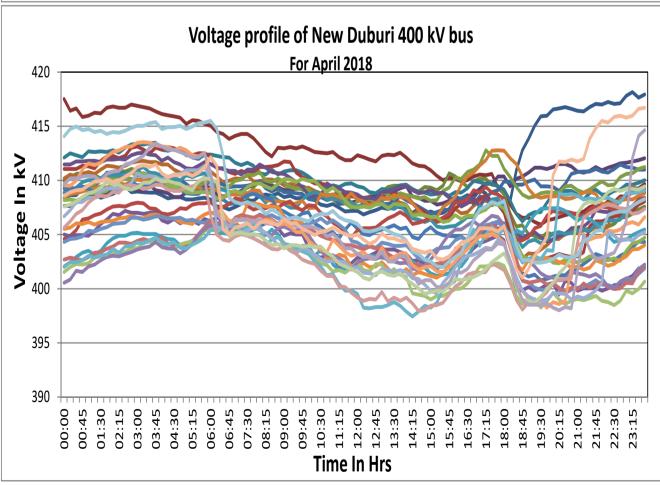
The maximum Voltage of 239.30 kV occurred at Jayanagar 220 kV bus, while Bolangir 220 kV bus has experienced the minimum Voltage of 199.76 kV. The 220 kV Voltage profile of Jayanagar and

Narendrapur and 400 kV Voltage profile of Meramundali and New Duburi bus during the month of January 2018 is shown below. In the 145th OCC meeting it was deliberated that 16 % of time Mendhasal 400 bus Voltage was in lower side during the month of April'2018.









B. Loading of 220/ 132 kV Auto a	at 220 kV S/Ss in OPTCL sy	estem for the month of Apr'18

AUTO TRANSFORMER LC		- J.\	1					APRIL'2018
Name of the 220 kV Sub-Station	Capacity							REMARKS
(Feeding Sub-stations/Feeders)	MVA	MW	laximui Day	m Time	MW	linimun Day	Time	
ATRI	2x160	57.92	10	12:45	9.04	6 6	09:15	
Banki, Khurda, Chandpur & Argul}	27.100	51.68	6	10:30	10.52	6	23:00	
BALASORE 220/132 KV	3x160	89.24	23	15:15	18.80	1	19:15	
Balasore, Birla Tyre(I), Ispat Alloy(I),		72.00	21	21:15	18.64	1	19:15	
laleswar, Jaleswar(T)}		91.12	23	15:15	18.96	1	19:15	
3HADRAK 220/132 KV	1x100	51.68	28	21:45	8.96	2	05:15	
Bhadrak area load, Bhadrak(T),Soro,	1x160	92.32	28	21:45	16.60	2	05:15	
FACOR (I), Dhamra Port}		YET TO E	E COM	MISSION	ED			
BHANJANAGAR 220/132 KV	1x160	76.28	19	09:15	5.80	9	14:45	
Bhanjanagar, Aska, Phulbani, Ganjam, Chatrapur}	1x160	80.48	18	09:15	4.84	9	14:45	
BIDANASI 220/132 KV	1x160	47.48	26	12:15	10.84	25	06:45	
Bidanasi, Khurda }	1x100	26.24	26	13:45	7.28	25	06:45	
	1x100	33.08	26	12:15	7.32	25	06:45	
BOLANGIR (SADAIPALLI) 220/132 KV	2x160	130.64	5	20:00	16.20	28	11:00	
Bolangir, Patnagarh, Sonepur, Saintala,								
(hariar, Barpalli }	0:400	138.20	5	20:00	17.96	30	13:00	
BUDHIPADAR 220/132 KV Jharsuguda, Jharsuguda Tr, Cemco(I),	2x160	92.80	16	16:45	13.88	17	09:15	
Jilaisuguda, Jilaisuguda 11, Cemco(1), MCL, Sundergarh,Brajarajnagar, Rajgangpur}		97.76	17	09:15	24.00	28	19:45	
CHANDAKA 220/132 KV	1x100	74.72	13	12:45	8.60	4	19:00	
Chandaka, Bhubaneswar, Nimapada,	1x160	122.68	26	14:30	15.20	4	19:00	
Ransinghpur, Puri,Kesura, Kaipadar Tr. }	1x100	80.36	13	12:45	9.20	4	19:00	
	1x160	124.48	13	12:45	14.32	4	19:00	
CUTTACK	1x160	91.92	19	15:15	8.84	30	22:00	
DUBURI 220/132 KV	3x100	Under sh	ut dow	n				
Duburi, Bamnipal(I), BRPL, MESCO,		83.44	21	14:30	13.28	4	17:30	
lajpur Road, Kalarangi, Jajpur Town}		93.84	26	12:45	12.72	4	17:30	
JAYANAGAR 220/132 KV.	1x160	79.64	23	19:45	9.36	2	02:45	
Damanjodi(NALCO), Traction S/Ss, Tentulikhunti, Sunabeda, Jayanagar]	1x160	80.20	23	19:45	9.48	2	02:45	
JODA 220/132 KV	3x100	62.00	21	10:45	11.76	11	10:45	"*" - Alternate P/S from
Joda, Tensa, FAP(I), Bolani(I), Nalda		56.80	11	10:45	15.32	17	16:00	Kuchei.
Гr.,Polasponga, *Rairangpur, Bhalulata		61.72	21	10:45	14.44	30	17:30	
raction} KATAPALI 220/132 KV	1,400							O manufact to D at a 0
Chipilima,Bargarh, ACC,Sonepur &	1x100	33.04	6	11:30	6.84	4	22:00	Supported by Burla &
Katapali area load.}	1x100	33.08	6	11:30	6.80	4	22:00	Chipilima power.
,	1x160							
APANGA	1x160	60.08	17	09:15	4.52	1	15:30	
Kuchinda, Aryan Viraj, Shyam Metallics}		59.56	17	09:15	6.72	28	18:45	
MERAMUNDALI 220/132 kV	3x100	38.44	24	21:15	9.64	8	17:45	
Meramundali Traction, Dhenkanal,		37.60	24	21:15	9.60	8	17:45	
Navchrome(I), Hind Metal, Aarti,BRG}		37.36	21	10:30	8.60	8	17:45	
Mendhasal { Part area load of Khurda S/S}	2x100	26.40	17	05:45	4.20	12	12:00	
		45.00	17	05:45	2.40	12	12:00	
NARENDRAPUR 220/132KV	2x160	122.28	14	19:30	25.08	24	01:30	
Narendrapur, NarendrapurTr, Berhampur,		106.28	9	15:15	23.92	23	01:30	
Chhatrapur, Ganjam, Balugaon, Digapahandi, Mohana.}	1x100	61.16	9	15:15	14.08	24	01:30	
PARDEEP 220/132 KV	1x160	110.16	22	20:45	9.56	4	09:30	
Paradeep, Kendrapada, Pattamundai,	1x100	68.16	19	03:36	7.12	4	19:15	
Chandikhol, Cuttack, Jagatsinghpur,	1x50	33.10	.5	20.00	2			
Phulnakhara}		00.00	2	10.40	4404		10.00	
ARKERA 220/132 KV Rourkela, Rourkela Tr.,RSP(I), Chhend,	4x100	68.68	3	10:48	14.64	6	18:00	
Adhunik Metal, Rajgangpur, OCL(I),		69.52 68.80	18	16:30 09:45	15.44 10.40	6 4	18:00	
Rajgangpur Tr.]		68.80	3	10:48	10.40	6	08:15 18:00	
HERUVALLI 220/132 KV.	2x100	85.16	2	14:45	21.00	26	04:30	Rayagada & Paralakhemund
Theruvali, IMFAL(I), JK(I), Junagarh,	۵۸۱۵۵							can be fed from Machhkund
Kesinga,Powmex(I), Rayagada, }		85.24	18	13:30	16.40	19	15:30	system.
TPS 220/132 KV Chainpal, FCI (I), Angul, MCL Nandira(I),	1x160	100.00	30	13:00	0.00	19	22:00	
Rairakhole,Boinda,Kamakhyanagar, Kalarangi,Nuapatna, Choudwar }	1x160	100.00	30	13:00	0.00	19	22:00	
SAMANGARA	1x100	73.12	9	11:15	10.64	4	19:30	
				•				

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)
CESU	Apr'18	745.479	734.495	770.403	19.655	750.748	16.253
WESCO	Apr'18	585.205	636.576	689.137	57.318	631.819	-4.757
NESCO	Apr'18	504.658	418.945	528.936	105.079	423.857	4.912
SOUTHCO	Apr'18	300.822	298.760	298.778	0	298.778	0.018

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.

D. Energy Generation / Import up to the month of April'18

Figures in MU

Month	Thermal	OHPC	CGP	IPP Inj.	RE	ISGS	Total
	(TTPS+IbTPS)	& MKD	Support				
April'18	535.10	421.70	362.53	198.95	9.69	872.26	2400.24
Total	535.10	421.70	362.53	198.95	9.69	872.26	2400.24

E. Drawal of Machhakund Power

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

Month	Total Generation	Odisha Drawl	AP Drawl		
Apr'18	37.162	18.613	16.943		
Total	37.162	18.613	16.943		

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

In the 119th 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^{th} PSOC meeting Southco has assured to complete the work by 1^{st} week of May'2018.

SOUTHCO may deliberate.

F. Under Frequency Relay operation in OPTCL System during the month of April'18.

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

G. Status of Open Access applications up to the month of April'2018

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

Sl.	Month	No	of Appl	ications	receiv	ed	d No of Applications Disposed					
No		Intra-	In	ter-Stat	te	Total	Intra- Inter-Sta		nter-Stat	te Total		App.
		State	tate Bilateral		PXI		State	Bilateral		PXI		Rejected
			ST	MT/				ST	MT/			
				LT					LT			
1	April'18	26	79	0	31	136	26	76	0	31	133	3
	Total	26	79	0	31	136	26	76	0	31	133	3

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 129 th 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.	10.05.15	30.11.18	162.5 Cr.	37.79Cr.	Total contract awarded for Rs. 51.35 Cr
7		Implementation of OPGW based reliable communication at 132kV and above substations	15.11.2017		25.61 Cr		Agreement signed on 03.01.2018
13	ОНРС	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.		Tendering under process
Pro		ocess of approval:	ı	1	1	1	T
Pro	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		Scheme was examined by TSEG. Inputs sought from entity. OPTCL submitted the relevant informatio n
Proj	OPTCL	submitted: Implementation of	22-12-17	3.26 Cr			
	OI ICL	Automatic Demand Management System (ADMS) in SLDC, Odisha	22-12-1/	3.20 CI			
	OPTCL	Protection upgradation and installation of SAS for seven numbers of 220/132/33kV Grid substations (Balasore, Bidanasi, Budhipadar, Katapalli, Narendrapur, New-Bolangir & Paradeep).	20.02.2018	41.1 Cr			

In the 116th PSOC meeting, OPTCL stated that they are linking another project for funding through

PSDF and the target date will be changed. The revised target date for completion will be intimated to ERPC. Further, technical specification for 400 kV bus reactors at Meramundali S/S is yet to be prepared. It was suggested that CPC may expedite the same.

In the 117th PSOC meeting, O&M deliberated that 400 kV bus Reactor for Meramundali S/S shall be procured after getting sanction by PSDF.

In the 120th PSOC meeting CGM (Telecom) stated that for implementation of OPGW based reliable communication at 132 kV and above S/Ss, technical specification has been completed. Financial specification is yet to be done. CGM (O&M) stated that for installation of Bus reactor specification finalized, PSDF response awaited. Implementation of ADMS by SLDC and protection up-gradation and installation of SAS for 7 Nos. of S/Ss PSDF raised some queries, which have to be complied.

Review meeting for PSDF funding will be held on 8th June 2018 at Binagudi, West Bengal.

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

C.2: Adopting adequate precautionary measures to prevent alert state operation-ERLDC

With onset of summer and associated rise of demand, the grid is being occasionally subjected to low frequency operation. The duration for which frequency persisted below the IEGC specified lower limit i.e. 49.9 Hz, was 31.85% of the time on 5-5-18 and 26.09 % of the time on 7-5-18. Moreover, the minimum frequency touched 49.6 Hz at 22:59 Hrs of 5-5-18, clearly indicating an all-India shortage of around 4000MW at that instant. In view of the above, to ensure secured grid operation at all times, all regional entities of Eastern Region are requested to strictly comply with the following:

- 1. All SLDCs may kindly ensure that the actual net drawl of the concerned control area is always maintained within the schedule, in line with the provision 6.4.7 of IEGC. Accordingly, requirement of respective control area may be assessed accurately in advance with necessary arrangement for meeting the same from all possible sources viz. long-term, medium-term and short-term markets.
- 2. Reserve corresponding to capacity of the largest unit may be maintained at all times, either from own generating stations or in the form of matching load response
- 3. Area control error (ACE) of respective control areas may be closely monitored and prompt action for demand curtailment taken whenever the positive value of the same exceeds 150MW or 12% of the schedule, whichever is lower.
- 4. All ISGSs and IPPs scheduled by ERLDC to strictly avoid generation below the schedule.

Members may please discuss.

C.3: Accounting of state drawl from Substation of PGCIL/ISTS Licensee in ER

State net drawl from Substation of PGCIL/ISTS Licensee in ER is being computed considering meter installed at feeders on LV side of Transformer due to the fact that for a few ICTs, multiple states used to draw through same ICT. Further, Sub stations where auxiliary requirement is met through tertiary of the IST ICT, States net drawl is computed by adding drawl through feeders after LV side of Transformer and auxiliary consumption through tertiary. Presently with network

strengthening and re-configuration in ER, such case of multiple State/entity drawing power from same ICT of PGCIL/ISTS License does not exist anymore.

As per Clause 7(1) (C) of CEA (Installation and Operation of Meters) Regulations, 2006 & its subsequent amendments, Main Meters for drawl computation through ICT should be installed on HV side of ICT and meters installed on LV side of ICT should be considered as Standby meters.

In view of the above it is proposed that Sate drawl from PGCIL/ISTS Licensee S/S may be computed by using the meter installed on HV side of ICTs in line with CEA regulation.

In order to enable ERLDC compute the state drawl through ICTs of PGCIL & other ISTS Licensees in ER as per CEA Regulations, PGCIL is requested to install meters at HV and LV side of ICTs at the stations enclosed at Annexure-B4.

GRIDCO may please note.

C.4: Improved telecom Infrastructure for cyber security

In 142nd 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.

MS, ERPC informed that a presentation on Cyber Security in Power Sector is also planned to be conducted at 37th TCC/ERPC meeting.

OCC referred the issue to TCC for further deliberation.

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

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-B3.1.

OCC advised all the constituents to submit the information to ERPC as per Annexure-B3.1.

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.

${\bf Quarterly\ Preparedness\ Monitoring\ -AGENDA}$

Annexure-B 3.1

Sl.	State	Sector	Utilities	Status of	Critical	Crisis	Status of	Status of	Action taken
No		(G/T/S)		CISO	Infra	management	CS mock	Training/	on CERT
				Nomination	Identified	Plan	dril	Workshops	In/NCIIPC
						Prepared		organized/	Advisories
								participate	
								d by utility	

1	Tamil	T	TANGE	Yes/No	Yes/No	Yes/No	Done on	Annexure	
	nadu		DCO						

Members may submit the status as per Annexure-**B3.1**.

CGM (Telecom) may discuss.

C.5: Auxiliary power consumption by Powergrid Substations-GRIDCO

GRIDCO vide letter dated 14th May 2018 informed that, GRIDCO had convened a meeting with Powergrid with a suggestion to become the consumer of state DISCOM and make the payment towards auxiliary power consumption as per the applicable tariff. Further, GRIDCO prevailed upon Powegrid that the amount to be paid to DISCOM should not be claimed in transmission tariff as the same has already been factored in the tariff as per the Regulation 29(4) of 2014 Tariff Regulations.

In this regard, Powergrid is not signing the minutes for commercial settlement. It was decided in the OCC that the issue may be raised in the Commercial sub-Committee meeting of ERPC

GRIDCO may elaborate. Members may discuss.

C.6: Commissioning of breakers at 400/220 kV Indravati (OHPC) S/s

In 141st OCC, it was explained that 3x105 MVA 400/220 kV ICT-I tie breaker, 220 kV Bus coupler and transfer bus breakers are not in service at 400/220 kV Indravati (OHPC) S/s.

In 142nd OCC, OHPC submitted the action plan as follows:

- 1. 220kV bus coupler: CB and CT needed to be replaced. They would restore the Bus coupler by August 2018
- 2. 220 kV Bus tie: CB and CT needed to be replaced. They would restore the Bus tie by November 2018.
- 3. 400 kV Tie-1 Breaker: CB and CT needed to be replaced. They would restore the 400 kV Tie by January 2019.

OCC opined that the target dates given by OHPC for replacement of CT and Breaker is too long and advised to take serious action to complete the work at the earliest.

In the 120th PSOC meeting, OHPC stated that replacement of breakers have already included for PSDF funding. It was suggested that OHPC shall justify the long target dates to ERPC.

OHPC may deliberate the discussion of OCC.

C.7: 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 120th PSOC meeting the status has been updated as follows:

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

C.8: Time correction of SEMs in Eastern Region – Replacement of heavily drifted SEMs

The issue was discussed in 35th TCC/ERPC meetings and it was felt that the meters with severe drift greater than 10 min need to be replaced first and if replacement is done with Genus then readings are to be collected manually using Laptop till interfacing with AMR is completed. 35th ERPC advised Powergrid to replace the 10% of the heavily drifted SEMs with new Genus make meters in Phase-I. Subsequently drifted meter replacement work of Phase –I for 24 meters have been completed.

As per decision taken in 134th OCC meeting, another 10% heavily drifted meter list was prepared by ERLDC and given to Powergrid for replacement. In 140th OCC it was informed that all the Phase-II meters have been replaced except Kharagpur. Since issue of integration of Genus meter is already resolved, It was also decided that list of meters to be replaced in next phase may be prepared.

Accordingly List of drifted meters to be replaced in Phase-III is placed below:

19 JINDAL (GRIDCO)	NP-6502-A	220KV JAMSHEDPUR (DVC)	ODISHA PROJECT
20 JAMSHEDPUR (DVC)	NP-6010-B	220 KV JINDAL	ER-I

POWERGRID / O&M may please discuss.

C.9: Prolonged outage of Power System elements in Eastern Region

(ii) Hydro Generating units:

Sl No	Generating Stn	Unit No	Capacity (MW)	Reasons of outage	Outage Date
1	Burla	1	49.5	Turbine & Gov. coupling cover leakage	25.10.2016
2	Burla	5	37.5	R&M Work	25.10.2016
3	Burla	6	37.5	R&M Work	16.10.2015
4	Chipilima	3	24	R&M Work	15.10.2015
5	Balimela	1	60	R&M Work	15.08.2016
6	Balimela	2	60	R&M Work	20.11.2017
7	U. Kolab	2	80	Repair of MIV & Draft tube gate leakage	28.05.2017

It is therefore seen that about 375 MW hydro capacity in Odisha is under forced outage / R&M and therefore not available for providing the much needed peaking support in summer peak. SLDC / OHPC may please indicate the capacity expected to be restored by 31/05/18.

C.10: 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 the 107th PSOC meeting, CGM (IT) informed that "Crisis management plan" work is awarded to M/s Digital Age Strategies Pvt. Ltd. The said firm has completed the study of Servers and Firewalls at SLDC, Bhubaneswar and back-up SLDC at Meramundali. Presently the data centers of SLDC and GRIDCO are being audited for IT security vulnerability assessment.

In the 117th PSOC meeting, CGM (IT) stated that audit has been completed and "ISO 270001 certificate". Certificate has been issued conditionally for one year. In case OPTCL fails to fulfill the conditions, the period may not be extended. However, the audit report is yet to be received by IT.

In the 118th PSOC meeting, CGM (IT) stated that certificate is expected by end of February'2018.

In the 119th PSOC meeting CGM (IT) stated that the Audit report and Certificate is yet to be received.

In the 120th PSOC meeting CGM (IT) stated that Certificate for FY-2017-18 is expected by 1st week of May'2018. Auditing for FY-2018-19 will be started from June'2018.

CGM (IT) / Telecom may please deliberate.

C.11: 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 the 111th PSOC meeting CGM (O&M) stated that 22 nos of officers are nominated from Chandaka, Mendhasal, Atri, Kesura, Bidanasi & Cuttack S/Ss to undergo training. Awareness training shall be started from 1st week of August'17. After receiving the price offer, order will be placed.

In the 113th PSOC meeting CGM (O&M) stated that certification for 6 Nos of S/Ss will be done by December'2017.

In the 116th PSOC meeting, CGM (O&M) stated that draft modality has been prepared. Order for Mendhasal S/S will be issued as a pilot project.

In the 117th 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 118th PSOC meeting, O&M stated that the report has already been submitted. Approval is yet to be received.

In the 119th PSOC meeting O&M stated that approval is yet to be received.

In the 120th PSOC meeting CGM (O&M) stated that Audit team is expected by May'2018.

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

C.12: Status of Disturbance Recorder, Stand alone Event Logger and Time Synchronization equipment.

The status of DR/EL and GPS as updated in previous OCCs is given below. Constituents are also requested to furnish their list of new DR/EL which are not included in the list.

Availability status of Event Logger, Disturbance Recorder & GPS

Sl.	Sub-Station		Protection & Control system					Remarks
No		Availability			Time Synchronization		ation	
		EL	DR	GPS	Relay	DR	EL	
12	Indravati	Yes	Faulty	No	No	No	No	ICT feeders using DR & EL available in numerical relays. 400 kV ICT-II feeder is being maintained by PGCIL.
	Meramundali	Defunct	Yes	Yes	Yes	Yes	Yes	
	Mendhasal	Defunct	Yes	Yes	Yes	Yes	No	EL will be restored by March'2015

In the 118th PSOC meeting O&M stated that 400 kV side EL at Mendhasal shall be replaced. Further, Order has been placed for automation of Mendhasal S/S, which is expected to be completed by end of May'2018. Proposal for including DR for Indravati is yet to be sent.

In the 119th PSOC meeting OHPC stated that EL & DR at Indravati is functioning. PSOC advised OHPC to revise the status in the OCC meeting.

In the 120th PSOC meeting it was suggested that OHPC officers attending OCC meeting may update the status at ERPC. O&M stated that Mendhasal S/S is included in the S/S automation scheme. SLDC may deliberate in the OCC meeting.

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

C.13: 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.

The latest status along with proposed logic as follows:

SI No	State/Utility	Logic for ADMS operation	Implementation status/target	Proposed logic (if different from under implementation logic)
4	Odisha	1. System Frequency < 49.9 Hz 2. Odisha over-drawl > 150 MW 3. DISCOM over-drawl > (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

In the 116th 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 117th PSOC meeting it was decided that SLDC shall process for tendering.

In the 118th PSOC meeting, SLDC stated that the tender specification is expected to be received from CPC by 1st week of March'2018. After receiving the same SLDC will process for tendering

In the 119th PSOC meeting it was decided that SLDC may prepare the financial specification and get approved from Finance wing of OPTCL without depending on CPC, as the matter is very much delayed.

In the 120th PSOC, SLDC stated that SLDC is exploring for financial specification.

In the 120th PSOC meeting SLDC stated that SLDC is exploring for financial specification. **SLDC may please deliberate the status.**

C.14: 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		Last week of	
		May-2018		January 2019	
3	Rengali	2 nd week of		Last week of	
		June 2018		November 2018	
4	U. Indravati	3 rd week of		2 nd week of	
		June 2018		February 2019	
6	Balimela	3 rd week of		1 st week of	
		October 2018		March 2019	
9	Burla	Last week of		Last week of	
		June 2018		February 2019	

In the 120^{th} PSOC meeting SLDC stated that ERPC has proposed to conduct a workshop at U. Kolab / Balimela. Mock Black start exercise for Balimela & Upper Kolab will be finalized after getting confirmation from ERPC.

OHPC / SLDC may please deliberate.

C.15: Implementation of Islanding scheme:

Efforts should be made to design islanding scheme based on frequency sensing relays so that in case of imminent grid failure, electrical islands can formed. These electrical islands can not only help in maintaining supply to essential services but would also help in faster restoration of grid.

No islanding scheme is available in Odisha, Bihar and Sikkim.

OPTCL has submitted the detail plan of IbTPS islanding scheme

OCC advised OPTCL to give a presentation on CPP islanding scheme existing in Odisha with the details of extending power capacity to Odisha during emergencies.

In 144th OCC, OPTCL informed that they are yet to convene a separate meeting with respective CPPs.

In 145th OCC ERLDC wanted to know that whether the islanding scheme for IbTPS considers the Low frequency condition or not.

OPTCL may deliberate the status.

C.16: Multiple tripping of 400 kV transmission lines emanating from Meramundali Grid S/S and issue of Auto re-closure.

For the last two months, several tripping of the 400 kV lines from Meramundali on single phase to earth fault, has been observed. On 1st April'18 and 29th April'18 two lines tripped from Meramundali and on 28thth April'2018 three lines tripped. This poses a serious threat to the grid in view of loss of N-1 reliability of Meramundali substation. Further It may also be seen that Auto-reclosure on the lines are not taking place. The issue has been raised in PCC forum on multiple occasions. Apart from this it may kindly be seen that on 28th April Sterlite CPP was connected only via 400 kV Sterlite-Jharsuguda ckts due to tripping of both Meramundali circuits.

In view of above, OPTCL is requested to look in to the issues and find out the reason for so many faults at the substation. It may be readily appreciated that any uncoordinated tripping could result in wide-scale impact on the system near Meramundali. Further OPTCL is advised to submit the following:

- 1. DR/EL for these tripping and the reason for the faults.
- 2. Action being taken to reduce such fault on these lines.
- 3. A/R status on these lines at Meramundali as well as remote end.

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 April'18:

Sl. No	Name of Discom	No. of message issued	Over drawal (MU)	Deviation (%)
1	CESU	0	16.253	2.218
2	WESCO	0	-4.757	0.74
3	NESCO	0	4.912	1.172
4	SOUTHCO	0	0.018	0.006
	Total	0	16.426	

It is noticed that CESU & NESCO have over drawn while WESCO have under drawn during the month. SOUTHCO's drawl was in line with the schedule.

SLDC/ Discoms may please deliberate.

D.2: Deviation Charges against DISCOM's

As per order dated 07.05.2018 passed in Appeal No. 55 of 2015 filed by GRIDCO, Hon'ble APTEL disposed the Appeal and accepted the amicable settlement between GRIDCO, DISCOMs and SLDC regarding the disputes of Deviation Charges. The abstract of settlements are as stated.

- a. For the period from 01.04.2012 to 16.02.2014, the bills towards Unscheduled Energy will be settled as per Intra-ABT Regulations of OERC without considering the penalty for gaming as the recognition of gaming will further burden the ultimate consumers of Odisha.
- b. However, for the period from 17.02.2014 and onwards, in absence of any prevailing DSM Regulations for the State, the Deviation Energy may be settled between GRIDCO and DISCOMs at BSP rate, till any Intra-State DSM Regulations in this regard comes in to effect.
- c. SLDC will stop billing to DISCOMs on account of deviation of energy henceforth till DSM Regulation is pronounced by OERC and to withdraw the DSM bills so raised **since 17.02.2014**.

Accordingly SLDC intimated all DISCOMs and stopped preparing Deviation Bill w.e.f May 2018 and withdrew the bills raised from 17.02.2014. However, the scheduling process will continue. DISCOMs are requested to forward their realistic drawal schedule for generation planning by SLDC.

Members may discuss.

D.3: Prolonged outage of transmission elements and tentative revival dates

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

Sl. No	Name of transmission element		Probable date of revival
1	220/132 kV, 100 MVA, Auto- 1 at Duburi	Main tank severely damaged	May-2018
2	220/132kV, 100MVA Auto-2 at Bhadrak	Fire hazard on 31.05.2017	June-2018

CGM (O&M) may update the progress.

D.4: Communication issues

The status of data communication from CGPs as deliberated in the 120th 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 117th PSOC meeting, Members opined that GCC should file a case soon against NINL & IRE before the OERC.

In the 118th PSOC meeting, GCC stated that a case will be filed against NINL, IRE & Rohit Ferrotech for non-compliance of the data communication provision.

In the 119th PSOC meeting it was decided that GCC shall file a case against the defaulting CGP/Consumers before the OERC. SLDC stated that RLDC is not getting the GMR-Meramundali line flow data. CGM (Telecom) has assured to investigate the issue.

In the 120th PSOC meeting CGM (Telecom) stated that IRE has requested OPTCL for proforma invoice to take up the communication work for them. It was learnt that CT /PT are not available at IRE end. It was decided in the meeting that Sr. G.M (O&M), Zone-I shall depute his staff to IRE

to ascertain the availability of CT/PT at their end. If not available, the same may be reported to the Electrical Inspector for necessary action. GCC was also advised to file a case against IRE & NINL before the Commission through RT&C wing of OPTCL for non-compliance of OGC provisions.

GMR Issue

GMR on line data is available at SLDC but not available directly to ERLDC. GMR entrusted the work on Powergrid.

CGM (Telecom)/ O&M / GCC / GMR / RT&C may deliberate the status.

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

In the 116th 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 117th 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 118th 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 119th 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 120th 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.

O&M / IT may deliberate.

D.6: Web based drawal / generation scheduling.

In the 111th PSOC meeting it was decided that from 1st August 2017 the schedule submitted through web portal will be considered. The web based schedule will be implemented for TTPS and Ib TPS from 1st 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 120th PSOC meeting it was decided that SLDC and IT may discuss the issue and resolve.

SLDC / IT may update.

D.7.DISCOM Issues

CESU

- 1. Construction of 132/33 kV S/s at Parjang and Kantilo
- 2. The discrepancy in BSP / Transmission charge bill intimated by CESU is not being responded by GRIDCO/ OPTCL.
- 3. To provide details energy drawl estimation due to PT / CT failure.

CESU may deliberate

D.8: Rectification / Replacement of Defective Meters at different interface points.

A list of defective meters indicating the defects has been placed in the 116th PSOC meeting wherein OPTCL was requested to take necessary action for checking CT / PT and early replacement of these meters wherever required. O&M proposed to convene a meeting to discuss the issue. The meeting is yet to be convened.

In the 119th PSOC meeting O&M stated that a meeting will be convened with Secure Meters and SLDC to discuss the issue.

In the 120th PSOC meeting O&M stated that the meeting has already been conducted by Mr. P. K. Pattanayak, DGM (EMR), who is the nodal officer. It was decided that OPTCL shall install new meters replacing the defective billing meters and Optical fiber cables available at store to be issued to field units for data down loading from APEX-100 meters also to release meters to be used as audit meters. M/s Secure meter has to examine the optical port of the meters having USB port problem.

O&M may deliberate the status

D.9: RSP agenda - Power supply interruption to RSP

- a. **27-Apr-18, 22:08 Hrs, Tarkera Grid s/s:** 220kV RSP Fdr-1 & 2 Tripped on Z1 Distance Protn. & E/F ('C' pole Tripped for both feeders) causing failure of GRID power inside RSP, occurrence of islanding of both Units took place. While, it was being normalized, only RSP Fdr-2 could be closed & RSP-1 breaker was not getting closed, leading to only one 220kV Fdr being available at night. There was no other disturbance at T.Grid.
- **b. 29-Apr-18, 18:17 Hrs, Tarkera Grid s/s:** Auto Tr-3 Tripped with severe Voltage Dip, Islandings of both Units occurred on df/dt & UV, many loads affected due to Voltage Dip. Our Unit-1 Tripped after one minute of Islanding leading to power failure in its Island. This further aggravated the effect of disturbance.
- **c.** 10-May-18, 19:45 Hrs, Tarkera Grid s/s: 220kV PGCIL Fdr-2 'B' Ph jumper snapped leading to disturbance in 'B' Ph currents of RSP-1 & RSP-2 to a dangerous level as 220kV Bus Coupler had Tripped. RSP Inc-2 was exporting 20 MW & RSP Inc-1 was importing heavily, we were worried for Tripping of any or both of the fdrs as nature of disturbance was not clear immediately.

Later, it was known that all 220kV Fdrs were kept split in Bus-1 & 2 and Bus coupler Tripped, leading to circulation of current. It is felt that jumper snappings can be diagnosed, well in advance, by "Thermography', thereby such situations can altogether be avoided.

RSP may deliberate

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:

Sl.	Transmission element details	Present Status
No		
1	Commissioning of 220 kV Jayanagar-Jeypore 2 nd DC line	Work has already been started.
		Expected to be completed by June'18.
2	Commissioning of 400 kV Meramundali-Mendhasal 2 nd	Line is ready and shall be charged after
	ckt.	commissioning of 3 rd ICT at
		Mendhasal. Expected by April'2018.
3	400/220 kV, 315 MVA 3 rd ICT at Mendhasal S/S	August'18
4	400/220 kV, 2x315 MVA Lapanga S/S	June'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	May'18
8	220/33 kV, 2x40 MVA Keonjhar GIS S/S	May'18
9	220/33 kV, 2x20 MVA Narasinghpur S/S	June'18
10	220/132 /33 kV, 2x100 MVA Aska S/S	December'18
11	220/132/33 kV, Bargarh (New) S/S (320 MVA)	Charged during March'18
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)	June'18
16	400 KV IB - Lapanga D/C (SEL, Bhushan & L&T)	June'18
17	132/33 kV Ghense S/S	Charged during April'18
18	132/33 kV Dhenkikote S/S	Charged on 24.02.2018
19	132/33 kV Betanati S/S	July'18
20	132/33 kV Kantabanji S/S	Charged on 28.02.18
21	132/33 kV R.Udyagiri S/S	July'18
22	132/33 kV Chikiti S/S	August'18
23	132/33 kV Athagarh S/S	May'18

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 deliberate the status.

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

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, 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 117th PSOC meeting, it was decided that CGM (O&M), OPTCL may direct the E & MR Division, Burla to take up the work.

In the 118th PSOC meeting Sr. G.M, EHT (O&M) Zone-II assured to install the meters soon. In the 119th PSOC meeting CGM (O&M) stated that Ib TPS may deposit the required amount to release meters (for check meter).

In the 12th PSOC meeting it was deliberated that IB TPS is yet to deposit the required amount for release of Energy meters.

OPTCL / IB TPS may 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 21st 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. Another meeting was proposed to be convened in the month of August'17 to finalize the mechanism of data communication. In the 113th PSOC meeting, it was decided that GRIDCO will take follow up action with all the RE generators to provide real time generation data to SLDC. ERLDC has reminded again to intimate the status.

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.

In the 116th PSOC meeting, CGM (Telecom) stated that the solar projects need to pay the SCADA integration charges for display of the data through SCADA.

In the 117th PSOC meeting CGM (Telecom) stated that for pilot project the integration charges may not be required. The Agencies may be asked to proceed with their project.

In the 118th PSOC meeting GRIDCO state that MoM has already been made for 2 Nos. pilot projects and work will be started soon.

In the 119th PSOC meeting it was decided that SLDC shall write a letter to Gridco to intimate the status for deliberations in the OCC. Gridco may explore for early completion of the pilot project.

In the 12th PSOC meeting CGM (Telecom) stated that they have already issued clearance to GRIDCO. GRIDCO may pursue the matter with the agencies awarded for pilot project.

Telecom / GRIDCO may deliberate the status.

E.4: Major Events in the month of April'18

- 12.04.18: Sadipali Solar (20 MW) connected with 132/33 kV Kesinga S/S through 33 kV dedicated feeder.
- 13.04.18: Bargada-Ghens 132 kV DC line charged along with 1x40 MVA 132/33 kV Ghens S/S.

E.5: Important Grid Incidences during the month of April'18.

No reportable incidence occurred in OPTCL system during the month April-18

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

Sl	Transmission lines	Tripping	Restoration	Reason
No		Dt/time	Dt/time	
1	400 kV Meramundali-MendhasalCkt	07.04.18	08.04.18	'Y' ph insulator damaged
		19:30	21:58	at Loc. No-24/01.
2	132 kV Meramundali –	09.04.18	10.04.18	Line patrolling was done
	KhajuriakataCkt	18:27	09:45	but no fault found.
3	220 kV Balasore-BhadrakCkt	23.04.18	24.04.18	'B' ph insulator damaged
		15:34	11:03	at Loc. No-202.
4	220 kV Joda-RamchandrapurCkt	26.04.18	27.04.18	Problem at
		12:50	17:29	Ramchandrapur end.
5	400 kV Meramundali-Vedanta Ckt-I	28.04.18	29.04.18	Line patrolling was done
		17:30	10:19	but no fault found.

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

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

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

Sl.	Station	Unit	Period	Remarks	
1	Burla	# 1	14.03.18 to 31.05.18	Shaft seal leakage	
		# 5	25.10.16 to continue	Under R,M & U	
		# 6	16.10.15 to continue	Under R, M & U	
2	Chiplima	# 3	15.10.15 to continue	Under R,M & U	
		# 1	01.06.18 to 15.06.18	Annual Maintenance	
3	Balimela	# 1	05.08.16 to continue	Under R,M & U	
		# 2	20.11.17 to continue	Programming for R&M	
4	Upper Kolab	# 2	28.05.17 to continue	Upstream leakage & intake gate Problem	
5	TTPS	# 2	24.06.18 to 08.07.18	Annual Maintenance	

OHPC / SLDC may deliberate.

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

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

Name of Hydro	Generation	n Program	Reservoir	Reservoir	MDDL	High
Gen. Station	(MW)		Level as on	Level as on		Flood
	June'18	June'18	01.05.17	01.05.18		Reservoir
	(1 st fortnight)	(2 nd fortnight)				Level
HPS-I, Burla	30	50	611.69 ft	611.10 ft	590 ft.	630 ft.
HPS-II, Chiplima	20	40	-	-	-	-
Balimela	160	140	1453.30 ft	1456.50 ft	1440 ft.	1516 ft.
Rengali	120	100	117.87 mtr	119.66 mtr	109.72mtr	123.5 mtr.
U.Kolab	50	50	849.48 mtr	850.72 mtr	844 mtr	858 mtr.
U. Indravati	120	120	631.15 mtr	632.61 mrt	625mtr	642 mtr
MKD (O/D)	30	30	2724.35 ft	2736.30 ft	2685 ft.	2750 ft.
TOTAL	530	530				

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 June'2018.

Sl. No	Discom	Average	Peak
1	CESU	1100	1370
2	WESCO	1000	1300
3	NESCO	800	1000
4	SOUTHCO	400	500
6	Total Discom	3300	4170
	System Loss & others	150	200
	Total Demand	3450	4270
Availab	ility		
1	Hydro	530	1200
2	State Thermal	770	770
3	IPP, small hydro &RE	450	650
4	ISGS share (including OA&	1350	1350
	purchase)		
5	CGP support (OA)	300	300
6	Total availability	3450	4270
7	Surplus / Deficit	0	0

Members may discuss.

PART F: OTHER ISSUES

F.1: Date and Venue of the next (122nd) PSOC meeting.