



सत्यमेव जयते

भारत सरकार
Government of India
विद्युत मंत्रालय
Ministry of Power
पूर्वी क्षेत्रीय विद्युत समिति

Eastern Regional Power Committee
14, गोल्फ क्लब रोड, टालीगंज, कोलकाता-700033
14 Golf Club Road, Tollygunj, Kolkata-700033



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NO. ERPC/PROTECTION/2017-18/

DATE: 29.12.2017

FAX MESSAGE NO. - 637

To,

As per list enclosed.

Sub: Notice for 63rd Protection Coordination sub-Committee (PCC) meeting of ERPC

Notice is hereby given that **63rd PCC meeting** of ERPC will be held on **19th January 2018 (Friday)** at 11: 00 hrs at **ERPC Conference Room, Kolkata.**

The tentative agenda items for discussion will be as follows:

- 1) Confirmation of the minutes of 62nd Protection sub-Committee Meeting of ERPC
- 2) Follow-up action on decision of previous Protection sub-Committee Meetings
- 3) Analysis of following grid disturbances of December, 2017:
 - Disturbance at 400kV New Chanditala S/s on 06-12-17 at 09:09 hrs.
 - Tripping of 220 kV Madhepura - Purnea D/C line on 06-12-17 at 18:22 hrs.
 - Disturbance at 400/132 kV Motihari S/S on 09-12-17 at 10:57 hrs
 - Total power failure at 220/132kV Sipara S/S on 13-12-17 at 16:43 hrs & 17:19 hrs
 - Disturbance at 220/132 kV Malda(PG) and 132kV Malda (WB) on 15-12-17 at 06:01 hrs
 - Disturbance at 220kV Hazipur on 20-12-17 at 13:52 hrs
 - Disturbance at 220/132 kV Purnea S/S on 22-12-17 at 10:49 hrs
 - Total power failure at 220/132 kV Bodhgaya S/S on 22-12-17 at 17:10 hrs
- 4) Single line tripping incidences of December, 2017.

You are requested to kindly furnish the detail report along with all records (SLD, SOE, DR, Relay and schematic diagram of auxiliary supply, wherever applicable) related to above trippings for meaningful analysis during the meeting. You are also requested to upload the details in on-line tripping incident reporting system implemented in Protection Database Management System www.erpc-protectiondb.in.

Your participation in the meeting is highly solicited. Please confirm your participation in the meeting along with name and designation of the participants.

Yours faithfully,

-sd-

(J. Ganeswara Rao)
Executive Engineer

LIST OF ADDRESSES:

Chief Engineer, Trans (O&M) Bihar State Power Transmission Limited, Vidyut Bhawan, Bailey Road, Patna-800021	Electrical Superintending Engineer (CRITL) Bihar State Power Transmission Limited, Vidyut Bhawan, Bailey Road, Patna-800021
Chief Engineer (SLDC) Damodar Valley Corporation, GOMD-I Premises, P.O.- Danesh Sheikh Lane, Howrah- 711109	Chief Engineer (CTC) Damodar Valley Corporation, P.O. Maithon Dam, Dist. Dhanbad, Jharkhand-828207
Chief Engineer, Trans (O&M) Jharkhand Urja Sancharan Nigam Limited Kusai Colony, Doranda, Ranchi-834002	Electrical Superintending Engineer (CLD) Jharkhand Urja Sancharan Nigam Limited, Kusai Colony, Doranda, Ranchi-834002
Chief General Manager (O&M), OPTCL, Janpath, Bhubaneswar, Odisha – 751 022. FAX: 0674-2542932 cgm.onm@optcl.co.in	Sr. General Manager (PPA), Technical Wing, OHPCL, Orissa State Police Housing & Welfare Corpn. Bldg. Vanivihar Chowk, Janpath, Bhubaneswar-752022
Chief Load Dispatcher, SLDC OPTCL, P.O. Mancheswar Rly. Colony Bhubaneswar-751017	Chief Engineer (Testing), WBSETCL Central Testing Laboratory, Abhikshan, Salt Lake, Kolkata-700091 (Fax no. 2367-3578/1235)
Chief Engineer (CLD) WBSETCL, P.O. Danesh Sheikh Lane, Andul Road, Howrah-711109	Addl. Chief Engineer (ALDC) West Bengal Electricity Distribution Company Ltd Vidyut Bhavan, 7 th Floor, Bidhannagar, Sector-I Salt Lake City, Kolkata-700091(Fax-033-2334-5862)
Dy. Chief Engineer (Testing)/ Sr. Manager (Testing) CESC Ltd.,4, Sasi Sekhar Bose Road, Kolkata-700025	General Manager (O&M) KhSTPS, NTPC Ltd., P.O. Deepti Nagar, Dist. Bhagalpur, Bihar-813203
General Manager(O&M) FSTPS, NTPC Ltd., P.O. Nabarun, Dist. Murshidabad, West Bengal-742236	Dy. General Manager (Engineering), WBPDC, OS Dept. Corporate Office, 3/C,L.A Block, Salt Lake-III, Kolkata-700098 (Fax-033-23350516)
General Manager (O&M) Barh STPS, NTPC Ltd., P.O. NTPC Barh, Dist. Patna, Bihar-803213	General Manager (OS), ERHQ-II, NTPC Ltd., 3 rd flr. OLIC Building, Plot no. N 17/2, Nayapalli, Unit-8 Bhubaneswar- 751012 (Fax No. 0674-2540919)
General Manager(O&M) TSTPS, NTPC Ltd. P.O.Kaniha, Dist. Angul, Orissa-759117	General Manager (O&M) POWERGRID, Odisha Projects Sahid Nagar, Bhubaneswar – 751 007
General Manager(OS), ERHQ-I, NTPC Ltd., Loknayak Jaiprakash Bhawan, (2 nd Floor), Dak Bungalow Chawk, Patna-800001	Director (GM Division) Central Electricity Authority Sewa Bhawan, R. K. Puram, New Delhi-110066
Executive Director (O&M) NHPC Ltd., NHPC Office Complex, Sector-33, Faridabad, Haryana-121003 (Fax-01292272413)	Electrical Superintending Engineer, TTPS, Tenughat Vidyut Nigam Ltd., Lalpania, Dist. Bokaro, Jharkhand-829149
Dy. General Manager (Electrical) IB Thermal Power Station, OPGCL Banhapalli, Dist. Jharsuguda-768234, Orissa	General Manager (OS), ER-I Power Grid Corporation of India Ltd., Alankar Place, Boring Road, Patna-800001
Chief Engineer (Trans.) Power Deptt., Govt. of Sikkim, Gangtok-731010	Sr. Manager (CTMC) Durgapur Projects Limited, Durgapur-713201
Executive Director, ERLDC, POSOCO 14, Golf Club Road, Tollygunge, Kolkata-700033	Manager (Electrical), Adhunik Power & Natural Resources Ltd. “Lansdowne Towers, Kolkata-700020 (Fax No. 033-2289 0285)
General Manager (OS), ER-II Power Grid Corporation of India Ltd., J-I-15, Block-EP, Sector-V, Salt Lake, Kolkata-91	Shri A.K.Nayak/Shri Sumit S Ghosh Maithon Power Limited, Maithon Office, MA 5 Gogna, Dist. Dhanbad, Jharkhand State, PIN-828207
General Manager (P&O), PTC Ltd., Kanchanjunga Bldg., 18, Barakhamba Road, New Delhi-110001	Vice President, Vedanta Ltd. 1 st Floor, Module C/2, Fortune Tower, C S Pur, Bhubaneswar- 751023
Managing Director, Bhutan Power Corporation Post Box no. 580, Thimpu, Bhutan.	Managing Director, Druk Green Power Corprn. P.O. Box-1351, Thimpu, Bhutan.
General Manager, Darbhanga(Bihar), Darbhanga Motihari Transmission Company Limited (DMTCL)	Head Construction, ENCIL, Siliguri-7340051
Shri D. P. Bhagava, Chief Consultant (O&M), Teesta Urja Limited, New Delhi (FAX:011-46529744)	Shri Brajesh Kumar Pande, Plant Head, JITPL. (FAX:011-26139256-65)

List of important transmission lines in ER which tripped in December-2017

S.NO	LINE NAME	TRIP DATE	TRIP TIME	RESTORATION DATE	RESTORATION TIME	Relay Indication LOCAL END	Relay Indication REMOTE END	Reason	Fault Clearance time in msec	Auto Recloser status	Remarks
Multiple tripping at the same time											
1	400KV KISHANGANJ-NEW PURNEA-II	17/12/2017	2:01	17/12/2017	3:20	NO DT RECEIVED AT KISHANGANJ	O/V RELAY MALOPERATION AT PURNEA	O/V RELAY MALOPERATION AT PURNEA	< 100 msec		Multiple tripping at the same time
2	400KV MALDA-NEW PURNEA-I	17/12/2017	2:01	17/12/2017	3:24	B-N/Z-1/FD 70KM/FC 4.319KA,1ST TIME A/R SUCCESSFUL THEN AGAIN TRIPPED@MALDA	B-N/FD 71.3KM/FC 4.02KA	B-N Fault	< 100 msec		Multiple tripping at the same time
3	220KV TASHIDING-RANGPO-I	20/12/2017	9:50	20/12/2017	11:08	Tripped from Tashiding end only	No Relay indication	Tripped from Tashiding end only			No fault observed in PMU
4	220KV NEW MELLI-TASHIDING-I	20/12/2017	9:50	20/12/2017	10:57	No relay indication	Tripped from Tashiding end only	Tripped from Tashiding end only			No fault observed in PMU
5	400KV MALDA-NEW PURNEA-II	30/12/2017	11:14	30/12/2017	11:56	Y-N Fault	Y_N,Z-1,3.25 KA,110.4 KM	Y-N Fault	< 100 msec		Multiple tripping at the same time
6	400KV MALDA-NEW PURNEA-I	30/12/2017	11:14	30/12/2017	11:24	Y-N,2.372KA,132.5 KA FROM PURNEA	Y-N,A/R SUCCESSFUL	Y-N Fault	< 100 msec	No A/R operation at Purnea	Multiple tripping at the same time
No Autoreclose operation observed in PMU data											
7	400KV NEW CHANDITALA-KHARAGPUR-I	03/12/2017	17:19	04/12/2017	15:29	R-N,Z1,DIST=48.66Km,FC=5.71KA,AR LO.	Direct trip received.	R-N Fault	< 100 msec	No Auto Reclose operation observed in PMU	
8	220KV GAYA-SONENAGAR-II	08/12/2017	12:08	08/12/2017	12:53	B-N Fault		B-N Fault	< 100 msec	No Auto Reclose operation observed in PMU	
9	220KV BARIPADA-BALASORE-II	18/12/2017	19:47	20/12/2017	0:40	Z-1,Y-N, 8.067KA, 10KM	Z2, Y-N, 0.48KA	Y-N Fault	< 100 msec	No Auto Reclose operation observed in PMU	
10	400KV PATNA-BALIA-III	26/12/2017	4:45	26/12/2017	5:01	A/R SUCCESSFUL	Y-N, 5 KA, 77 KM	Y-N Fault	< 100 msec	No Auto Reclose operation observed in PMU	
11	765KV FATEHPUR-PUSAULI-I	29/12/2017	4:14	29/12/2017	16:30	FATEHPUR- R-N FAULT,250 KM ,2.34KA	R-N FAULT, FAULT CURRENT 2.4 KA, DISTANCE 58.7 KM	R-N Fault	< 100 msec	No Auto Reclose operation observed in PMU	
12	220KV DEHRI-GAYA-I	29/12/2017	23:56	30/12/2017	0:30		Y-N, 16.2Km, 7.4KA	Y-N Fault	< 100 msec	No Auto Reclose operation observed in PMU	
13	400KV PUSAULI(PG)-VARANASI-1	30/12/2017	1:21	30/12/2017	1:46	R-N, 9.6Km, 1.518KA		R-N Fault	< 100 msec	No Auto Reclose operation observed in PMU	
14	400KV PATNA-BALIA-III	31/12/2017	3:13	31/12/2017	5:05	R_N, F.D. 133.3 KM, 3.68 kA		R-N Fault	< 100 msec	No Auto Reclose operation observed in PMU	
Miscellaneous: Tripping on DT, No reason furnished											
15	400KV GORAKHPUR-MOTIHARI-I	09/12/2017	13:17	09/12/2017	14:53		Relay maloperation	Relay maloperation	300 msec		R-N Fault observed in PMU
16	315MVA ICT-1 AT INDRAVATI (PH)	09/12/2017	21:47	10/12/2017	2:43	Bus differential operated at 220 kv side		Bus differential operated at 220 kv side			No fault observed in PMU, ICT should not trip on Bus Differential protection
17	132KV KhSTPP, NTPC-Lalmatia-I	12/12/2017	11:20	12/12/2017	11:55	R_N Fault, 5.70 KM from KHSTPP		R-N Fault			No fault observed in PMU
18	400KV GMR-ANGUL-I	15/12/2017	13:00	15/12/2017	14:55	Tripped from GMR end	No Relay indication	Tripped from GMR end			No fault observed in PMU
19	315MVA ICT-1 AT JEYPORE	22/12/2017	21:42	23/12/2017	22:26			No reason furnished			
20	220KV JODA-RAMCHANDRAPUR-SC	28/12/2017	19:27	28/12/2017	20:01	Didn't tripped from joda end	No relay provided from RCP	Tripped only from Joda end			No fault observed in PMU

21	400KV RANCHI-RAGHUNATHPUR-III	28/12/2017	20:22	28/12/2017	21:01	Didn't Tripped from Ranchi end	DT received at RTPS end due to mal operation	DT received at RTPS end due to mal operation			MPL-Ranchi-I A/R successful at the same time
22	400KV RANCHI-RAGHUNATHPUR-III	28/12/2017	22:32	28/12/2017	23:03	Did not tripped from Ranchi end	DT received at RTPS end due to mal operation	DT received at RTPS end due to mal operation			MPL-Ranchi-II A/R successful at the same time
23	765KV MAIN BUS-II AT GAYA	29/12/2017	23:33	30/12/2017	0:30	Tripped during A/R of 765kV Gaya Balia line		Tripped during A/R of 765kV Gaya Balia line			
24	400KV ALIPURDUAR-BONGAIGAON-II	30/12/2017	21:42	30/12/2017	22:21			No reason furnished			No fault observed in PMU

Tripping of HVDC Sasaram

25	HVDC PUSAULI	22/12/2017	2:54	23/12/2017	18:55	SYSTEM FAILURE ALARM		SYSTEM FAILURE ALARM			
26	HVDC PUSAULI	23/12/2017	21:07	23/12/2017	21:59	SYSTEM FAILURE ALARM		SYSTEM FAILURE ALARM			
27	HVDC PUSAULI	24/12/2017	11:11	24/12/2017	15:00	SYSTEM FAILURE ALARM		SYSTEM FAILURE ALARM			
28	HVDC PUSAULI	25/12/2017	3:05	25/12/2017	8:13	SYSTEM FAILURE ALARM		SYSTEM FAILURE ALARM			
29	HVDC PUSAULI	25/12/2017	10:18	25/12/2017	16:03	No Reason furnished		No Reason furnished			
30	HVDC PUSAULI	26/12/2017	3:40	26/12/2017	5:47	SYSTEM FAILURE ALARM		SYSTEM FAILURE ALARM			
31	HVDC PUSAULI	27/12/2017	7:15	27/12/2017	19:57	SYSTEM FAILURE ALARM		SYSTEM FAILURE ALARM			
32	HVDC PUSAULI	29/12/2017	0:30	29/12/2017	2:17	SYSTEM FAILURE ALARM		SYSTEM FAILURE ALARM			

Multiple times tripping of same element

33	315MVA ICT-3 AT JAMSHEDPUR	09/12/2017	22:00			tripped due to LV overflux stage-1 (110% setting) after a delay of 6000 second at 22:54 hrs	Since at no load and 220kV cable (length around 350 meter), no load CVT voltage at line side CVT in 212 bay was high, around 112 % at night time, the LV overflux stage-1 setting (110 %) operated.	Overflux relay operated			As per PMU voltage is 422 KV
34	315MVA ICT-3 AT JAMSHEDPUR	11/12/2017	21:46	12/12/2017	12:47	LV side Over flux protection operated		Overflux relay operated			As per PMU voltage is 422 KV
35	315MVA ICT-3 AT JAMSHEDPUR	12/12/2017	17:17	12/12/2017	20:22	Residual o/V		Residual o/V			As per PMU voltage is 417 KV
36	315MVA ICT-3 AT JAMSHEDPUR	13/12/2017	2:59	14/12/2017	16:11	Over flux protection operated on 220 KV side		Over flux protection operated on 220 KV side			As per PMU voltage is 424 KV
37	220KV ATRI-PANDIABILI-II	20/12/2017	10:35	20/12/2017	11:11	No Relay indication at ATRI	DT RECIEVED AT PANDIABILI	DT RECIEVED AT PANDIABILI			No fault observed in PMU
38	220KV ATRI-PANDIABILI-II	20/12/2017	12:17	21/12/2017	13:03		DT recieved at Pandiabili	DT recieved at Pandiabili			No fault observed in PMU
39	220KV ATRI-PANDIABILI-II	27/12/2017	15:00	27/12/2017	15:38	Master relay 86A	Didn't Tripped	Master relay 86A operated at Atri end	800 msec		