Odisha Power Transmission Corporation Ltd.
Bhubaneswar.

Agenda
for
137th Power System Operational Co-ordination Meeting

Date: 21.09.2019
Venue: Power Training Center, Chandaka, Bhubaneswar

Odisha Power Transmission Corporation Ltd. Bhubaneswar.

Agenda for 137th PSOC Meeting to be held on 21.09.2019 at OPTCL Power Training Center, Chandaka, Bhubaneswar

A. Confirmation of the minutes of the 136th PSOC Meeting held on 21.08.2019

The minutes of meeting was circulated vide letter No. SGM (PS)-Pl-15/2019/2880 (48) dated 06.09.2019 to all the members and also uploaded in the SLDC website. Members may offer their comments. If there are no comments, 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 August'2019

C.1: Status of projects funded under PSDF scheme

C.2: Finalization Outage Request and processing timeline—ERLDC.

C.3: Status of main bay of 400kV Indravati (OHPC)-Indravati(PG) at OHPC substation.

C.4: Implementation of Automatic Demand Management Scheme.

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

C.6: Bypassing arrangement of LILO of 400kV Lines at Angul

C.7: Update on status of telemetry

C.8: Mock Black start exercises in Eastern Region

C.9: Collection of modeling data from Renewable as well as conventional energy generators: ERLDC.

C.10: Implementation of Automatic Generation Control in Eastern Region--ERLDC

C.11:Clarification regarding load flow direction in 400 KV JP_GZW_FSC to 400 KV JP_GZW_HVDC Bus vis-a-vis loading PoC charges of these lines to Odisha --GRIDCO

C.12: Auxiliary power consumption by Powergrid Substations--GRIDCO

C.13: Data for preparation Load Generation Balance Report (LGBR) of ER for the year 2020-21

C.14: Submission of state tie-line wise daily energy exchange (in mu) for preparation of Daily Power Supply Position.--ERLDC

C.15: Flash Report by SLDC in Real Time --ERLDC

C.16: Monitoring of Next Six-Month New Element Integration in OCC and Its Update on Monthly Basis --ERLDC

C.17: Preparation of crisis management plan for Cyber Security in Power Sector in line with CERT-IN.

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

D.2: Compliance of CEA Regulations for Grid Connectivity of Renewable Energy Sources.

D.3: Data communication from newly commissioned RE sources connected at 132 kV- SLDC.

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

D.5: Colony consumption of POWERGRID S/Ss

D.6: Collection of modelling data for new Transmission elements / Generators for system study.

D.7: Procedure for first time charging of Transmission Elements.

E.1: Commissioning status of New Transmission elements.

E.2: HT metering at DISCOM interface points.-SLDC.

E.3: HT metering in the Tertiary winding of ICT in PGCIL S/Ss

E.4: Major Events in the month of August'19

E.5: Important grid incidences during the month of August'19.

E.6: Outage of major transmission Elements during the month August'19. (above 10 hrs).

E.7: Prolonged outage of Transmission elements

E.8: Review of Outage Program of State Generators for the month of October'2019

E.9: Generation Program for the month of October'2019.

E.10: Anticipated power generation and demand for the month of October'2019.

F.1: Date and Venue of the next (138th) PSOC meeting.

PART B: GRID PERFORMANCE

B. Review of Grid Performance for the month of August'19.

A. Frequency:

Hourly frequency variation for the month of August'19.

Month	% of time frequency remained					Average
	<49.00	49.00-49.70	49.70-49.90	**49.90-50.05**	>50.05	
June'19	0.00	0.05	10.06	69.87	20.03	49.99
July'19	0.00	0.05	7.00	67.57	25.39	50.00
Aug'19	0.00	0.10	7.29	71.69	20.92	49.99

Maximum & Minimum frequency during the month of July'19 & August'19.

Month	Freq (Hz)	Date	Time
July'19	Maximum –50.23	07.07.19	13:00 Hrs
	Minimum – 49.72	04.07.19	00:00 Hrs
Aug'19	Maximum –50.26	15.08.19	09:30 Hrs
	Minimum – 49.66	20.08.19	19:15 Hrs

Grid Demand for the month of August'19

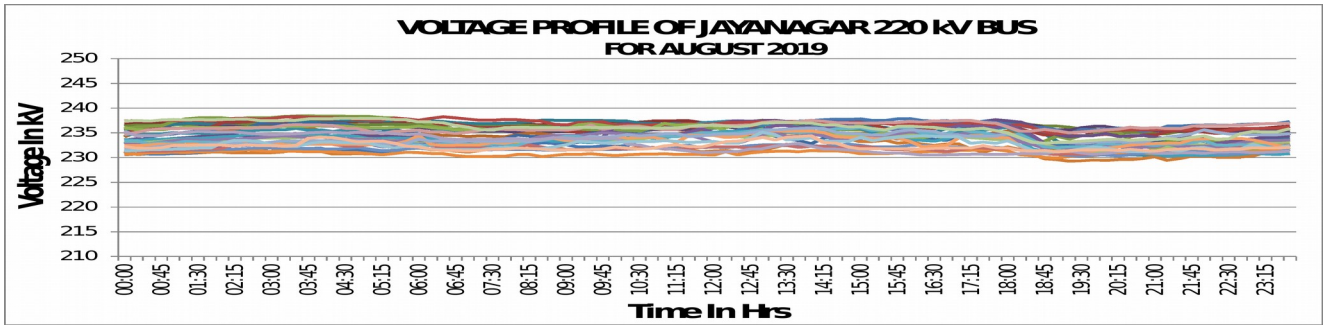
Month	Max. Consumption		Demand		Maximum Demand			Minimum Demand		
	MU	Date	MU	Avg. (MW)	MW	Date	Time	MW	Date	Time
Mar'19	98.41	27.03.19	2624	3526	4643	27.03.19	20:00	2634	18.03.19	04:00
Apr'19	113.14	05.04.19	2786	3869	5151	04.04.19	20:00	2689	20.04.19	05:00
May'19	102.99	19.05.19	2638	3545	4635	18.05.19	24:00	1720	03.05.19	18:00
June'19	105.24	11.06.19	2653	3684	4790	11.06.19	23:00	2556	13.06.19	06:00
July'19	106.80	15.07.19	2744	3688	4899	15.07.19	21:00	2640	02.07.19	04:00
Aug'19	**105.41**	**21.08.19**	**2924**	**3930**	**4901**	**16.08.19**	**21:00**	**3161**	**08.08.19**	**05:00**
Aug'18	**114.57**	**24.08.18**	**3165**	**4254**	**5428**	**23.08.18**	**21:00**	**3313**	**28.08.18**	**14:00**

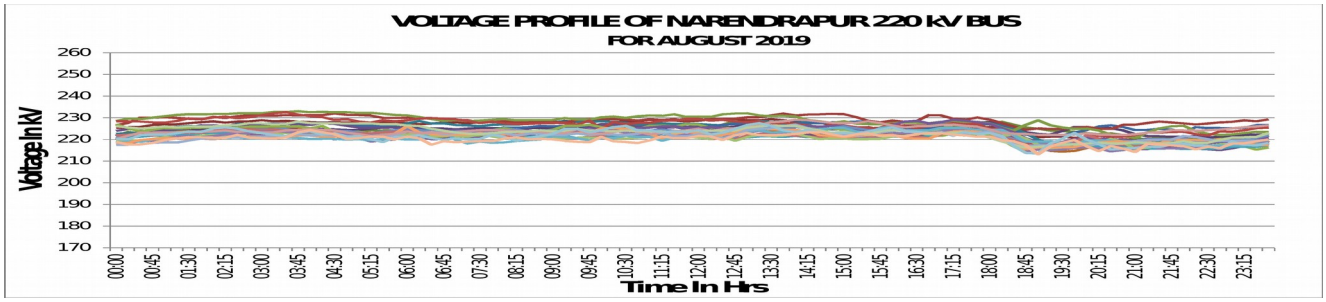
B. Voltage Profile of 220 kV Buses in OPTCL system for the month of: August'19

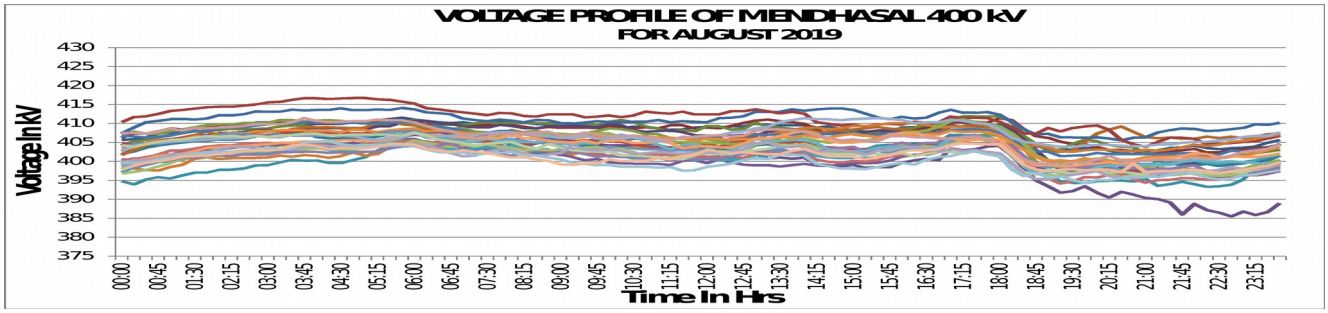
Sl. No	S/s Name	Maximum			Minimum		
		kV	Day	Time	kV	Day	Time
1	Atri	233.42	8	3:45	209.40	10	22:45
2	Balasore	230.53	7	5:45	209.80	10	23:15
3	Barkote	232.43	8	4:00	225.68	29	19:15
4	Bargarh	232.90	13	6:00	217.25	29	18:45
5	Bhadrak	230.82	25	15:00	208.88	10	21:45
6	Bhanjanagar	235.90	8	3:45	212.05	10	20:15
7	Bidanasi	235.73	25	15:15	222.56	16	11:15
8	Bolangir	232.38	8	5:00	215.11	10	21:30
9	Budhipadar	232.26	8	5:45	224.93	21	6:45
10	Chandaka	229.09	8	4:00	204.72	10	22:45
11	Cuttack	228.45	26	3:45	205.30	10	22:45
12	Duburi(O)	229.89	8	4:30	215.81	10	23:15
13	Duburi (N)	232.90	13	6:00	217.25	29	18:45
14	Jayanagar	**238.50**	8	3:45	229.32	11	19:15
15	Joda	229.89	8	3:45	216.50	10	23:45
16	Katapalli	229.66	8	4:45	218.46	21	5:30
17	Lapanga	232.32	8	4:45	222.04	21	5:30
18	Laxmipur	**238.44**	8	3:45	225.33	11	19:15
19	Mendhasal	232.49	8	3:45	208.42	10	22:45
20	Meramundali	228.62	8	3:45	220.48	10	22:30
21	Narendrapur	233.13	8	3:45	210.96	30	13:30
22	Nayagarh	234.74	8	3:45	208.82	10	21:45
23	Paradeep	233.13	8	4:30	**203.28**	20	21:30
24	Tarkera	231.86	8	5:45	224.29	29	19:15
25	Theruvali	234.92	8	3:45	212.40	10	20:15
26	Rengali	230.13	8	3:45	223.54	29	19:15

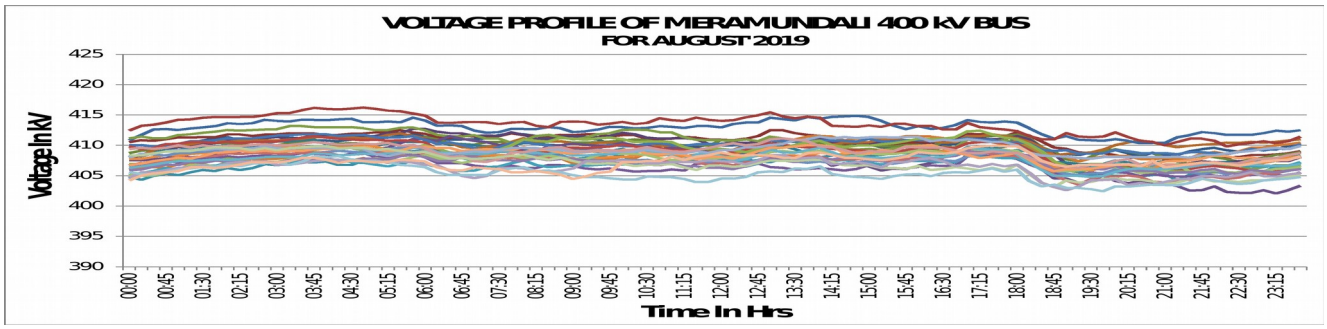
The maximum Voltage of **238.50 kV** occurred at **Jayanagar 220 kV bus.**, while **Paradeep** 220 kV bus has experienced the minimum Voltage of **203.28 kV.** The 220 kV Voltage profile of Jayanagar and Narendrapur and

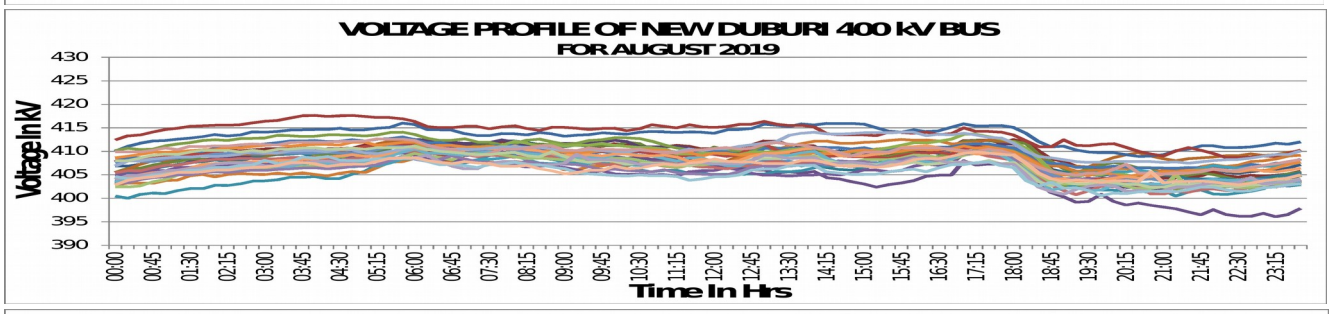
400 kV Voltage profile of Mendhasal, Meramundali and New Duburi bus during the month of **Aug'2019** are indicated.

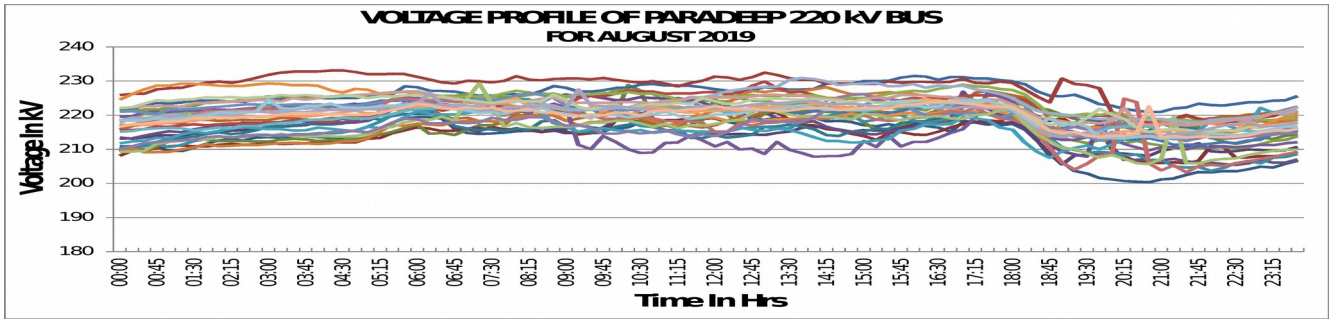












Members may discuss.

C. Loading of 220/ 132 kV Auto at 220 kV S/Ss in OPTCL system for the month of Aug–2019.

AUTO TRANSFORMER LOADING FOR THE MONTH OF AUGUST'2019

Name of the 220 kV Sub-Station (Feeding Sub-stations/Feeders)	Capacity	Drawal details						REMARKS
		Maximum			Minimum			
	MVA	MW	Day	Time	MW	Day	Time	
ATRI *{Banki, Khurda, Chandpur & Argul}*	2x160	46.00	11	00:00	5.48	20	17:15	
		46.16	11	00:00	5.52	20	17:15	
BALASORE 220/132 KV *{ Balasore, Birla Tyre(I), Ispat Alloy(I), Jaleswar, Jaleswar(T)}*	3x160	84.36	21	20:00	18.16	5	17:30	
		84.88	21	22:15	18.20	5	17:15	
		81.00	21	21:15	17.40	5	16:30	
BARGARH 220/132 kV	1x100	12.40	5	17:15	3.56	1	05:00	
	1x160	7.52	13	06:15	1.64	1	03:00	
BHADRAK 220/132 KV {Bargarh, Ghensh}	1x100	41.04	31	14:45	6.12	12	14:30	
	1x160	74.00	31	14:45	11.64	12	14:30	
	1x160	65.12	17	13:30	4.96	16	15:45	
BHANJANAGAR 220/132 KV *{ Bhanjanagar, Aska, Phulbani, Ganjam, Chatrapur}*	1x160	81.88	27	18:45	5.12	22	20:00	
	1x160	72.04	27	18:45	4.16	22	20:00	
BIDANASI 220/132 KV *{Bidanasi, Khurda }*	1x100	34.12	16	13:00	5.24	5	20:00	
	1x100	34.08	16	13:00	5.24	5	20:00	
	1x160	48.48	16	13:30	7.64	5	20:00	
BOLANGIR (SADAIPALLI) 220/132 KV { Bolangir, Patnagarh, Sonepur, Saintala, Khariar, Barpalli }	2x160	150.44	21	17:00	16.12	8	03:36	
		137.40	21	10:15	17.00	8	20:15	
BUDHIPADAR 220/132 KV *{ Jharsuguda, Jharsuguda Tr, Cemco(I), MCL, Sundergarh,Brajarajnagar, Rajgangpur}*	2x160	97.24	22	19:00	31.24	12	14:15	
		96.76	22	19:00	31.12	12	14:15	
CHANDAKA 220/132 KV *{ Chandaka, Bhubaneswar, Nimapada, Ransinghpur, Puri,Kesura, Kaipadar Tr. }*	1x100	65.24	20	11:45	25.96	26	03:45	
	1x160	114.60	20	11:45	45.92	26	03:45	
	1x100	68.20	16	22:30	7.76	20	11:30	
	1x160	110.64	20	11:45	8.64	28	15:15	
CUTTACK	1x160	64.24	16	14:45	13.56	6	20:00	
	1x100	55.08	6	20:00	9.20	7	01:00	
DUBURI 220/132 KV *{Duburi, Bamnipal(I), BRPL, MESCO, Jajpur Road, Kalarangi, Jajpur Town}*	1x160	76.64	6	20:15	15.56	24	00:15	
	1x100	58.16	18	18:45	7.36	23	11:30	
	1x100	55.40	18	18:45	6.52	6	10:15	
JAYANAGAR 220/132 KV. *[Damanjodi(NALCO), Traction S/Ss, Tentulikhunti, Sunabeda, Jayanagar]*	1x160	51.68	23	07:15	6.12	9	13:45	
	1x160	86.52	17	19:45	6.16	9	13:45	
JODA 220/132 KV *{ Joda,Tensa, FAP(I), Bolani(I), Nalda Tr.,Polasponga, *Rairangpur, Bhalulata traction}*	3x100	58.12	17	15:15	24.56	1	11:30	*"*" - Alternate P/S from Kuchei.*
		60.48	17	15:15	25.48	1	11:30	
		56.64	10	21:00	22.72	3	17:00	
KATAPALI 220/132 KV {Chipilima,Bargarh, ACC,Sonepur & Katapali area load.}	1x100	34.68	5	10:15	4.68	3	19:30	*Supported by Burla & Chipilima power.*
	1x100	32.88	5	16:45	5.00	3	02:30	
	1x160	51.96	5	10:15	7.64	3	02:30	
LAPANGA *{Kuchinda, Aryan Viraj, Shyam Metallics}*	2x160	59.32	6	18:45	12.24	27	03:00	
		59.16	6	18:45	12.12	27	10:00	
MERAMUNDALI 220/132 kV *{Meramundali Traction, Dhenkanal, Navchrome(I), Hind Metal, Aarti,BRG}*	3x100	32.76	16	13:00	4.16	24	03:30	
		32.24	16	13:00	3.48	10	03:30	
		8.84	18	00:45	0.80	27	00:00	
Mendhasal *{ Part area load of Khurda S/S}*	2x100	49.80	20	11:00	20.40	8	12:00	
		46.80	20	11:00	19.80	8	12:00	
NARENDRAPUR 220/132KV *{ Narendrapur, NarendrapurTr, Berhampur, Chhatrapur, Ganjam, Balugaon, Digapahandi, Mohana.}*	2x160	105.92	9	19:30	58.56	2	12:45	
		125.56	11	05:00	57.48	2	12:45	
	1x100	70.96	7	05:45	33.20	2	12:45	
PARDEEP 220/132 KV { Paradeep, Kendrapada, Pattamundai, Chandikhol, Cuttack, Jagatsinghpur, Phulnakhara}	1x100	50.08	31	20:45	10.84	3	10:15	
	1x160	81.64	31	20:30	17.68	3	10:15	
	1x160	83.84	31	20:45:00	17.04	7.00	15:45	
TARKERA 220/132 KV *[Rourkela, Rourkela Tr.,RSP(I), Chhend , Adhunik Metal, Rajgangpur, OCL(I), Rajgangpur Tr.]*	4x100	50.48	1	19:30	5.44	17	21:15	
		51.76	1	19:15	6.08	17	21:15	
		50.68	9	19:15	5.52	17	21:15	
		50.52	1	19:15	6.12	17	21:15	
THERUVALLI 220/132 KV. *{Theruvali, IMFAL(I), JK(I), Junagarh, Kesinga,Powmex(I), Rayagada, }*	2x100	60.16	31	10:48	7.32	8	11:00	*Rayagada & Paralakhemundi can be fed from Machhkund system.*
		48.72	28	12:15	7.60	8	11:00	
	1x160	71.64	11	19:00	11.32	8	11:00	
TTPS 220/132 KV *{ Chainpal, FCI (I), Angul, MCL Nandira(I), Rairakhole,Boinda,Kamakhyanagar, Kalarangi,Nuapatna, Choudwar }*	1x160	105.07	4	20:15	0.00	29	16:00	
	1x160	105.07	4	20:15	0.00	29	16:00	
SAMANGARA *{ Puri, Nimapara & Konark}*	2x160							

D. DISCOM Drawal up to the month of August'19

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'19	798	760.542	857.404	18.345	839.059	78.517
	May'19	770.33	664.438	689.035	16.166	672.869	8.431
	June'19	798	758.651	793.853	17.431	776.422	17.771
	July'19	770.33	778.505	798.994	15.847	783.147	4.642
	Aug'19	**770.33**	**745.852**	**785.057**	**14.196**	**770.861**	**25.009**
WESCO	Apr'19	635	649.188	856.374	149.999	706.375	57.187
	May'19	604.71	703.036	841.28	100.32	740.96	37.924
	June'19	635	656.64	789.792	110.175	679.617	22.977
	July'19	604.71	670.083	835.876	143.639	692.237	22.154
	Aug'19	**604.71**	**637.41**	**1043.79**	**423.111**	**620.682**	**-16.728**
NESCO	Apr'19	517	478.905	600.692	99.608	501.084	22.179
	May'19	521.48	508.934	629.852	89.858	539.994	31.06
	June'19	517	490.244	607.403	105.15	502.253	12.009
	July'19	521.48	532.112	660.208	131.831	528.377	-3.735
	Aug'19	521.48	**493.554**	**627.779**	**128.157**	**499.622**	**6.068**
SOUTHCO	Apr'19	331	303.576	334.361	0	334.361	30.785
	May'19	310.85	320.055	336.003	0	336.003	15.048
	June'19	331	318.393	324.819	0.116	324.703	6.31
	July'19	310.85	315.891	305.83	0.061	305.769	-10.122
	Aug'19	**310.85**	**291.711**	**296.609**	**0**	**296.609**	**4.898**

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.

E. Energy Generation / Import up to the month of August'19

Figures in MU

Month	Thermal (TTPS+IbTPS)	OHPC & MKD	CGP Support	IPP Inj.	RE	ISGS	Total
April'19	588.681	538.473	308.480	263.019	29.852	1057.035	2785.540
May'19	608.185	571.561	290.845	203.850	46.247	916.949	2637.637
June'19	581.856	414.962	329.321	212.683	47.362	1066.419	2652.603
July'19	566.902	407.505	363.839	198.433	46.030	1171.210	2753.919
Aug'19	**359.551**	**836.840**	**345.534**	**56.723**	**46.535**	**1278.578**	**2923.761**
Total	**2705.173**	**2769.341**	**1638.02**	**934.708**	**216.026**	**5490.191**	**13753.460**

F. Drawal of Machhakund Power

The drawal of Machhakund power up to the month of August'19 are as detailed:

Month	Total Generation		Odisha Drawl		AP Drawl	
	MU	Avg (MW)	MU	Avg (MW)	MU	Avg (MW)
Apr'19	53.168	73.84	24.896	34.58	26.401	36.67
May'19	60.577	81.42	26.811	36.04	31.821	42.77
June'19	52.203	72.50	22.395	31.10	30.840	42.84
July'19	59.779	80.35	26.579	35.73	31.116	41.82
Aug'19	53.318	71.66	24.773	33.30	27.139	36.48
Total	**279.045**		**125.454**		**147.317**	

In the 136th PSOC meeting Southco stated that Dasmantpur feeder in expected to be charged today i.e on 21.08.2019.

Sr.GM (O&M), Zone –I suggested to explore the following link lines for providing adequate matching load in Machhakund system.

i. Connecting Patangi S/S or Proposed Lamtaput S/S with Podagada S/S through 132 kV link.
ii. Providing Sunabeda S/S area load in Machhakund system
iii. Modification of Jayanagar S/S to accommodate Jayanagar load

GRIDCO / O&M/SLDC/SOUTHCO may deliberate.

G. Under Frequency Relay operation in OPTCL System during the month of August'19.

Since, the frequency had never gone beyond the lowest setting of UFR, there was no UF Relay operation occurred during the month of **August'19.**

H. Status of Open Access applications up to the month of August'2019

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	MU
		Intra - State	Inter-State			Total	Intra - State	Inter-State			Total		
			Bilateral		PXI			Bilateral		PXI			
			ST	MT/ LT				ST	MT/ LT				
1	April'19	48	100	0	24	172	48	100	0	24	172	0	522.98
2	May'19	21	92	0	29	142	21	92	0	29	142	0	487.30
3	June'19	49	106	0	32	187	49	106	0	32	187	0	641.01
4	July'19	94	60	0	28	182	94	60	0	28	182	0	726.36
5	**Aug'19**	114	132	0	38	284	110	132	0	38	280	4	904.48
	Total	**326**	**490**	**0**	**151**	**967**	**322**	**490**	**0**	**151**	**963**	**4**	**3282.13**

PART C – Issues discussed in the 161st OCC meeting of ERPC on 20.09.2019

C.1: Status of projects funded under PSDF schemes

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 129th 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	31.03.20	162.5 Cr. Total expenditure may not exceed Rs. 68 Crs.	38.09 Cr. Received Rs. 8.00 Cr on 28.03.19	***90% equipment installed and commissioned. Tender for measuring instruments under evaluation.***
7		Implementation of OPGW based reliable communication at 132kV and above substations	15.11.2017		51.22 Cr	2.56 Cr received as 10 % DPR. Claimed for 20 %.	Order placed. Expected by Sept'19
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-Nov18 Chiplima Dec 2018	22.35 Cr.	2.674 Cr	***Placed work order for Balimela. PO for other units amounting Rs. 12.79 Crs placed. Order under process.***
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	27-07-18		31.94 Cr Ested. Cost. Approved amount 30.26 Cr. Grant amount 27.23 Cr.	Rs.2.72 Cr received as 10% of DPR. Retendering under process.	Agreement signed and sent to NLDC for signature. Retendering already done.
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. 2.93 Cr recommended by Appraisal committee.		CERC approval received. Tender documents will be made by end of August'19.
	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).	12.03.2018 Date of submission		41.1 Cr Estt cost	10% of DPR to be asked.	Project approved. Tender to be floated after revision of specification..

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

C.2: Finalization Outage Request and processing timeline--ERLDC

The procedure for timeline regarding submission of outage request till approval of the outage formulated by ERLDC has been circulated and discussed in 156th OCC meeting held at NTPC, Kahalgaon. The same had also been presented in 157th OCC meeting held at ERPC, Kolkata for beneficiary's comments/suggestion. Till date ERLDC did not receive any objection/suggestion from the utilities. Under this circumstance, the procedure mentioned through a flow chart in Annexure-B15 may be approved and minute unless any modification/suggestion recommended. In 158th OCC, all the constituents were advised to submit their comments on outage procedure within a week. OCC decided to finalize the procedure in next OCC Meeting.

In the 136th PSOC meeting it was decided that SLDC and O&M shall submit feedback to ERPC

SLDC / O&M may deliberate.

C.3: Status of main bay of 400kV Indravati (OHPC)-Indravati(PG) at OHPC substation.

In 159th OCC, OHPC was advised to submit a detail plan of restoration of the main bay to ERLDC and ERPC.

In the 136th PSOC meeting, Sr. G.M (O&M), Zone-I stated that dismantling process of the foundation of the defunct CB has already been started.

O&M may update.

C.4: Implementation of Automatic Demand Management Scheme

The latest status along with proposed logic as follows:

Sl. No	State /Utility	Logic for ADMS operation	Implementation status/target	Proposed logic (if different from under implementation logic
1	Odisha	1. System Frequency < 49.9 Hz 2. Odisha over-drawl > 150 MW 3. DISCOM over-drawl > (40 MW)	10 Months Sent for PSDF approval	Logic 2 and 3 is AND or OR, in case it is AND then ADMS may not operate when DISCOMs are in schedule but GRIDCO is over drawing 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 123rd PSOC meeting SLDC stated that since the estimated cost has increased due to inclusive of SCADA integration, the revised estimate is placed in the BoD for approval.

In the 133rd PSOC meeting a committee was constituted with representatives of DISCOM, Telecom, IT & SLDC.
A meeting of the Committee was held on Dt. 06.07.2019. SLDC made a presentation on the logic and methodology to be adopted for the ADMS. The technical specifications prepared by SLDC were shared among the concern wings of OPTCL for their views. The specification will be finalized on receipt of the same. The DISCOMs were requested to update the list of feeders and group considering the present network configuration. On finalization of the above, the tendering process will be taken up by CPC wing of OPTCL as already approved by CMD, OPTCL.
The role of different wings was discussed in the meeting as tabled.

Role of different wings of OPTCL for implementation of ADMS

Task	Responsible Entity in OPTCL
Preparation of Tender Document and finalization of ADMS logic	SLDC
Finalization of Technical Spec.	Telecom wing, OPTCL
Floating of Tender	CPC wing, OPTCL
Interfacing between SCADA and ADMS Server at SLDC	Telecom wing, OPTCL
Communication link between SLDC ADMS Server and Grid S/S	IT / Telecom wing, OPTCL
Installation of RTU at Grid S/s	Under the supervision of O&M / Telecom wing, OPTCL
Connection of 33KV trip Ckt. with RTU at Grid S/S	Under the supervision of O & M wing, OPTCL
Updating and Grouping of 33KV feeders	Discom
Day to day monitoring of ADMS	SLDC
Bidding Guidelines	As per OPTCL procurement guidelines

As decided in the 135th PSOC meeting, SLDC convened a meeting on 06.08.2019 with Telecom, O&M, IT and CPC to discuss their rolls in the ADMS project.

The Technical & Commercial specification have been approved by the committee and forwarded to CPC for processing the Tender.

SLDC / Members may deliberate

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

PGCIL has already commissioned the 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 136rd 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 kV D/C line at Bolangir (PG) S/S.	Construction of 220 kV Sadeipali- Kesinga line has started. 220 kV Sadeipali-Bolangir (PG) portion of the line is expected by March'20.
2.	**400/220 kV Keonjhar S/S.**	
a.	Keonjhar (PG)-Keonjhar (220/33 kV) 220 kV D/C line	220 kV S.C line and Keonjhar S/S (220/33 kV), 2x20 MVA charged on 31.12.2018. 2nd ckt; charged on 03.08.2019.
b.	Keonjhar (PG)-Turumunga (220/132 kV) & 220 kV D/C Line.	By 2021. Order placed.
3.	**400/220 kV Pandiabil Grid S/s**	
a.	Pratapsasan(OPTCL)-Pandiabil (PG) 220 kV D/C	December'2019

C.GM (Cont) / CGM (Telecom) may update.

C.6: Bypassing arrangement of LILO of 400kV Lines at Angul

LILO of Meramundali-Bolangir/Jeypore 400 kV S/C line and LILO of one Ckt of Talcher-Meramundali 400 kV D/C line has been done at Angul 765/400kV Sub-station. The bypass arrangement for these circuits is under implementation at Angul by Powergrid.

In 158th OCC, Powergrid informed that bypass arrangement would be completed by August 2019. OPTCL informed that 2nd circuit of 400 kV Meramundali-Mendhasal line would be commissioned by 1st week of August 2019.
In the 134th PSOC meeting O&M stated that 3rd ICT at Mendhasal is expected to be charged by end of July'19, after which charging of 2nd 400 kV Meramundali-Mendhasal ckt will be taken up.

In the 136th PSOC meeting, CGM (Const) stated that charging of 3rd ICT at Mendhasal is expected by end of August'2019. O&M may take steps for forest/tree clearing along the line.

O&M may update.

C.7: Update on status of telemetry

CERC vide order dated 28.02.2016 on Petition No. 007/SN/2014 directed NLDC and respective RLDCs to update the status of telemetry every month at their respective websites and take up the issue of persistent non-availability of data from Generating Stations/substations at RPC meetings for appropriate action. Major issues are given below:

i. Regarding frequent intermittent of real time SCADA data from Talcher STPS Stage 1 & 2, NTPC agreed to provide additional ports by March 2019.
ii. Alternate path for Malda–Farakka OPGW link In 153rd OCC, Powergrid was advised to implement alternate OPGW link through 400 kV Kishenganj- Darbhanga-Muzaffarpur lines.

In 159th OCC, ERLDC informed that PMU data available at ERLDC is intermittent due to communication issues and PMU data reporting from PDCs at SLDCs is also intermittent. ERLDC opined that alternate OPGW link is required for reliable communication. OCC advised Powergrid to take the necessary action to resolve the issue. CERC vide order dated 28.02.2016 on Petition No. 007/SN/2014 directed, NLDC and respective RLDCs to update the status of telemetry every month at their respective websites and take up the issue of persistent non-availability of data from Generating Stations/substations at RPC meetings for appropriate action.
Issues relating OPTCL Network:

Narsingpur data:
In the 132nd PSOC meeting CGM (Telecom) stated that survey work for Meramundali-Bhanjanagar line is under process. OPGW will be reached at site after completion of survey and preparation of drum schedule.

In the 134th meeting CGM (Telecom) stated that delivery of OPGW has already been started.

In the 135th PSOC meeting DGM (Telecom) stated that replacement of earth wire by OPGW in 220 kV Bhanjanagar-Meramundali is expected by December'2019

NALCO data: DGM (Telecom) stated that the vender list and rate will be provided to NALCO for placement of order by them.

In the 133rd PSOC meeting NALCO stated that the tower schedule has been prepared.
DGM (Telecom) stated that NALCO have proposed OPTCL to do the work on deposit basis.

In the 136th PSOC meeting, it was decided that NALCO shall submit a request letter to Telecom to take up the work**.**
Telecom / NALCO may deliberate the status

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

Schedule and tentative date for conducting mock black start exercise in OHPC stations is as tabled.

Sl.	Name of Hydro Station	Schedule	Tentative Date	Schedule	Tentative Date
		Test-I		Test-II	
1	Upper Kolab	Last week of May-2019	Done on 19th July19	Last week of January 2020	
3	Rengali	2nd week of June 2019	Done on June'19	Last week of November 2020	
4	U.Indravati	3rd week of June 2019	Sept' 2019	2nd week of February 2020	
6	Balimela	3rd week of October 2019	Done on 17th July19	1st week of March 2020	
9	Burla	Last week of June 2019	Done on 20th July' 2019	Last week of February 2020	

In the 136th PSOC meeting, SLDC stated that while conducting mock Black start exercise for Upper Kolab and Upper Indravati HEPs Muniguda Traction feeder is getting interrupted. In view of the above, feeding of Muniguda Traction S/S from Theruvali S/S through a separate dedicate line may be examined.

SLDC / O&M/ OHPC may deliberate

C.9: Collection of modeling data from Renewable as well as conventional energy generators: ERLDC

As a National Grid operator, POSOCO is continuously working for ensuring reliability and security of the Grid. With penetration of more and more renewable energy source the task is becoming complicated day by day. An accurate dynamic modeling of the National Grid needs modeling of conventional as well as renewable / distributed generation sources. World Bank has engaged Digsilent as consultant for assisting POSOCO for building dynamic model of the Grid. A guideline for dynamic data collection has been developed in consultation with Digsilent Pacific team. All the utilities are requested to collect data from the grid scale renewable power plants as well as from conventional power plants under their jurisdiction and submit the same to ERLDC/ERPC as early as possible.

In the 132nd PSOC meeting, all generators as well as RE sources were requested to furnish data to SLDC for onward transmission to ERPC.

SLDC requested ERPC to forward the format for preparing the data. The format will be circulated to all RE & conventional generators in the State

In the 135th PSOC meeting, SLDC stated that the format was received on 18th July'19 and will be circulated soon.

SLDC stated that the format has been forwarded to all entities. As decided in the 136th PSOC meeting, a copy of the format was also forwarded to GRIDCO for necessary coordination.

OCC agenda indicated that Bihar/ West Bengal and Orissa are having Solar Plant with more than 5 MW capacity. However, details have not yet been received in terms of modelling data.

GRIDCO / SLDC may update

C.10: Implementation of Automatic Generation Control in Eastern Region--ERLDC

In compliance to CERC's direction in order dated 06/12/2017 in petition no 79/RC/2017, AGC was commissioned in NTPC Barh on 01st August 2019 and operationalized since 23rd August, 2019.

Vide order dated 28th August 2019, CERC in Petition No.: 319/RC/2018 directed that all the ISGS stations whose tariff is determined or adopted by CERC shall be AGC-enabled and the ancillary services including secondary control through AGC be implemented as per the following direction:

I. All thermal ISGS stations with installed capacity of 200 MW and above and all hydro stations having capacity exceeding 25 MW excluding the Run-of-River Hydro Projects irrespective of size of the generating station and whose tariff is determined or adopted by CERC are directed to install equipment at the unit control rooms for transferring the required data for AGC as per the requirement to be notified by NLDC. NLDC shall notify the said requirements within one month of this order.

II. All such ISGS stations whose tariff is determined or adopted by CERC shall have communication from the nearest wide band node to the RTU in the unit control room.
xxxxxxxxx
IX. All new thermal ISGS stations with installed capacity of 200 MW and above and hydro stations having capacity exceeding 25 MW excluding the Run-of-River Hydro Projects irrespective of size of the generating station and whose tariff is determined or adopted by CERC shall mandatorily have the capability to provide AGC support.

Member may discuss

C.11: Clarification regarding load flow direction in 400 KV JP_GZW_FSC to 400 KV JP_GZW_HVDC Bus vis-a-vis loading PoC charges of these lines to Odisha --GRIDCO

As per the PoC data uploaded by NLDC, although the direction of power flow shows from 400 KV JP_GZW_FSC Bus to 400 KV JP_GZW_HVDC bus for both the Circuits; significant portion of the cost of the said Lines has been allocated to Odisha in various quarters. Gridco has studied the load flow for four quarters of FY 2017-18 for the aforesaid lines & the comprehensive report regarding flow direction, quantum & allocated cost from 2017-18 Q1 to 2017-18 Q4 is mentioned below from which it is evident that although the load flow direction has always been towards Southern Region from Eastern Region for 2017-18, Odisha has been allocated significant portions of the transmission charge of these two lines. Such gross incongruity is against the CERC Regulation for sharing of Transmission charges as far as PoC calculation methodology is concerned. Such calculation has burdened the Odisha consumer with additional Transmission charge allocation to the tune of 15.89 Cr (i.e. 80% of the line cost) during 2017-18.Load flow study for the other quarters are also being carried out.

GRIDCO may deliberate the discussion in OCC.

C.12: Auxiliary power consumption by Powergrid Substations--GRIDCO

As per decision of Special meeting on this issue held at ERPC on 10.07.2018, drawal of auxiliary power through tertiary winding by Powergrid substations shall be treated as drawal by Powergrid from the DISCOM (s). For this, Powergrid shall approach the concerned DISCOM(s) and shall complete all the necessary formalities to become a consumer of the concerned DISCOM. Powergrid is not becoming the consumer of DISCOM Utility as a result of which, GRIDCO/DISCOM(s) are unable to realize the revenue from Powergrid, whereas GRIDCO is paying for the said quantum of energy consumed by Powergrid since October, 2017.
This issue has already been discussed in the monthly Power System Operational Coordination Committee (PSOC) meeting convened by SLDC, Odisha several times. Powergrid did not attend these meetings. DISCOMs stated that that they are not receiving proper response from the Powergrid to regularize the consumer issue.

GRIDCO may deliberate the discussion in OCC.

C.13: Data for preparation Load Generation Balance Report (LGBR) of ER for the year 2020-21

As per the IEGC, RPC Secretariat is responsible for finalization of the Annual Load Generation Balance Report (LGBR) for Peak as well as Off-peak scenarios and the annual outage plan for

the respective region To facilitate the preparation of LGBR of Eastern Region by ERPC Secretariat within the schedule period, the following data/information for the year **2020-21** in respect of the constituents/utilities of Eastern Region is urgently required:

i) The unit wise and station wise monthly energy generation proposed from existing units during 2020-21 (thermal/hydro/RES).

ii) Annual maintenance programme for each of the generating units (thermal and hydro both).

iii) Generating units under R&M / long outage indicating date of outage and reasons of outage and expected date of return (thermal and hydro both).

iv) Partial and forced outage figures (in %) of generating units for the last 3 years.

v) Month wise peak demand (MW) – restricted and unrestricted peak demand.

vi) Month wise off-peak demand (MW).

vii) Month wise energy requirement (in MU).

viii) Month wise & source wise power (both MU & MW) purchase and/or sale plan.

ix) Schedule of commissioning of new generating units during 2020-21 and unit-wise monthly generation programme (in MU).

x) Allocation of power from new generating units.

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

Information may please also be submitted in the form of soft copy through email (mail ID: **mserpcpower@nic.in / erpcjha@yahoo.co.in**).

Members may furnish the above data.

C.14: Submission of state tie-line wise daily energy exchange (in mu) for preparation of Daily Power Supply Position.--ERLDC

ERLDC prepares the daily Power Supply Position (PSP) of Eastern Region during night hour for the previous day based on the actual energy data provided by ISGS, IPP, Transmission Licensees and SLDCs(for state drawl and intra state generation). To facilitate the data submission & data collection for preparation of daily PSP, POSOCO has developed an online portal and shared the credentials with all the stakeholders. The online reporting portal of ERLDC was operationalized on 7th September 2018, in which the following are being furnished by 02:00hrs by:

1. ISGS/IPPs: – Plant wise generation (mu)

2. SLDCs: – Net exchange of the state (mu) through the state tie line
- Plant wise generation of the state (mu)
- CPP wise net injection (mu)

3. Transmission licence: Energy transferred through IR & Transnational lines (mu). During finalization of the PSP report, night shift operators of ERLDC verify the energy data submitted by the stake holders with respective energy data recorded by ERLDC SCADA as a process of data validation. It is being observed, the energy data submitted by the SLDCs for state drawl at times differs significantly from the state drawl obtained from SCADA data. Under such situation, it is very difficult for the night shift operator to identify the source or reason of mismatch between SCADA data and data furnished by states unless tie-line wise breakup of energy exchange is available.

In view of above, to make the data validation process robust and ensure accuracy of the daily PSP report, it is necessary for all the states and transmission licensees to submit following details during night hour in addition to existing data provided by them

1. All SLDCs to provide state tie-line wise break up of actual state energy exchange in Mu

2. Transmission licensee control centers (Powergrid ER-I & ER-II, DMTCL) to provide state Interconnection point ICT/line wise break up of actual energy exchange in Mu.

Necessary provision in WEB reporting software shall be made available to SLDCs and Transmission licensees to fill the drawl/injection energy data as mentioned above in the reporting portal w.e.f. 15th October, 2019.

SLDC may explain the discussions in OCC.

C.15: Flash Report by SLDC in Real Time --ERLDC

In line with IEGC Grid 5.9.4, IEGC 5.9.5 and CEA grid Standard Clause 12.2, SLDC and USER must report the grid event to ERLDC in written report. However, during real time operation the user and SLDC are not furnishing the written flash report to the ERLDC. A list of events from July and Aug-2019 is provided below where utilities have not shared the written information report and thus violating the above regulation by CERC and CEA.

6 GD-I 13-08-2019 05:53 Sadaipalli No

C.16: Monitoring of Next Six-Month New Element Integration in OCC and Its Update on Monthly Basis --ERLDC

It has been observed that many elements are getting interconnected into the system and beforehand details are not available with the system operator resulting in difficulty in carrying our operational planning activity. In view of this, as a regular agenda all ISTS and ISGS/IPP to update the OCC regarding any new elements at 220 kV and above which will be integrated in next six month with the grid. For State Grid, SLDC will be submitting the details on behalf of its intrastate Generation and transmission system. The format is given below:

Transmission Elements	Agency/ Owner	Scheme (ERSS/ TBCB/ Standing Committee/State	Schedule Completion	Projected Month for Completion	Issue Being Faced

In previous several OCC, Transmission licensees and SLDCs are requested to submit RLDC/RPC following details on monthly basis

- List of transmission element /generators of State and ISTS licensees synchronised in the last month.
- List of transmission element /generators expected to be synchronised during next month or in near future

Some SLDCs are submitting the list of intrastate and interstate line on regular basis, however transmission element /generators expected to be synchronised during next month or in near future is not submitted by any SLSC/Transmission licensee to RLDC/RPC.

SLDC may explain, CGM (Const) / CGM (O&M) may deliberate

C.17: 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 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.

As suggested by CEA, a format has been circulated among ER constituents for furnishing the information of the respective systems for discussion in OCC Meeting. The format is enclosed at Annexure-E1.

OCC advised all the constituents to submit the information to ERPC as per Annexure-E1.
OPTCL has submitted the required data

In the 136th PSOC meeting, IT wing was requested to submit the quarterly report for the quarter ending September'2019.
Sr. G.M (IT) may update

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 **Aug'19**:

Sl. No	Name of Discom	No. of message issued	Over drawal (MU)	Deviation (%)
1	CESU	0	25.009	3.353
2	WESCO	0	-16.728	2.624
3	NESCO	0	6.068	1.229
4	SOUTHCO	0	4.898	1.679
	Total	**0**	**19.247**	

It is noticed that all the DISCOMs except WESCO were over drawn during the month, while WESCO have under drawn. **CESU** has deviated **3.353%** followed by WESCO 2.624**%** from the scheduled energy while **NESCO & SOUTHCO** have deviated **1.229 %** & **1.679 %** respectively. DISCOMs may forecast their drawal in realistic approach to minimise deviation. Daily drawal profile of all DISCOMs is annexed.

SLDC/ Discoms may please deliberate.

D.2: 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 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 125th PSOC meeting GRIDCO have agreed to write a letter to M/s Chemtrol. It was decided that a committee shall be constituted with representatives of GRIDCO, O&M, Telecom & SLDC to take a decision.

In the 134th PSOC meeting, GRIDCO stated that M/s Camptrol has successfully completed the pilot project i.e real time data communication for MGM Solar at Tangi.

A committee has been constituted with representatives of GRIDCO, O&M, Telecom & SLDC. This issue was also discussed in the 16th GCC meeting held on 09.08.2019. GRIDCO assured to make a demo of data communication from MGM Solar at Tangi to SLDC by end of August'19.

In the 136th PSOC meeting, GRIDCO stated that M/S Chemtrol has agreed to make a demo of data communication from MGM Solar at Tangi to SLDC on 29th August'2019. The demo is yet to be made by Chemtrol.

GRIDCO may deliberate the status.

D.3: Data communication from newly commissioned RE sources connected at 132 kV- SLDC

There are as many 8 Nos. of Solar projects with installed capacity of 272.5 MW have connected with OPTCL network through 132 kV lines. The real time data of these plants are yet to be received at SLDC control room. Since the generation quantum is quite substantial (to the tune of 0.6 MU during a day), this has an impact on real time generation monitoring.

In the 132nd PSOC meeting it was decided that SLDC shall convene a meeting with the defaulting Solar units and Telecom to discuss the issue.

In the 133rd PSOC meeting CGM (Telecom) stated that Vinto Solar data can be integrated only after laying of optical fiber, which has been proposed for PSDF funding

In the 134th PSOC meeting, CGM (Tel) stated that release of optical fiber has already processed. This issue was discussed in the 16th GCC meeting held on 09.08.2019, where Director (Commercial) suggested to prioritize data communication from Solar plants.

In the 136th PSOC meeting, CGM (Telecom) stated that the laying of optical fiber in in process.

Telecom may deliberate.

D.4: 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 133rd PSOC meeting, DGM (IT) stated that Paralakhemundi and Balasore S/S meter data has been tested. The software fetching data for other S/Ss will be tested

In the 135th PSOC meeting IT stated that TCS has already rectified the error. TCS will make a presentation in this regard on dt. 27.08.2019.

In the 136th PSOC meeting, IT stated that the meter data has been checked and presentation done on 2nd August'2019. The same has been forwarded to SLDC.

IT / SLDC may update the status

D.5: Colony consumption of POWERGRID S/Ss

In the 131st PSOC meeting SLDC stated that POWERGRID is consuming power for their colony, which is not reflected in the DISCOM bill. POWERGRID stated that they have applied to DISCOMs to make them consumer.

It was decided that SLDC shall convene a meeting between GRIDCO, POWERGRID & DISCOMs to discuss the issue.

In the 133rd PSOC meeting it was decided that all Discoms shall submit the details of their problems regarding making POWERGRID their consumer, to GRIDCO for raising the issue in the Commercial Committee meeting of ERPC.

In the 134th PSOC meeting it was decided that SLDC shall prepare the energy accounting considering consumption of POWERGRID. The DISCOMs may insist POWERGRID stations in their respective control area to become their consumer. SLDC has prepared the energy Accounting of DISCOMs including drawal of POWERGRID.

In the 136th PSOC meeting it was decided that GRIDCO shall write a letter to ERPC to convene a special meeting involving POWERGRID and add DISCOMs of the State to resolve the issue. This item has been listed in the OCC agenda.

SLDC/GRIDCO may deliberate the discussions in OCC

D.6: Collection of modelling data for new Transmission elements as well as Generators for system study.

SLDC is conducting system study for real time operation and determination of ATC & TTC for the State system. For the said study modelling of all transmission elements as well as generators are required. O&M is requested to furnish the parameters of newly inducted transmission lines / Transformers such as conductor type, line length and resistance, reactance and susceptance etc. and percentage impedance for transformers. Generators are requested to furnish the similar parameters in respect of the generator.

In the 135th PSOC meeting SLDC stated that the format for data submission has already been forwarded to all Generators and O&M.

In the 136th PSOC meeting all generators and O&M were requested to forward the data to SLDC.

SLDC may deliberate the status

D.7: Procedure for first time charging of Transmission Elements.

As per the provision under Regulation 6(1) of CEA (Grid Standards) Regulations 2010, no entity shall introduce an element in the Grid without the concurrence of LDC. In case a new element is likely to be connected with the system or to be energized for the first time, STU shall send a request in advance (at least one week before) complying the provisions.

Further as per provision under chapter (4), Appendix-B of Odisha Grid Code Regulations, 2015, prior permission is required from SLDC for first time charging of new transmission elements after satisfying the required provisions such as SLD of transmission system, equipment details etc.

SLDC vide letter No. SGM(PS)/6-340/2229(4) dated 11.09.2019 intimated CGM (O&M) / CGM (Const) to comply the above provisions, while charging of any Transmission Elements for first time. Copy of the letter is annexed as ANNEXURE-1. As such it is requested to follow the provisions before inducting any new transmission elements to the system.

CGM (O&M) / CGM (Const.) 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 last meeting is as follows:

Sl. No	Transmission element details	Present Status
1	220 kV Jayanagar-Jeypore(PG) 2nd DC line	October'2019
2	400 kV Meramundali-Mendhasal 2nd ckt.	October'2019
3	132 kV Kesinga-Junagarh line	September'2019
4	220 kV Pandiabili-Pratapsasan line	March'20
5	132 kV Pratapsasan-Phulnakhara line	Dec'19
6	220/132/33 kV, Pratapsasan S/S	Dec'19
7	220/33 kV, Deogarh S/S	Jan'20
8	132/33 kV, Maneswar S/S	Feb'20
9	132/33 kV, Boriguma S/S	Feb'20
10	220/33 kV, 2x20 MVA Baliguda S/S	March'20
11	220/33 kV, 2x20 MVA Kalimela S/S	March'20
12	220/132/33 kV, Goda Chhak S/S (320 MVA)	March'20
13	220/132 kV Kesinga S/S	Mar'20
14	132/33 kV R.Udyagiri S/S	Mar'20
15	132/33 kV Patangi S/S	Charged on 15th Sept'19
16	220/33 kV Laxmipur S/S 2nd 20 MVA Tfr	Oct'19
17	132/33 kV, Agarapada S/S	Charged on 30th August'19
18	132/33 kV, Mancheswar GIS	Dec'19
19	132/33 kV, Satasankha S/S	Dec'19

It was deliberated by Const. that WESCO may expedite takeoff arrangement from Jayapatna to avoid over loading of Junagarh S/S. SOUTHCO may follow up PMU for early completion of 33 kV Kasipur feeder. All the Discoms are 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

E.2: HT metering at DISCOM interface points.-SLDC.

As per the Central Electricity Authority (Installation and Operation of Meters) Amendment Regulations, 2010, the interface meters shall be installed at the High Voltage side of the Inter Connecting Transformer. Accordingly POWERGRID has implemented the amended Regulation. GRIDCO / OPTCL may examine for metering in the High Voltage side of the ICT, which is done in the Low Voltage side at present.

In the 134th PSOC meeting, SLDC stated that Gridco may convene a meeting with DISCOMs and OPTCL to implement CEA Regulation to reduce the loss level of State system and increase

revenue of GRIDCO. Further OERC vide order dated 29.03.2019 in case No. 71/2018 in the matter of ARR and Transmission tariff of OPTCL at Para 181 directed OPTCL to take necessary steps for reduction of transmission loss by avoiding over loading as well as other innovative action.

This issue was also discussed in the 16th GCC meeting, where the DISCOMs highlighted the PPA provision for receiving power at 33 kV Voltage level by them. Director (Commercial) agreed to convene a meeting between DISCOMs, O&M & SLDC to discuss the issue. If required, GRIDCO shall approach the Hon'ble OERC for amendment of the PPA/ Supply Code if required to comply CEA Regulation.

In the 136th PSOC meeting, GRIDCO has agreed to convene a meeting in the month of September'19 to discuss the issue

OPTCL / GRIDCO may deliberate

E.3: HT metering in the Tertiary winding of ICT in PGCIL S/Ss

In the 134th PSOC meeting, SOUTHCO raised the issue of HT metering in the Tertiary winding of the ICTs of POWERGRID S/Ss to accounting their drawal, which was also supported by other DISCOMs. It was also decided that GRIDCO /RT&C may raise the issue in the Commercial sub-Committee of ERPC.

In the 135th PSOC meeting, SLDC suggested that GRIDCO and RT&C may raise this issue in the Commercial Sub-Committee meeting of ERPC.

In the 136th PSOC meeting it was decided that GRIDCO shall write to ERPC to convene a special meeting to discuss the issue.

GRIDCO may deliberate.

E.4: Major Events in the month of August'19

1. On dt. 03.08.2019 at 13:49 Hrs.: 220 KV Keonjhar(OPTCL) -Keonjhar(PG) ckt -II charged.
2. On dt.21.08.2019 at 13:00Hrs. : 315 MVA, 400/220/33 kV ICT-II charged at Grid S/S, Lapanga.
3. On dt. 21.08.2019 at 21:33 Hrs.: 80MVAR 400 kV Line Reactor -II (connecting to 400 kV Lapanga- Meramundali ckt -II) charged at Grid S/S, Lapanga.
4. On dt. 30.08.19 at 16:42 Hrs.: 132/33 kV Grid S/S, Agarpada charged by LILO arrangement in 132 KV Bhadrak- Anandpur feeder. At 17:02 Hrs dt. 30.08.19- 40 MVA, 132/33 kV Power Transformer charged at Grid S/S, Agarpada.

Members may note

E.5: Important Grid Incidences during the month of August'19.

On dt. 13-08-19 at 05.18 hrs. : At 220/132/33 KV Grid S/S, Bolangir (New), due to DC leakage fault in Oil Surge Relay of 220/132/33KV Auto TRF-2, OSR operated & the concern breaker tripped. Simultaneously 220KV Bolangir (New)- Bolangir (PGCIL) ckt tripped. Subsequently at 05.53Hrs 220KV Bolangir (New) -Baragarh (New) feeder tripped on R-Ph E/F relay indication, resulting complete blackout of Bolangir (New) S/S.

O&M may deliberate

E.6: Outage of major transmission Elements during the month of August'19. (above 10 hrs).

Sl No	Transmission line / element	Tripping Dt/time	Restoration Dt/time	Reason
1	132 kV Kamakhyanagar- OPCL ckt	05.08.19 / 18:40 Hrs	06.08.19 / 14:50 Hrs	Breakdown at LOC 132-B of 132 KV K.Nagar - OPCL Line
2	220 kV New Duburi- Dubri(old) ckt -II	09.08.19/ 16:50 Hrs	10.08.19/ 19:22 Hrs	Due to bus fault at Grid S/S, Duburi (Old)

3	220 kV Meramundali-Bhanjanagar ckt -I	10.08.19/ 12:54 Hrs	12.08.19/ 13:45 Hrs	Tripped on R-ph, E/F, Zone -1. S/D taken for Maintenance of line CT and CVT at Narasingpur grid S/s.
4	132 kV Jharsuguda-Ultratech fdr	12.08.19 / 17:52 Hrs	14.08.19	Failure of R&Y Ph CT (Heavy lightning condition).
5	132 kV Lapanga- Jharsuguda ckt	14.08.19 / 07:06 Hrs	17.08.19 / 11:57 Hrs	Directional E/F operated due to Jumper snapping.
6	160 MVA AUTO Transformer – I at Grid S/S, Jayanagar	17.08.19 / 08:52 Hrs	17.08.19 / 20:35 Hrs	R-ph CT failure
7	220 kV Budhipadar- Tarkera ckt -1	17.08.19 / 21:06 Hrs	18.08.19 / 09:12 Hrs	L1-L2 fault, zone-1, FD-16.8 KM, FC-7.7 KA
8	132 kV Lapanga- Burla ckt -II	20.08.19 / 20:03 Hrs	22.08.19 / 19:54 Hrs	R-Ph cross bus of 132kV Burla ckt- II snapped at Lapanga grid S/S.
9	132 kV Aarti –Nuapatna feeder	21.08.19 / 16:01 Hrs	23.08.19 / 17:58 Hrs	B-ph conductor snapped at Loc No- 28
10	220 kV Budhipadar-Lapanga ckt -II	21.08.19 / 05:18 Hrs	21.08.19 / 18:41 Hrs	Y ph jumper snapped at Loc no - 4

O&M may discuss

E.7: Prolonged outage of Transmission elements

Sl No	Transmission line / element	Date of outage	Reason	Expected date of restoration
1	220 kV Samangara – Pandiavil ckt –I& II	03.05.19	Tower collapsed during the severe cyclonic storm FANI.	

E.8: Review of Outage Program of State Generators for the month of October'19:

Tentative Outage programe for State Generators for the month of **October'2019**

Sl.	Station	Unit	Period	Remarks
1	Burla	# 1 # 5 # 6	14.03.18 to continue 25.10.16 to continue 16.10.15 to continue	T&G coupling cover water leakage Under R,M & U Under R, M & U
2	Balimela	# 1 # 2	05.08.16 to continue 20.11.17 to continue	Under R,M work Under R,M work

OHPC may deliberate

E.9: Generation Program for the month of October'19.

Generation schedule for the month of October'19 furnished by OHPC are given below.

Name of Hydro Gen. Station	Generation Program (MW)		Reservoir Level as on 01.09.19	Reservoir Level as on 01.09.18	MDDL	High Flood Reservoir Level
	Oct'19 (1st fortnight)	Oct'19 (2nd fortnight)				
HPS-I, Burla	130	130	622.93 ft.	623.45 ft.	590 ft.	630 ft.
HPS-II, Chiplima	60	60	-	-	-	-
Balimela	330	330	1491.70 ft.	1512.70 ft.	1440 ft.	1516 ft.
Rengali	250	250	122.08 mtr.	121.40 mtr.	109.72 mtr	123.5 mtr.
U.Kolab	320	320	853.43 mts.	856.11 mtr.	844 mtr	858 mtr.
U. Indravati	600	600	640.38 mtr.	640.01 mtr.	625mtr	642 mtr
MKD (O/D)	30	30	2745.85 ft.	2748.00 ft.	2685 ft.	2750 ft.

TOTAL	**1720**	**1720**				

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

SLDC / OHPC may deliberate

E.10: Anticipated power generation and demand for the month of October'2019.

Sl. No	Discom	Average	Peak
1	CESU	1100	1350
2	WESCO	1050	1200
3	NESCO	950	1150
4	SOUTHCO	450	500
5	**Total Discom**	3550	4200
	System Loss & others	**150**	**200**
	Total Demand	**3700**	**4400**
Availability			
1	Hydro	1400	1500
2	State Thermal	850	850
3	IPP, small hydro &RE	350	300
4	ISGS share (including OA& purchase)	900	1400
5	CGP support (OA)	350	350
6	**Total availability**	**3850**	**4400**
7	**Surplus / Deficit**	**150**	**0**

Members may discuss.

PART F: OTHER ISSUES

F.1: Date and Venue of the next (138th) PSOC meeting.

ANNEXURE-1

STATE LOAD DESPATCH CENTRE

OFFICE OF THE Sr. GENERAL MANAGER (POWER SYSTEM)
ORISSA POWER TRANSMISSION CORPORATION LIMITED
GRIDCO Colony, P.O.- Mancheswar Rly. Colony, Bhubaneswar-17, FAX-0674- 2748509
CIN: U40102OR2004SGC007553

Letter No. SGM (PS)/6-340/ 2929 (4) Date : - 11.09.2019

From

The CLD, SLDC
OPTCL, Bhubaneswar-17

To

CGM (Cons), OPTCL, Bhubaneswar
CGM (O&M), OPTCL, Bhubaneswar

Sub: Procedure for first time charging of lines and equipments.

Sir,

In line with Regulation 6 (1) of the Central Electricity Authority (Grid Standards) regulations 2010, no entity shall introduce an element in the Grid without the concurrence of LDC. In case a new transmission element is likely to be connected with the system or to be energized for the first time, STU shall send a request in advance (at least one week before) along with the confirmation of the following compliances : -

1) Availability of telemetry of station/element at the SLDC,
2) Availability of voice communication with the station at SLDC,
3) Single Line Diagram,
4) Healthiness of Protection System/Protection Setting

As per Orissa Grid Code regulation under chapter(4) Appendix B(i.e. detailed system data transmission) prior permission is required from SLDC for first time charging of new lines/equipments. The following compliance must be satisfied before taking permission for first time charging : -

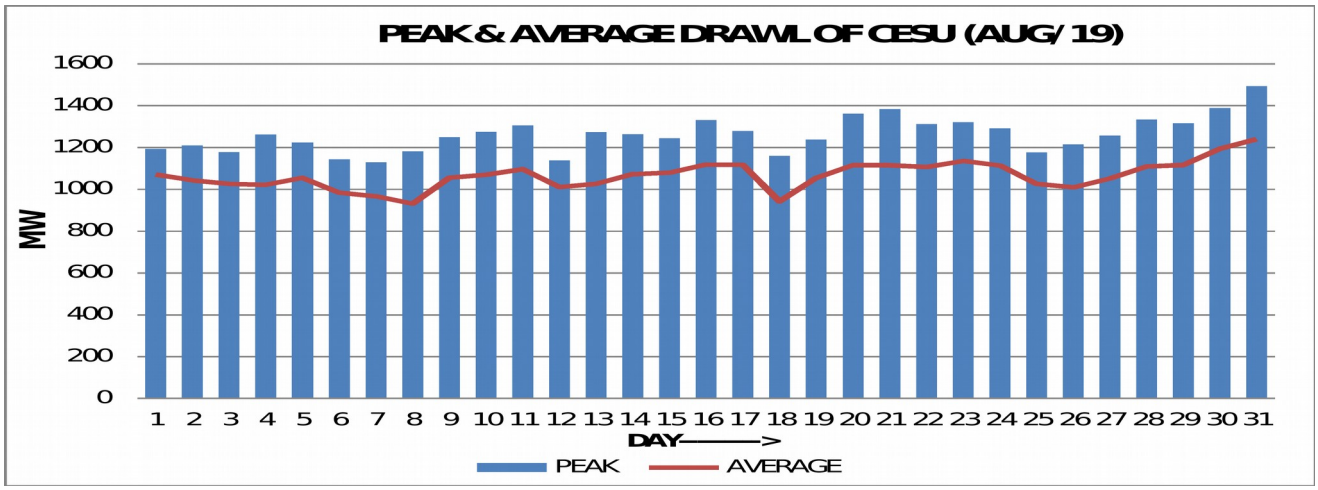
1) Single line diagram of transmission system detailing : - Name of S/s, Power station connected if any, Number and length of circuits, Interconnecting transformers, Sub-station bus lay outs, Power transformers, Reactive compensation equipments.
2) Equipment details : - Circuit breakers, Isolating switches, Current transformers, Potential transformers.

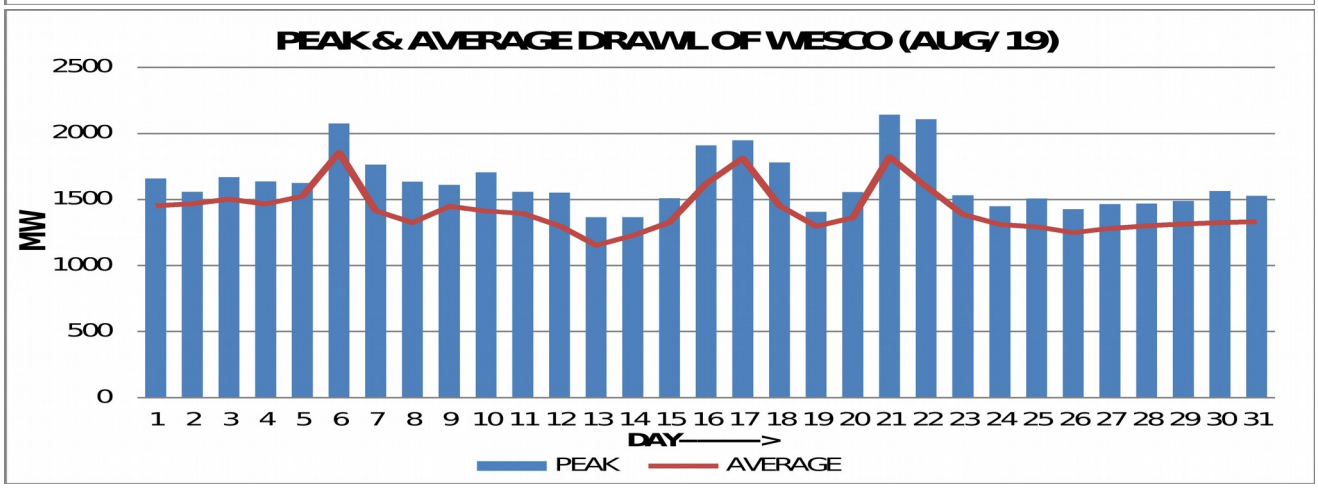
Therefore, it is requested to take necessary action for furnishing the above details for preparation of SCADA database at SLDC and onward transmission to RLDC if required for clearance before first time charging of lines/equipments.

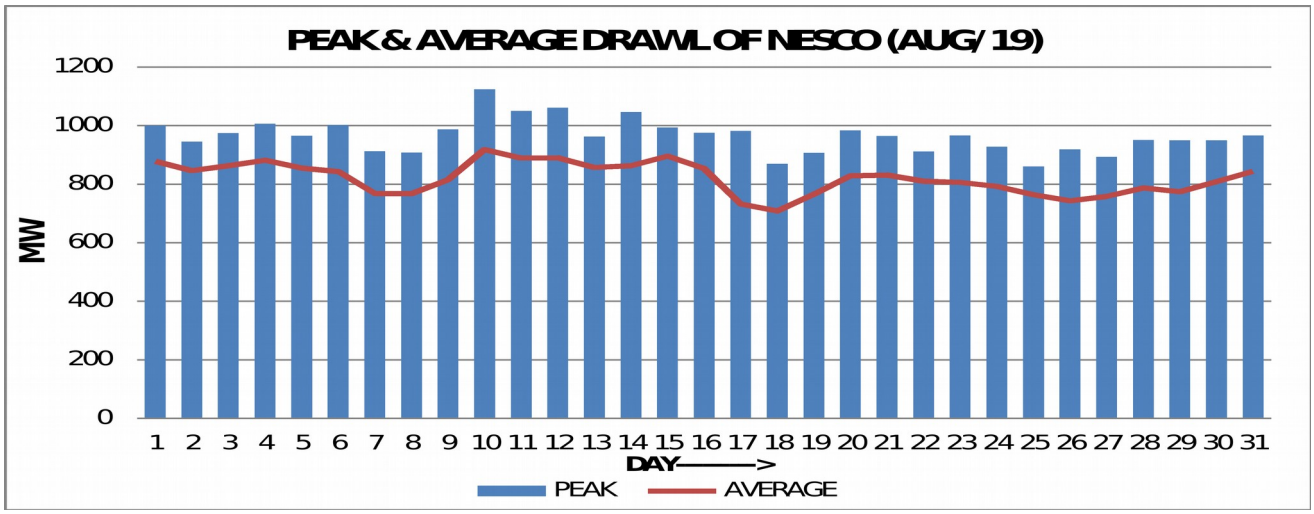
Yours faithfully,

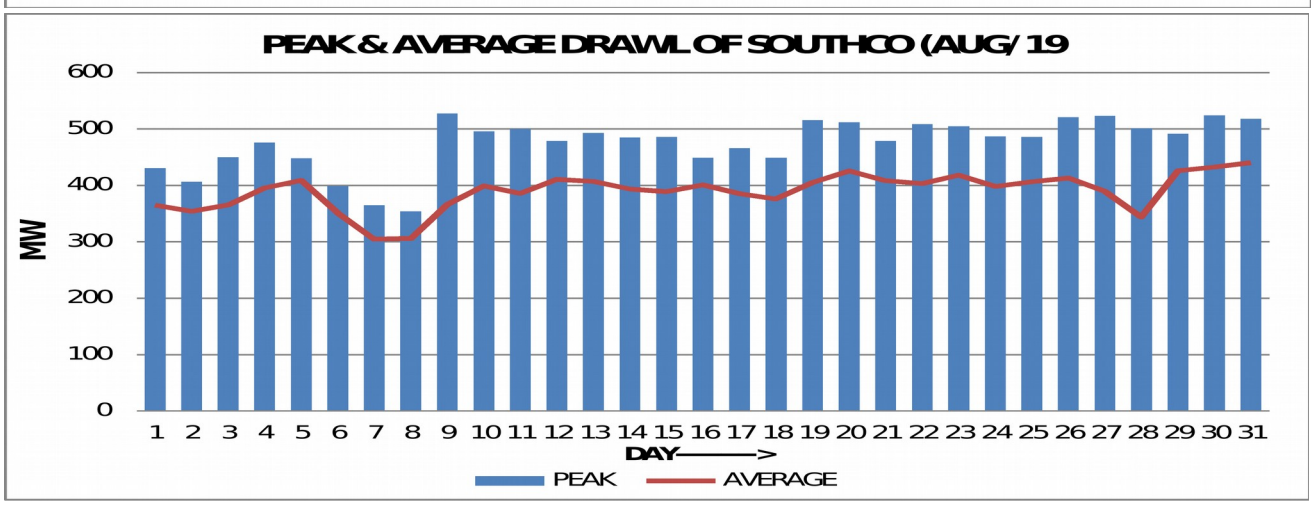
Chief Load Despatcher,
SLDC, OPTCL, Bhubaneswar

ANNEXURE-2


PEAK & AVERAGE DRAWL OF CESU (AUG/ 19)
MW
1600
1400
1200
1000
800
600
400
200
0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
DAY------>
PEAK
AVERAGE


PEAK & AVERAGE DRAWL OF WESCO (AUG/ 19)
MW
2500
2000
1500
1000
500
0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
DAY------>
PEAK
AVERAGE


PEAK & AVERAGE DRAWL OF NESCO (AUG/ 19)
MW
1200
1000
800
600
400
200
0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
DAY------>
PEAK
AVERAGE


PEAK & AVERAGE DRAWL OF SOUTHCO (AUG/ 19
MW
600
500
400
300
200
100
0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
DAY------>
PEAK
AVERAGE