



भारत सरकार
Government of India
विद्युत मंत्रालय
Ministry of Power
पूर्वी क्षेत्रीय विद्युत समिति
Eastern Regional Power Committee
14, गोल्फ क्लब रोड, टॉलीगंज, कोलकाता-700033
14 Golf Club Road, Tollygunj, Kolkata-700033



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NO. ERPC/PROTECTION/2016/

DATE: 02.09.2016

FAX MESSAGE NO.

To,

As per list enclosed.

Sub: Notice for 47th Protection Coordination sub-Committee (PCC) meeting of ERPC

Notice is hereby given that **47th PCC meeting** of ERPC will be held on **19th September 2016 (Monday)** 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 46th 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 August 2016:
 - Disturbance at 220 kV Bakreswar(WBPDCL) S/s on 19-08-16 at 13:39 hrs.
 - Multiple elements tripping at 132kV Purnea (PG) and 132kV Purnea (BSPTCL) system on 19-08-16 at 17:11 hrs.
 - Disturbance at 220 kV Sasaram S/s on 28-08-16 at 10:54 hrs & 11:10 hrs.
 - Disturbance at 220 kV Khagul (BSPTCL) S/s on 30-08-16 at 19:18 hrs
- 4) Multiple elements tripping without load loss:
 - Multiple elements tripping at 132kV Purnea (PG) and 132kV Purnea (BSPTCL) system on 14-08-16 at 12:32 hrs.
 - Disturbance at 400 kV Jamshedpur S/s on 26-08-16 at 10:15 hrs.
 - Disturbance at 400 kV Jamshedpur S/s on 29-08-16 at 13:38 hrs.
 - Disturbance at 400kV Farakka S/s of NTPC System on 29-08-16 at 12:22 hrs.
 - Single line tripping incidences enclosed at **Annexure-I.**

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.

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-

(A. K. Bandyopadhyaya)
Member Secretary

LIST OF ADDRESSES:

Chief Engineer, Trans (O&M) Bihar State Electricity Board, Vidyut Bhawan, Bailey Road, Patna-800021	Electrical Superintending Engineer (CRITL) Bihar State Electricity Board, Vidyut Bhawan, Bailey Road, Patna-800021
Chief Engineer (CLD) Damodar Valley Corporation, P.O. Maithon Dam, Dist. Dhanbad, Jharkhand-828207	Chief Engineer (CTC) Damodar Valley Corporation, P.O. Maithon Dam, Dist. Dhanbad, Jharkhand-828207
Chief Engineer, Trans (O&M) Jharkhand State Electricity Board Kusai Colony, Doranda, Ranchi-834002	Electrical Superintending Engineer (CLD) Jharkhand State Electricity Board, 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., Loknaya Jaiprakash Bhawan, (2 nd Floor), Dak Bunglow 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
General Manager, 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, Sesa Sterlite Ltd. 1 st floor, City Mart Complex, Baramunda, Bhubaneswar-751012
Managing Director, Bhutan Power Corporation Post Box no. 580, Thimpu, Bhutan.	Managing Director, Druk Green Power Corpn. P.O. Box-1351, Thimpu, Bhutan.
SUPERINTENDENT ENGINEER, ERPC	ASSISTANT SECRETARY, ERPC

List of important transmission lines (220 kV & above) in ER which tripped in August'16

S.NO	LINE NAME	TRIP DATE	TRIP TIME	RESTORATION DATE	RESTORATION TIME	Reason	Fault Clearance time in msec	Relay Indication LOCAL END	Relay Indication REMOTE END	Auto Recloser status	DR/EL received within 24 Hrs	DR/EL received after 24 Hrs	Remarks
Fault clearing time is violating protection standard (As per PMU data)													
1	220 KV MUZAFFARPUR-DALKEBAR	01.08.16	19:14	04.08.16	14:20	R-N FAULT	520 ms approx	Yet to be received	Yet to be received	No autoreclose operation observed in PMU data	No	No	
2	220 KV FARAKKA-LALMATIA	03.08.16	17:45	03.08.16	18:34	TRIPPED FROM FARAKKA END ONLY	1000 sec approx	Yet to be received	Did not trip	--	No	No	Voltage dip observed in all three phases
3	400 KV JAMSHEDPUR-BARIPADA	06.08.16	13:14	06.08.16	12:59	R-Y FAULT	560 ms approx	R-Y , Z-II, 122.9 Km from Jamshedpur end IR -- 4.49 KA , IY -- 4.41 KA	R-Y , Z-I, 18.9 Km from Baripada end IR -- 8.9 KA , IY -- 9.1 KA	--	Yes	--	
4	220 KV RANCHI - CHANDIL	07.08.16	01:17	07.08.16	18:34	B-N FAULT .	400 ms approx	Yet to be received	Yet to be received	No autoreclose operation observed in PMU data	No	No	
5	220 KV ROURKELA - TARKERA-II	11.08.16	08:31	11.08.16	17:40	B-N FAULT	600 ms approx	B-N, Z-I,	Yet to be received	No autoreclose operation observed in PMU data	Yes	--	
6	400 KV TALA-BINAGURI-II	14.08.16	13:05	17.08.16	21:34	Y-N FAULT	450 ms approx	Yet to be received	Y-N , Z-II, F/D- 139.4 Km from Binaguri, F/C- 1.04 KA (DT sent to Tala)	No autoreclose operation observed in PMU data	No	No	
7	220 KV CHANDIL-SANTALDIH	25.08.16	13:58	25.08.16	14:14	R-N FAULT	200 ms approx	R-N, Z-II, R- Ph, 136.30 Km from Chandil, F/C:1.329 KA	R-N, Z-I, 31.56 Km from STPS, Fault Duration : 63.27 ms, F/C: 2.490 KA	No autoreclose operation observed in PMU data	No	No	DR, EL & A/R are not available at STPS
Multiple tripping at same time													
1	220 KV JORETHANG-NEW MELLI	01.08.16	11:43	01.08.16	12:34	B-N FAULT	<100	B-N, 3.3 km from Jorethang	Yet to be received	No autoreclose operation observed in PMU data	Yes	--	
2	220 KV JORETHANG-RANGPO			01.08.16	12:27	B-N FAULT	<100	B-N, 19 km from Jorethang	Yet to be received	No autoreclose operation observed in PMU data	Yes	--	
3	220 KV NEW MELLI-RANGPO			01.08.16	12:41	B-N FAULT	<100	Yet to be received	Yet to be received	No autoreclose operation observed in PMU data	No	No	
4	220 KV MUZAFFARPUR - HAZIPUR II	10.08.16	12:51	10.08.16	13:17	B-N FAULT	<100	Tripped	B-N, Z-I, 13.8 km from Hazipur	No autoreclose operation observed in PMU data	--	Yes	As per BSPTCL, there was no fault in second circuit
5	220 KV MUZAFFARPUR - HAZIPUR I			10.08.16	13:40	B-N FAULT	<100	Tripped	Z-I	No autoreclose operation observed in PMU data	--	Yes	

S.NO	LINE NAME	TRIP DATE	TRIP TIME	RESTORATION DATE	RESTORATION TIME	Reason	Fault Clearance time in msec	Relay Indication LOCAL END	Relay Indication REMOTE END	Auto Recloser status	DR/EL received within 24 Hrs	DR/EL received after 24 Hrs	Remarks
6	220 KV CHUKHA - BIRPARA - I	25.08.16	17:03	25.08.16	18:12	LBB OPERATED AT CHUKHA	--	LBB operated at Chukha	Did not trip	--	No	No	
7	220 KV CHUKHA - BIRPARA - II			25.08.16	18:32	LBB OPERATED AT CHUKHA	--	LBB operated at Chukha	Did not trip	--	No	No	
Fault Not observed in PMU data													
1	220 KV RANCHI-CHANDIL	05.08.16	00:45	06.08.16	15:44	B-N FAULT .	--	Yet to be received	Yet to be received	--	No	No	
2	765 KV GAYA - BALIA	10.08.16	01:00	10.08.16	03:04	DT RECEIVED at Gaya	--	DT Received	Yet to be received	--	No	No	
3	400 KV FARAKKA - SAGARDIGHI	16.08.16	13:10	16.08.16	13:33	OVER VOLTAGE	--	OVER VOLTAGE	OVER VOLTAGE	--	--	Yes	
4	400 KV PURNIA - BINAGURI -I	23.08.16	23:03	23.08.16	23:25	DT RECEIVED AT BINAGURI	--	Yet to be received	DT Received	--	No	No	
5	220 KV BIRPARA - SALAKATI-I	31.08.16	18:02	31.08.16	19:14	DIRECTIONAL EARTH FAULT	--	Yet to be received	Yet to be received	--	No	No	
No autorecloser operation observed in PMU data													
1	400 KV KOLAGHAT-KHARAGPUR	03.08.16	06:20	03.08.16	06:34	Y-N FAULT	<100	Y-N, Z-I, F/C= 7.55 KA, 31.28KM from KTPS, A/R Started	B-N, Z-I, A/R started, DT Recived	No autoreclose operation observed in PMU data	Yes	--	No autoreclose operation observed in PMU data
2	400 KV PURNEA-MUZAFARPUR-I	03.08.16	18:11	03.08.16	19:16	R-N FAULT	<100	Yet to be received	Yet to be received	No autoreclose operation observed in PMU data	No	No	No autoreclose operation observed in PMU data
3	400 KV GAYA - CHANDWA -II	04.08.16	18:03	04.08.16	18:34	B-N FAULT .	<100	Yet to be received	Yet to be received	No autoreclose operation observed in PMU data	No	No	No autoreclose operation observed in PMU data
4	400 KV TALA-BINAGURI-I	14.08.16	13:05	14.08.16	13:31	Y-N FAULT	<100	Yet to be received	Yet to be received	A/R successful at Binaguri end only	No	No	No autoreclose operation observed in PMU data
5	400 KV TALCHER - ROURKELA -I	15.08.16	13:50	15.08.16	14:38	B-N FAULT	<100	B-N	Did not trip	No autoreclose operation observed in PMU data	Yes	--	No autoreclose operation observed in PMU data
6	400 KV RANCHI - RAGHUNATHPUR	15.08.16	15:28	15.08.16	15:50	Y-N FAULT	<100	Y-N, Z-I, 55 KM from Ranchi F/C: .4.1 KA A/R successful.	Yet to be received	A/R successful at Ranchi end only	No	No	No autoreclose operation observed in PMU data
7	400 KV TALA - BINAGURI-IV	16.08.16	12:18	16.08.16	12:34	Y-N FAULT	<100	Yet to be received	Y-N, Zone II, 153.3 KM from Binaguri, F/C: 2.3 KA	No autoreclose operation observed in PMU data	Yes	--	No autoreclose operation observed in PMU data