



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

Tel No.:033-24239651, 24239654 FAX No.:033-24221802, 24221358 Web: www.erpc.gov.in

सं./NO. पू.क्षे.वि.स./PROTECTION/2021/1073

दिनांक /DATE: 05.11.2021

सेवा में / To,

संलग्न सूची के अनुसार / As per list enclosed.

विषय : पू.क्षे.वि.स. की 108 वीं संरक्षण समन्वय उप-समिति (पीसीसी) की बैठक हेतु सूचना।

Sub: Notice for 108th Protection Coordination sub-Committee (PCC) meeting of ERPC.

यह सूचित किया जाता है कि पू.क्षे.वि.स की 108वीं पीसीसी बैठक 16 नवंबर 2021 (मंगलवार) को 10:30 बजे से ऑनलाइन माइक्रोसॉफ्ट टीम्स मीटिंग प्लेटफॉर्म के माध्यम से आयोजित की जाएगी। मीटिंग लिंक ई-मेल या संदेश के माध्यम से अग्रेषित किया जाएगा। किसी भी सहायता के लिए निम्न समन्वयक से संपर्क किया जा सकता है:

Notice is hereby given that 108th PCC meeting of ERPC will be held on 16th November, 2021 (Tuesday) from 10:30 hrs through online Microsoft Teams meeting platform. The meeting link will be forwarded through e-mail or message. The following coordinator may be contacted for any assistance:

कुमार सत्यम, सहायक अभियंता-II, पू.क्षे.वि.स., मोब: 7355225072, ई-मेल: satyam.24365@gov.in
Kumar Satyam, Asst. Director-II, ERPC, Mob: 7355225072, E-mail: satyam.24365@gov.in

चर्चा हेतु अस्थायी कार्यसूची बिन्दुएं निम्नानुसार होंगे :

The tentative agenda items for discussion will be as follows:

- 1) पू.क्षे.वि.स. की 107वीं संरक्षण उप-समिति की बैठक के कार्यवृत्त की पुष्टि।
Confirmation of the minutes of 107th Protection sub-Committee Meeting of ERPC.
- 2) अक्टूबर 2021 की ग्रीड गड़बड़ी का विश्लेषण:
Analysis of following grid disturbances of October, 2021:
 - Total Power Failure at 400kV Dikchu HEP on 06/10/2021 at 12:38 Hrs
 - Disturbance at 220/132kV Budhipadar(OPTCL) Substation on 09/10/2021 at 11:57 Hrs
 - Total Power Failure at 220/132 kV Chatra(JUSNL) Substation on 09/10/2021 at 12:44Hrs
 - Total Power Failure at 220 kV Garwah (JUSNL) Substation on 09/10/2021 at 18:49 Hrs
 - Total Power Failure at 220kV Rongnicnu HEP on 20/10/2021 at 12:42 Hrs
 - Total Power Failure at 400kV Teesta-II, HEP on 21/10/2021 at 14:32Hrs
- 3) पिछली सुरक्षा समन्वय उप-समिति की बैठकों के निर्णय का पालन.
Follow up of decision of previous Protection Coordination sub-Committee Meetings.
- 4) अक्टूबर 2021 के लिए ट्रांसमिशन तत्वों की सिंगल लाइन ट्रिपिंग घटनाएं अनुबंध-1 में संलग्न हैं
Single line tripping incidences of transmission elements for October 2021 as enclosed at Annexure-1

आपसे निवेदन है कि बैठक के दौरान अर्थपूर्ण विश्लेषण हेतु उपरोक्त ट्रिपिंग से संबंधित समस्त दस्तावेज (SLD, SOE, DR, Relay and schematic diagram of auxiliary supply, wherever applicable) सहित विस्तृत रिपोर्ट प्रस्तुत करें। आपसे अनुरोध किया जाता है कि संरक्षण डाटाबेस प्रबंधन प्रणाली में लागू ट्रिपिंग घटना सूचना प्रणाली का विवरण ऑन-लाइन में अपलोड करें www.erpc-protectiondb.in.

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 tripping well in advance for meaningful analysis. 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.)

बैठक में आपकी उपस्थिति महत्वपूर्ण है।

Your participation in the meeting is highly solicited.

भवदीय / Yours faithfully,

(पी.पी.जेना / P.P.Jena)

Executive Engineer (PS)/ कार्यपालक अभियंता(पी.एस)

LIST OF ADDRESSES:

Chief Engineer, Trans (O&M) Bihar State Power Transmission Limited, VidyutBhawan, Bailey Road, Patna-800021	Electrical Supeeerintending Engineer (CRITL) Bihar State Power Transmission Limited, VidyutBhawan,Bailey Road, Patna-800021
Chief Engineer(System Operation), SLDC , BSPTCL, 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, KusaiColony,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. VaniviharChowk, 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, AndulRoad, Howrah-711109	Addl. Chief Engineer (ALDC) West Bengal Electricity Distribution Company Ltd VidyutBhavan, 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, SasiSekhar 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, LA 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 (AM), POWERGRID, Odisha Projects, Sahid Nagar, Bhubaneswar – 751 007
General Manager (OS), ERHQ-I, NTPC Ltd., LoknayaJaiprakashBhawan, (2 nd Floor), DakBunglowChawk, Patna-800001	Manager (Electrical), Adhunik Power & Natural Resources Ltd. “Lansdowne Towers, Kolkata-700020 (Fax No. 033-2289 0285)
Executive Director (O&M) NHPC Ltd., NHPC Office Complex, Sector-33, Faridabad, Haryana-121003 (Fax-01292272413)	Electrical Superintending Engineer, TTPS, TenughatVidyut Nigam Ltd., Lalpania, Dist. Bokaro, Jharkhand-829149
Dy. General Manager (Electrical) IB Thermal Power Station, OPGCL Banhapalli, Dist. Jharsuguda-768234, Orissa	General Manager (AM), 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	The Head Maithon Power Limited, Maithon Office, MA 5 Gogna, Dist. Dhanbad, Jharkhand State, PIN-828207
General Manager (AM), ER-II Power Grid Corporation of India Ltd., J-I-15, Block-EP, Sector-V,Salt Lake,Kolkata-91	Head –Regulatory and contracts, IndiGrid Limited , 247 Embassy, Office No 107, ‘B’ Wing, Hindustan Co. Bus Stop, Gandhi Nagar, L.B.S. Road, Vikhroli West, Mumbai – 400 079. Ph : +91 845509 96408
General Manager (P&O), PTC Ltd., Kanchanjunga Bldg.,18, Barakhamba Road, New Delhi-110001	
Managing Director, Bhutan Power Corporation Post Box no. 580, Thimpu, Bhutan.	Managing Director, Druk Green Power Corprn. P.O. Box-1351, Thimpu, Bhutan.

Associate Director (Commercial and Regulatory) Darbhanga-Motihari Transmission Company Limited (DMTCL),503, Windsor, Off CST Road, Kalina, Santacruz(E), Mumbai-400098	The Plant Head, JITPL, Angul, Odisha (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 Sewa Bhawan, R. K. Puram, New Delhi-110066
Director (NPC), CEA, NRPC Building, Katwaria Sarai, 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
President , TPTL, Bhikaji Cama Place, New Delhi , 110066	

List of important transmission lines in ER which tripped in OCTOBER-2021

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	Remarks	LOCAL END UTILITY	REMOTE END UTILITY	Utility Response
1	220 KV MUZAFFARPUR-HAZIPUR-1	01-10-2021	21:44	01-10-2021	22:19	Didn't trip	Y_ph O/c	Y-Earth	100		PG ER-1	BSPTCL	
2	220 KV MUZAFFARPUR-HAZIPUR-2	01-10-2021	21:44	02-10-2021	10:04	Y_N, 0.6 km, 21 kA		Y-Earth	100	A/r can't be ascertained. DR timelength is less	PG ER-1	BSPTCL	
3	400 KV ALIPURDUAR-BINAGURI-1	02-10-2021	05:38	03-10-2021	18:32	Alipurduar: R_Y, Ir=Iy: 4.2 kA, 87 kA	Binaguri: R_Y, Ir: 12.7 kA, Iy: 12.4 kA, 20.06 km	R-Y-Earth	100	Phase-to-phase fault	PG ER-2	PG ER-2	
4	400 KV MUZAFFARPUR-GORAKHPUR-1	02-10-2021	08:22	02-10-2021	09:33	DT received	O/V st. I at Gorakhpur			DT received at Muzaffarpur	PG ER-1	NR	
5	400 KV LAPANGA-OPGC (IB THERMAL)-1	02-10-2021	08:25	02-10-2021	11:19	Lapanga: B_N, 11.52 kA, 7.4 km	-	B-Earth	100	A/r successful from Lapanga after 1 sec. OPGC DR not available	OPTCL	OPTCL	

6	400 KV BIHARSHARIF-SASARAM-1	02-10-2021	13:27	03-10-2021	00:10	Biharsharif: R_B, 132.5 km, 3.9 kA	Sasaram: R_B, Z I, 60.71 km, 5.3 kA	R-B-Earth	100	Insulator decapped found at loc. 344. Phase to phase fault	PG ER-1	PG ER-1	
7	220 KV DARBHANGA (DMTCL)-SAMASTIPUR-1	03-10-2021	09:24	03-10-2021	10:20	Darbhangha: B_N, Z I, 39.1 km, 0.2 kA	Samastipur: B_N, 7.5 km, 3.9 kA	B-Earth	100	No A/r observed in PMU	DMTCL	BSPTCL	
8	220 KV KHAGARIA-NEW PURNEA-2	03-10-2021	12:17	03-10-2021	17:38		Didn't trip	NA	NA	No fault observed in PMU. Reason for tripping maybe shared by BSPTCL	BSPTCL	PG ER-1	
9	220 KV PATNA-FATUAH-1	03-10-2021	12:23	03-10-2021	13:13	Patna: R_N, Z I, 14.4 km, 8.4 kA	Fatuah: R_N, Z I, 7.86 km, 7.56 kA	R-Earth	100	Three phase tripping for single phase fault from Patna end .While from ftua end also 3 phase tripping occurred but Rand B phase reclosed after 800 ms .A/R scheme to be reveiwed at Fatuah.	PG ER-1	BSPTCL	

10	400 KV PATNA-BALIA-2	03-10-2021	16:50	03-10-2021	17:31	Patna: Y_N, 126.53 km, 3.6 kA	Balia: A/r successful	Y-Earth	100	No A/r attempt at Patna. Other two phase tripped after 2.5 seconds on PD. Seems Y phase reclosed at balia end but after 2.5 seconds also needs to be checked.	PG ER-1	NR	
11	220 KV DALTONGANJ-CHATRA-2	04-10-2021	19:25	04-10-2021	19:43	Spurious DT sent from Daltonganj while changeover from Bus-1 to Bus-2 through TBC		NA	NA	Reason maybe shared by PG	PG ER-1	JUSNL	
12	400 KV FSTPP-KHSTPP-4	06-10-2021	07:21	06-10-2021	08:52	Didn't trip	DT received	NA	NA	Reason maybe shared by NTPC	NTPC FSTPP	NTPC KHSTPP	
13	220 KV JODA-RAMCHANDRAPUR-1	06-10-2021	10:21	06-10-2021	11:04	Joda: Y_N, 95.28 km, 1.02 kA	Ramchandrapur: Y_N, 44 km, 2.88 kA	Y-Earth	200	A/r failure from Joda end after 1 sec. Three phase tripping from Ramchandrapur	OPTCL	JUSNL	
14	220 KV SASARAM-SAHUPURI-1	06-10-2021	11:08	06-10-2021	16:38	Sasaram: R_B, 6.19 kA, 22.9 km		R-B-Earth	100	Phase-to-phase fault	PG ER-1	NR	
15	400 KV JEYPORE-GAZUWAKA-1	07-10-2021	12:17	07-10-2021	13:14	Line tripped during reversal of power flow from SR to ER			NA	PG may explain. No DR uploaded	PG ODISHA PROJEC TS	SR	

16	400 KV MERAMUNDALI-LAPANGA-2	08-10-2021	14:27	08-10-2021	16:53	Meramundali: R_N Fault, 160 km, 19 kA	Meramundali: R_N, 5.7 km	R-Earth	100	Lapanga-2 and Bolangir are in same dia at Meramundali. Fault was in Meramundali-Lapanga line, R_ph breaker at both ends got opened within 100 msec. However, after 200 msec LBB of tie bay at Meramundali operated and DT sent to Bolangir and Lapnaga line. It seems LBB operated even after breaker opened. OPTCL may explain	OPTCL	OPTCL	
17	400 KV MERAMUNDALI-BOLANGIR-1	08-10-2021	14:27	08-10-2021	14:56	-	DT received at Bolangir	No fault	NA		OPTCL	PG ODISHA PROJECTS	
18	400 KV BARIPADA-TISCO-1	09-10-2021	11:27	09-10-2021	12:29	Baripada: DT received	TISCO: Didn't trip		NA	No fault observed. Main and tie bay got opened at Baripada. PG may explain	PG ODISHA PROJECTS	DVC	
19	400 KV ALIPURDUAR-JIGMELLING-2	10-10-2021	04:22	10-10-2021	05:36	Alipurduar: B_N, 10.32 kA, 64.1 km	Jigmelling: B_N, 136.8 km, 1.71 kA	B-Earth	100	A/r failed after 1 second	PG ER-2	BHUTAN	

20	220 KV SANTALDIH (STPS)-CHANDIL	12-10-2021	11:52	12-10-2021	15:36	Santaldih: B_N, Z I, 43 km, 1.18 kA	Chandil: B_N, 164 km	B-Earth	100	Tripped from Chandil within 100 msec	WBSETC L	JUSNL	
21	400 KV KISHANGANJ-RANGPO-1	13-10-2021	10:53	13-10-2021	17:22	Kishanganj: B_N, 2.09 kA, DEF	Rangpo: B_N, 2.5 kA	B-Earth	1500	DEF setting at Rangpo need to be checked. Fault current was around 2 kA for more than 1.5 seconds. DT sent to Kishanganj	PG ER-1	PG ER-2	
22	220 KV TENUGHAT-BIHARSHARIF	13-10-2021	14:31	13-10-2021	15:12	Tenughat: Y_N, 48.5 km	Biharsharif: Y_N, 100 km	Y-Earth	100	Three phase tripping for single phase fault at Biharsharif	JUSNL	BSPTCL	
23	220 KV DARBHANGA (DMTCL)-MOTIPUR-1	14-10-2021	13:01	15-10-2021	13:39			Y-B-Earth	1000	High resistive fault got converted to phase to phase fault after 1 second	DMTCL	BSPTCL	
24	400 KV KHARAGPUR-CHAIBASA-2	15-10-2021	11:44	15-10-2021	16:36	ur: Y_N, Z I, 3.622 kA,	Chaibasa: Y_N, 98.667 km, 3.31 kA	Y-Earth	100	A/r failed after 1 second	WBSETC L	PG ER-1	
25	400 KV KOLAGHAT-KHARAGPUR-2	16-10-2021	00:26	16-10-2021	01:07	Kolaghat: B_N, Z I, 21.32 km, 9.548 kA	Kharagpur: B_N, Z I, 3.622 kA, 80.1 km	B-Earth	100	A/r failed after 1 second	WBSETC L	WBSETC L	

26	400 KV BINAGURI-RANGPO-1	16-10-2021	09:53	16-10-2021	12:01		Rangpo: R_Y, 75 km, Ir: 4.2 kA, Iy: 3.7 kA	R-Y-Earth	100	Phase-to-phase fault	PG ER-2	PG ER-2	
27	220 KV DALTONGANJ-CHATRA-2	16-10-2021	15:39	16-10-2021	16:35	Daltonganj: Y_B, 124 km, Iy: 1.6 kA, Ib: 1.6 kA		Y-B-Earth	300	Phase-to-phase fault. Tripped in Z II time from Daltonganj	PG ER-1	JUSNL	
28	220 KV DALTONGANJ-CHATRA-1	17-10-2021	13:05	17-10-2021	14:39	Daltonganj: B-N, 85 km, 1.6 kA	Chatra: Carrier received	B-Earth	100	A/r successful from Daltonganj. Tripped again within reclaim time	PG ER-1	JUSNL	
29	400 KV MEDINIPUR-NEW CHANDITALA-1	17-10-2021	15:32	17-10-2021	15:58	Medinipur: Didn't trip	New Chanditala: DT received		NA	DR not uploaded. Tripping reason maybe explained by WBSETCL	PMJTL	WBSETCL	
30	400 KV BIDHANNAGAR-NEW CHANDITALA	17-10-2021	15:32	17-10-2021	15:56	Bidhannagar: R_N, 94.1 km, 3.7 kA	New Chanditala: R_N, Z I, 47.21 km, 6.07 kA	R-Earth	100	A/r successful from New Chanditala	WBSETCL	WBSETCL	
31	400 KV KOLAGHAT-KHARAGPUR-2	18-10-2021	06:09	18-10-2021	06:53	Kolaghat: B_N, 22 km, 9.59 kA	Kharagpur: B_N, Z I, 3.14 kA, 76 km	B-Earth	100	A/r successful from Kolghat	WBSETCL	WBSETCL	

32	400 KV BAHARAMPUR-BHERAMARA-3	18-10-2021	11:04	18-10-2021	11:10	Baharampur: DT received		No fault	NA	Line tripped during availing shutdown of Ckt I. DT received	PG ER-2	BANGLA DESH	
33	220 KV NEW MELLI-TASHIDING-1	18-10-2021	17:51	18-10-2021	19:20	New Melli: DEF, DT sent		B-Earth	500	DEF operated at New Melli	PG ER-2	Tashiding	
34	400 KV LAPANGA-MERAMUNDALI-2	19-10-2021	11:49	19-10-2021	12:33		Meramundali: Y_N, Z I, 48.8 km, 10 kA	Y-Earth	100	A/r successful. Tripped again within reclaim time	OPTCL	OPTCL	
35	400 KV RANCHI-RAGHUNATHPUR (RTPS)-3	19-10-2021	16:33	19-10-2021	17:22	Ranchi: B_N, Z I, 55.95 km, 5.292 kA	Raghunathpur: B_N, Z I, 151.2 km, 2.542 kA	B-Earth	100	A/r successful from Ranchi	PG ER-1	DVC	
36	400 KV NABINAGAR (NPGC)-PATNA-1	19-10-2021	19:54	19-10-2021	20:43	NPGC: B_N, Z I, 38.29 km, 9.70 kA	Patna: B_N, Z I, 65.19 km, 5.5 kA	B-Earth	100	A/r failed after 1 second	NPGC	PG ER-1	
37	400 KV NEW PURNEA-MUZAFFARPUR-1	20-10-2021	08:56	20-10-2021	11:10		Muzaffarpur: R_N, 121 km, 3.16 kA	R-Earth	100	A/r failed after 1 second	PG ER-1	PG ER-1	
38	400 KV KHARAGPUR-KOLAGHAT-2	20-10-2021	11:10	20-10-2021	11:22	Kharagpur: R_N, 38.02 km, 5.714 kA	Kolaghat: R_N, 60 km, 5.25 kA	R-Earth	100	A/r failed after 1 second	WBSETCL	WBSETCL	

39	400 KV MALDA-NEW PURNEA-1	21-10-2021	00:16	21-10-2021	18:22	Malda: R_N, 3.828 km, 14.91 kA	New Purnea: R_N, 156 km, 1.85 kA	R-Earth	150	No A/r attempt at Malda. Other two phases tripped in PD time. A/r failed after 1 second from New Purnea. Tie CB at New Purnea took another attempt after 1 second of A/r failure	PG ER-2	PG ER-1	
40	400 KV KISHANGANJ- TEESTA-III-1	21-10-2021	13:47	21-10-2021	16:17	Kishanganj: Y_B, Z I, 188.29 km, Iy=Ib=3.9 kA	Teesta III: Y_B, Z I, 28.69 km, Iy: 8.830 kA, Ib: 7.076 kA	Y-B-Earth	600	fault was in z-2 and carrier recived from teesta 3 end and All three phase of main CB at Kishanganj opened after 100 msec. However, tie CB opened after 600 msec which should not occur.needs to be checked	PG ER-1	TVPTL	
41	400 KV TEESTA III- DIKCHU-1	21-10-2021	14:32	21-10-2021	15:13	Teesta III: B_N, Z III, 2.1 kA		B-Earth	1200	Tripped on DEF	TVPTL	Dikchu	

42	400/220 KV ICT-1 AT JEERAT	22-10-2021	12:36	22-10-2021	20:10	Differential protection operated. Y_ph LA burst on HV side		Y-Earth	100	Differential operated	WBSETCL	NA	
43	400 KV MALDA-NEW PURNEA-1	23-10-2021	06:22	23-10-2021	12:57	Suspected mal-operation of TBC LBB at Malda		No fault	NA		PG ER-2	PG ER-1	
44	400 KV FSTPP-MALDA-1	23-10-2021	06:22	23-10-2021	11:00	Suspected mal-operation of TBC LBB at Malda		No fault	NA		NTPC FSTPP	PG ER-2	
45	220 KV RENGALI(PH)-TSTPP-1	23-10-2021	12:40	23-10-2021	14:30	Rengali: R_N, 31.36 km, 3.18 kA	TSTPP: R_N, 1.1 km	R-Earth	300	Delayed clearance from Rengali PH	OHPC	NTPC TSTPP	
46	220 KV MAITHON-DUMKA-1	23-10-2021	13:02	23-10-2021	13:42	Maithon: Y_B_N, Iy: 4.46 kA, Ib: 4.14 kA, 51.16 km	Dumka: Y_B_N, Iy:2.2 kA, Ib:2.25 kA, 20.25 km	Y_B-Earth	100	Phase-to-phase fault	PG ER-2	JUSNL	
47	220 KV KHAGARIA-NEW PURNEA-2	23-10-2021	21:18	23-10-2021	21:44	Khagaria: R_N, 3.04 kA, 24.2 km	New Purnea: R_N, 82.7 km, 2.1 kA	R-Earth	100	No A/r at New Purnea. A/r operated at Khagaria after 300 msec and breaker agin got opened after 200 msec	BSPTCL	PG ER-1	

48	220 KV CHANDAUTI-SONENAGAR-1	24-10-2021	23:54	25-10-2021	00:37	Chandauti: R_N, 18.6 km, 6.59 kA, A/r successful	Sonenagar: R_N, 40.19 km, 2.193 kA	R-Earth	250	Fault disappeared within 70 msec during which breaker at Chandauti opened. Fault reappeared after 60 msec and breaker at Sonenagar opened in 100 msec. A/r successful from Chandauti. No A/r attempt at Sonenagar.	PMTL	BSPTCL	
49	400 KV BINAGURI-RANGPO-2	26-10-2021	13:29	26-10-2021	13:56	Binaguri: DT received	Rangpo: Y_N, 2 kA	Y-Earth	1700	DEF setting at both ends need to be checked. Current in neutral is around 2.2 kA at Rangpo and 1.4 kA at Binaguri for more than 1.7 seconds.	PG ER-2	PG ER-2	

50	400 KV ALIPURDUAR-BINAGURI-3	28-10-2021	13:32	28-10-2021	17:46	Alipurduar: Y_B, 32.1 km, Iy: 9.17 kA, Ib: 9.01 kA	Binaguri: Y_B, Iy: 4.257 kA, Ib: 4.5 kA, 76.25 km	Y-B-Earth	1500	Highly resistive fault gradually evolved in phase to phase to earth fault after 1.5 seconds	PG ER-2	PG ER-2	
51	400 KV ALIPURDUAR-BINAGURI-1	30-10-2021	12:45	30-10-2021	15:46	Alipurduar: Y_N, 11.17 kA, 18 km	Binaguri: Y_N, 2.39 kA, 123.7 km	Y-Earth	100	A/r failure after 1 second	PG ER-2	PG ER-2	
52	400 KV MEDINIPUR-KHARAGPUR-1	30-10-2021	14:28	30-10-2021	18:10	Medinipur: R_B, Z I, Ir-11.32 kA, Ib-11.4 kA, 19.7 km	Kharagpur: R_B, Z-2, 5 kA, 96.75 km	R-B-Earth	100	Phase to phase fault	PMJTL	WBSETCL	
53	765 KV MEDINIPUR-NEW JEERAT-2	31-10-2021	01:24	31-10-2021	10:37	Medinipur: R_B, Z 1, Ir-5.125 kA, Ib-5.219 kA, 95.5 km		R-B-Earth	100	Phase to phase fault	PMJTL	PMJTL	
54	220 KV CHANDIL-SANTALDIH-1	31-10-2021	01:41	31-10-2021	01:57	Chandil: R_N, 1.95 kA, 81.6 km	SantalDIH: R_N, 4.6 kA, 26 km	R-Earth	100	Three phase tripping for single phase fault	JUSNL	WBSETCL	
55	220 KV DARBHANGA (DMTCL)-MOTIPUR-1	31-10-2021	11:07	31-10-2021	11:57	Darbhanga: R_N, 9.6 km, Ir-9.77 kA	Motipur: R_N, 1.5 kA, 182.06 km, O/V	R-Earth	100	A/r failure after 1 second	DMTCL	BSPTCL	