



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
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NO. ERPC/PROTECTION/2021/7489-7532

DATE: 07.01.2021

To,

As per list enclosed,

Sub: Notice for 98th Protection Coordination sub-Committee (PCC) meeting of ERPC

Sir,

Notice is hereby given that **98thPCC meeting** of ERPC will be held on **13.01.2021 (Wednesday)** from **10:30hrs** through online Microsoft Teams meeting platform. The meeting link will be forwarded through e-mail or message. You are requested to enter the participant name and designation and organisation name while joining the meeting. The following coordinator may be contacted for any assistance:

Kumar Satyam, Asst. Director-II, ERPC, Mob: 7355225072, E-mail: satyam24365@gmail.com

The tentative agenda items for discussion will be as follows:

- 1) Confirmation of the minutes of 97thProtection sub-Committee Meeting of ERPC.
- 2) Analysis of following grid disturbances of December 2020:

Sr. No	GD/ GI	Date	Time	Affected System	Summary	Load loss (MW)	Gen loss (MW)
1	GD-1	21-12-2020	06:21	BSPTCL	On 21-12-2020 at 06:21 hrs, 220 KV Dehri - Gaya D/C and 220 kV Pusauli - Dehri S/C tripped from Gaya and Pusauli end respectively resulting in total power failure at Dehri end. Existence of Y phase to earth fault has been captured by PMU data as well as DR recorded at Gaya end. The fault clearing time as per Gaya PMU is around 800 ms.	184	0

- 3) Single line tripping incidences of transmission lines for month of December 2020 is enclosed at Annexure -1.

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.

Yours faithfully,


(D. K. Bauri)

Superintending Engineer(Operation)

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.- DaneshSeikh Lane, Howrah- 711109	Chief Engineer (CTC) Damodar Valley Corporation, P.O. Maithon Dam, Dist. Dhanbad, Jharkhand-828207
Chief Engineer, (CRITL) Jharkhand UrjaSancharan Nigam Limited Kusai Colony, Doranda, Ranchi-834002	Electrical Superintending Engineer (CLD) Jharkhand UrjaSancharan 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 Bunglow Chawk, Patna-800001	Manager (Electrical), Adhunik Power & Natural Resources Ltd. “Lansdowne Towers, Kolkata-700020 (Fax No. 033-2289 0285)
Executive Director (O&M)	Electrical Superintending Engineer, TTPS,

NHPC Ltd., NHPC Office Complex, Sector-33, Faridabad, Haryana-121003 (Fax-01292272413)	TenughatVidyut 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, Tollygunge, Kolkata-700033	Head Construction, ENCIL, Siliguri-7340051
General Manager (OS), ER-II Power Grid Corporation of India Ltd., J-I-15, Block-EP, Sector-V, Salt Lake, Kolkata-91	ShriA.K.Nayak/ShriSumit 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), DarbhangaMotihari Transmission Company Limited (DMTCL)	ShriBrajesh Kumar Pande, Plant Head, JITPL. (FAX:011-26139256-65)
Shri D. P. Bhagava, Chief Consultant (O&M), TeestaUrja Limited, New Delhi (FAX:011- 46529744)	Director (GM Division), Central Electricity Authority SewaBhawan, R. K. Puram, New Delhi-110066
Director (NPC), CEA, NRPC Building, KatwariaSarai, New Delhi- 110016	President, Dans Energy Pvt. Ltd, 5th Floor, DLF Building No. 8, Tower-C, Gurgaon - 722002
Director, Shiga Energy Pw. Ltd., 5th Floor, DLF Building No. 8, Tower-C, Gurgaon - 722002	DGM (E&I), HALDIA ENERGY LIMITED, BARIK BHAWAN, KOKATA-700072, FAX: 033-22360955

List of important transmission lines in ER which tripped in DECEMBER-2020

S.NO	LINE NAME	TRIP DATE	TRIP TIME	Relay Indication LOCAL END	Relay Indication REMOTE END	Reason	Fault Clearance time in msec	Remarks	DR CONFIGURATION DISCREPANCY	DR/EL RECEIVED FROM LOCAL END	DR/EL RECEIVED FROM REMOTE END
1	220KV-BIHARSARIFF(PG)-BIHARSARIFF(BSEB)-2	01-12-2020	18:32	Secondary circuit problem in 220KV Biharsharif-PGCIL ckt-1(315MVA ICT1) at Biharsharif GSS end		NO FAULT	NA			NO	NO
2	400KV-JHARSUGUDA-STERLITE-2	02-12-2020	11:19	DT received at JSG		NO FAULT	NA			NO	NO
3	BiPole of HVDC BHERAMARA	02-12-2020	22:22	Due to blackout of Khulna zone, the bus voltage of Bheramara HVDC 230 KV substation got zero		HVDC FAULT	NA			NO	NO
4	Pole-II of HVDC BHERAMARA	02-12-2020	17:05	Filter tripped		HVDC FAULT	NA			NO	NO
5	220KV-JODA-RAMCHANDRAPUR-1	03-12-2020	11:00	Joda: DT received;	RCP: No relay indication	NO FAULT	NA	Reason for Dt may be shared .	DR IS NOT CONFIGURED AS PER ERPC PHILOSOPHY	YES	YES
6	220KV-PATNA-FATUHA-1	05-12-2020	23:45	Fatuha: Z1, B-N, 8.566Km, 7.103kA,	Patna: Z-1,B_N, FD-12.31 Km, FC-8.7 Ka	B-N FAULT.	<160	NO A/R ,3 phase tripping at the instant of fault.		YES	YES
7	Pole-II of HVDC BHERAMARA	06-12-2020	03:54	External Protection Operated.		HVDC FAULT	NA			NO	NO
8	Pole-II of HVDC BHERAMARA	07-12-2020	09:28	External Protection Operated.		HVDC FAULT	NA			NO	NO
9	400KV-ARAMBAGH-BAKRESWAR-1	08-12-2020	02:23	Arambag: Z1, B-N, 91.8 km, 4.09 KA	Bakreswar: B-N , 40 km, 4.42 KA, Insulator disc failed at Loc no. 138.	B-N FAULT.	<100			NO	NO

10	400KV-PATNA-BALIA-4	08-12-2020	07:02	Patna- Z1, Y-N FC-3.9kA FD-97.67km	Pilot Insulator de-capped at location no-429	Y-N FAULT.	<100	A/R Unsuccessful.		YES	YES
11	400KV-PATNA-KISHANGANJ-2	08-12-2020	02:15	Patna : B-N, 177.13 KM, 2.48 KA	Insulator flashover found at ERS location No-409 due to heavy fog.	B-N FAULT.	<100	At the instant of fault 3 phase tripping occurred .Whether A/R		YES	YES
12	400KV-PATNA-KISHANGANJ-1	08-12-2020	01:30	KISHANGANJ: R-N, FD-157.9 KM FC-2.7 KA PATNA : R-N, FD-191 KM FC-2.3 KA	Insulator flashover found at ERS location No-409 due to heavy fog.	R-N FAULT.	<100	A/R was successful tripped in reclaim time.Line voltage after 3	MCB Status at kishanganj showing opened all time.	YES	YES
13	400KV-PATNA-KISHANGANJ-1	08-12-2020	00:56	KISHANGANJ:R-N, FD-150KM FC-2.8KA		R-N FAULT.	<100	A/R unsuccessful .Line voltage after 3 pole opening observed due	MCB Status at kishanganj showing opened all time.	YES	YES
14	400KV-JEERAT-BAKRESWAR-1	09-12-2020	05:00	Reactor protection operated-86 RA, 197A, FUSE FAIL SUPERVISION M1(97)		NO FAULT	NA			NO	NO
15	400KV-MUZAFFARPUR-GORAKHPUR-1	09-12-2020	03:37	B-N FAULT, 261 KM FROM MUZAFFARPUR, 2.39 KA		B-N FAULT.	<100	Transients in helathy phase currents observed at the time of		YES	YES
16	400KV-INDRAVATI(PG)-INDRAVATI(GR)-1	10-12-2020	10:47	Due to red hot in B-phase of 400Kv Indravati(PG)-Indravati(GR)-1 feeder line isolator at Indravati(GR) end.		NO FAULT	NA			NO	NO
17	400KV-DURGAPUR-BIDHANNAGAR-1	10-12-2020	16:28	Bidhannagar: DT received.	Tripped from Bidhannagar end only	NO FAULT	NA			NO	NO
18	400KV-BINAGURI-BONGAIGAON-2	11-12-2020	13:51	DT RECEIPT AT BINAGURI end and Reactor REF at Bongaon end.		NO FAULT	NA			YES	NO
19	400KV-BIHARSARIEFF(PG)-PUSAULI-1	12-12-2020	14:58	Sasaram: R_N, 9 KM, 13 kA; R_ph LA failed at Sasaram	Biharsharif: R_N, 203.3 KM, 2.3 kA	R-N FAULT.	<100	A/R Unsuccessful from Bsf ,at Ssaram no A/R operated.		YES	YES

20	400KV-MAITHON-MAITHON RB-1	12-12-2020	21:09	dt receipt at maithon rb ,no tripping at maithon end		NO FAULT	NA			NO	NO
21	400KV-PUSAULI(PG)-NABINAGAR(BRBCL)-2	12-12-2020	14:58	Sasaram: R_N Fault		R-N FAULT.	<100			NO	NO
22	400KV-MEERAMUNDALI-BOLANGIR-1	14-12-2020	02:46	Bolangir: B-N, 53.7Km, 2.4KA MMDL: B-N,201Km, 2.7KA		B-N FAULT.	500	At meramundali end A/R operated		YES	NO
23	500KV HVDC TALCHER-KOLAR POLE-I	15-12-2020	16:33	Persistent DC line Fault, 49.7 Km from talcher		HVDC FAULT	NA			NO	NO
24	400KV-KHARAGPUR-CHAIBASA-1	16-12-2020	12:07	Tripped from Chaibsa end		NO FAULT	NA	Reason for DT may be shared		YES	NO
25	400KV-KHARAGPUR-CHAIBASA-2	16-12-2020	12:07	Tripped from Chaibsa end		NO FAULT	NA	Reason for DT may be shared		YES	NO
26	400KV-JEYPORE-GAJUWAKA-1	19-12-2020	10:44	Y-N, 138.7 KM, FC: 1.86 KA		Y-N FAULT.	<100			NO	NO
27	500KV HVDC TALCHER-KOLAR POLE-I	20-12-2020	21:24	Inlet temperature high in the valve cooling system		HVDC FAULT	NA			NO	NO
28	400KV-JEERAT-BAKRESWAR-1	20-12-2020	21:19	Jeerat end: reactor VT fuse fail/overvoltage failure	Bk'TPP end: 27,186A,186B, carrier trip	NO FAULT	NA			NO	NO
29	220KV-CHAIBASA(PG)-CHAIBASA(JUSNL)-1	21-12-2020	14:59	SF6 gas pressure low		NO FAULT	NA			NO	NO
30	220KV-PUSAULI-DEHRI-1	21-12-2020	06:21	SASARAM MAIN 2: Z1 1.7517 KA 64 KM LINE LENGTH Y-N MAIN ZONE 3 DEHRI END NO TRIP		Y-N FAULT.	900			NO	NO

31	220KV-DEHRI-GAYA-2	21-12-2020	06:21	DEHRI 2 Y-N Y-N226 KM FROM GAYA 1.2KA		Y-N FAULT.	900	From Gaya end tripped in z-3.		YES	YES
32	220KV-DEHRI-GAYA-1	21-12-2020	06:21	DEHRI 1 y-nFAULT 224 KM KM(LINE 98 KM) GROM GAYA 1.38 KA		Y-N FAULT.	900	From Gaya end tripped in z-3.		NO	YES
33	400KV-KHSTPP-BARH-1	22-12-2020	06:09	DT received at KHSTPP, Teed protection operated at Barh (Iy: 1.55 kA)		NO FAULT	NA			YES	YES
34	400KV-PATNA-BARH-1	22-12-2020	06:09	Y_N, 78.28 KM, 7.2 kA (Patna)	Y_N, 26.55 KM, 14.57 kA (Barh)	Y-N FAULT.	<100	At Patna end Y-N fault detected ,and only Y pole opened and		YES	YES
35	220KV-CHAIBASA(PG)-CHAIBASA(JUSNL)-1	22-12-2020	10:58	Master Trip; Low gas (SF6) pressure of the line CT at JUSNL end		NO FAULT	NA			NO	NO
36	220KV-SUBHASGRAM(PG)-CESC(EMSS)-1	23-12-2020	10:32	INTER TRIP RECEIVED AT EMSS STATION	NO TRIP AT SUBHASGRAM	NO FAULT	NA			NO	NO
37	400KV-BAHARAMPUR-SAGARDIGHI-2	24-12-2020	15:47	DT RECEIVED AT BAHARAMPUR.	DC EARTH FAULT REPORTED AT SAGARDIGHI.	DC EARTH FAULT	NA			YES	NO
38	400KV-GOKARNA-SAGARDIGHI-1	24-12-2020	15:47	NO TRIPPING AT GOKARNO.DC EARTH FAULT REPORTED AT SAGARDIGHI.	DC EARTH FAULT REPORTED AT SAGARDIGHI.	DC EARTH FAULT	NA			NO	NO
39	400KV-MEERAMUNDALI-BOLANGIR-1	24-12-2020	11:11	MEERAMUNDALI : B-N,FC 2.73 KA 209KM	BOLANGIR: B-N,FC 2.34KA,56.118KM	B-N FAULT.	500	Delayed clearance observed .		YES	NO

40	220KV-JAMSHEDPUR-JINDAL-1	24-12-2020	05:52	Jamshedpur end-Yph, Z1, fd-86.664 km, fault current=1593.69 A.		Y-N FAULT.	<100			NO	NO
41	220KV-BUDHIPADAR-KORBA-1	25-12-2020	12:04	b-n 58.4 km ,2.9 kA form budhipadar KE END : ZONE-2, B PHASE, 82.93 KM & FAULT CURRENT=2.048KA.		B-N FAULT.	<100			NO	NO
42	220KV-CHANDIL-STPS(WBPDCL)-1	25-12-2020	01:01	STPS end: Yph, Z1,13.35 km, Iy=6.402 kA		Y-N FAULT.	<100			NO	NO
43	400KV-ROURKELA-CHAIBASA-2	26-12-2020	12:58	Buchholtz operated in LR at Rourkela DT received at Chaibasa.	Line charged without 50MVar Line reactor.	NO FAULT	NA	REACTOR RINGDOWN OBSERVED.		NO	YES
44	400KV-PATNA-KISHANGANJ-1	26-12-2020	08:01	KISHANGUNJ: B-N, 2.6KA, 147KM;	PATNA: B-N, 2.3KA, 173 KM	B-N FAULT.	<100	A/R unsuccessful .Reactor ringdown observed.		YES	YES
45	220KV-PATNA-KHAGAUL-3	29-12-2020	12:09	Patna-86 master trip Khagaul-awaited		NO FAULT	NA			NO	NO
46	220KV-PATNA-KHAGAUL-2	29-12-2020	12:09	Suspected LBB operation at Khagaul end	Patna end not tripped	NO FAULT	NA			NO	NO
47	400KV-NEW PURNEA-GOKARNA-1	30-12-2020	06:25	As reported, PLCC maloperated at New Purnea. DT sent. However, B_N fault observed in PMU		B-N FAULT.	<100			NO	NO