



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

75
Azadi Ka
Amrit Mahotsav



Eastern Regional Power Committee

14, गोल्फ क्लब रोड, टॉलीगंज, कोलकाता-700033

Tel. No.: 033-24239651, 24239659 FAX No.: 033-24239652, 24239653 Web: www.erpc.gov.in

सं./NO. पू.क्षे.वि.स./PROTECTION/2022/316

दिनांक /DATE: 06.06.2022

सेवा में / To,

संलग्न सूची के अनुसार / As per list enclosed.

विषय : पू.क्षे.वि.स. की 115 वीं संरक्षण समन्वय उप-समिति (पीसीसी) की बैठक हेतु सूचना।

Sub: Notice for 115th Protection Coordination sub-Committee (PCC) meeting of ERPC.

Sir/Madam,

यह सूचित किया जाता है कि पू.क्षे.वि.स. की 115वीं पीसीसी बैठक 20 जून 2022 (सोमवार) 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 अग्रपिठ किया जाएगा।

Notice is hereby given that **115th PCC meeting** of ERPC will be held on **20th June, 2022 (Monday)** from 10:30 hrs through **online Microsoft Teams meeting platform**. The meeting link will be forwarded through e-mail or message.

चर्चा हेतु अस्थायी कार्यसूची बिन्दुएं निम्नानुसार होंगे :

The tentative agenda items for discussion will be as follows:

- 1) Confirmation of the minutes of 114th Protection sub-Committee Meeting of ERPC
- 2) Analysis of following grid disturbances of May 2022:
 - Total Power failure at 220 kV Garhwa(JUSNL) S/s on 01.05.2022 at 15:53 Hrs and on 23.05.2022 at 19:59 Hrs
 - Total Power failure at 220 kV Chatra(JUSNL) S/s on 01.05.2022 at 17:40 Hrs
 - Disturbance at 400/220 kV Bokaro A(DVC) S/S on 12.05.2022 at 13:56 Hrs
 - Disturbance at 400/220/132 kV Lapanga (OPTCL)S/s on 27.05.2022 at 15:56 Hrs
 - Total Power failure at 400/220 kV Patratu(JUSNL) S/s on 14.05.2022 at 16:04 Hrs
 - Disturbance at 220 kV Barauni(BSPTCL) S/S on 19.05.2022 at 17:25 Hrs
 - Disturbance at 220 kV Ramchandrapur(JUSNL) S/S on 21.05.2022 at 01:33 Hrs
 - Disturbance at 400/220 kV Rourkela(PG) S/S on 31.05.2022 at 11:09 Hrs
- 3) Follow up of decision of previous Protection Coordination sub-Committee Meetings.
- 4) Single line tripping incidences of transmission elements for May 2022 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,

P.P. Jena
06.06.2022

(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, Jhankand 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 May-2022

Sl. 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	DR Configuration Disc re pa ncy	DR/EL RE CE IV ED FROM LOCAL END	DR/EL RE CE IV ED FROM REMOTE END	UTILITY RESPONSE
1	400KV-JAMSHEDPUR-ANDAL-1	01-05-2022	20:15	01-05-2022	22:26	Jamshedpur: B_N, Z1, 156.2km, 2.81kA	Andal (DSTPS) : B-N, Z-1, 11.39 km, Ib=5 kA	B-Earth	100	A/r successful. Tripped again within reclaim time		Yes	Yes	

2	400KV-BIDHANNAGAR-NEW CHANDITAL A-1	01-05-2022	20:30	01-05-2022	21:18	Bidhannagar : R-N, Z1, 7.1 km, Ir=16.48 kA	New Chanditala: R-N, 137.4 km, Ir=0.2557 kA	R-Earth	100	A/r failed after 1 second		Yes	Yes	
3	220KV-SUBHASGRAM(PG)-NEW TOWN-1	01-05-2022	23:00	01-05-2022	23:37	Subhasgram : R-N, 21.145 km, 6.420 kA	New Town : R-N, Z -1, 2.59 km	R-Earth	100	Three phase tripping for single phase fault		Yes	No	
4	400KV-TSTPP-MEERAMUNDALI-1	02-05-2022	13:25	02-05-2022	16:30	TSTPP : B-N , Zone 1	Meramundali : B-N ; 43.7 km; Ib= 4.9 kA	B-Earth	100	A/r failed after 1 second		Yes	Yes	
5	220KV-MAITHON-DUMKA-1	03-05-2022	04:31	03-05-2022	06:58	Maithon: A/r successful	Dumka: R_N, Z-1, 11 km Ir=3.64 kA	R-Earth	100	Three phase tripping at Dumka end	DR lent h less at Mait	Yes	Yes	
6	220KV-DARBHANGA (DMTCL)-MOTIPUR-2	03-05-2022	00:32	03-05-2022	09:37	Darbhanga: R-N, Z1, 33.18km, 3.988 kA		R-Earth	100	A/r failed after 1 second		No	Yes	
7	220KV-MUZAFFARPUR-KANTI-1	03-05-2022	00:09	03-05-2022	12:35	Muzaffarpur: R-N, 19.23 km, 8.55kA	MTPS: R-N, 3 km, 12kA	R-Earth	120	A/r not observed. Single phase tripping. Other two phase tripped after 1.6 seconds at Muzaffarpur		Yes	No	
8	220KV-CHANDIL-RANCHI-1	03-05-2022	14:49	03-05-2022	15:27	Chandil: R_Y, Z-1, 65 km, Ir=2.64kA, Iy= 2.60kA	Ranchi: R-Y, 15km, Ir=Iy=4.27kA	R-Y-Earth	100	Phase-to-phase fault		Yes	Yes	

9	400KV-MEERAMUN DALI-TSTPP-2	03-05-2022	18:26	03-05-2022	20:27	Meramundali : R_N 15.7 km , 9.63 KA	TSTPP : R_N , 37.3 km, Ir =8.685 kA	R- Earth	100	A/r failed after 1 second		Yes	Yes	
10	400KV-KHSTPP-BANKA (PG)-1	03-05-2022	02:30	03-05-2022	22:23		Banka : Y_N, 1.8 km, 10.8kA	Y- Earth	100	A/r failed after 1 second		Yes	No	
11	400KV-NEW DUBURI-MEERAMUN DALI-2	03-05-2022	18:26	03-05-2022	23:28	Tripped with ICT at New Duburi which is in same dia. Main bay at New Duburi was out of service.		No fault	NA	Main bay at New Duburi out of service. Tripped due to tripping of dia element		Yes	Yes	
	315 MVA ICT-2 at New Duburi	03-05-2022	18:26			Differential relay operated		R- Earth	100	Differentail relay operated. Findings maybe shared by OPTCL		Yes	NA	
12	400KV-BIHARSARIF (PG)-PUSAULI-1	04-05-2022	09:37	04-05-2022	11:25	Biharshariff : Y_N , Z-4 , Iy=5.4 KA	Pusauli: Y_N, 2.9 kA	Y- Earth	350	Tripped in Zone-2 time from both ends. PG may explain.		Yes	Yes	
13	400KV-MAITHON-GAYA-2	04-05-2022	07:17	06-05-2022	01:16	Maithon:R-Y, 245 km, Ir 2.6kA, Iy 2.5kA	Gaya:R-Y 37 km ,Ir 12.84 kA,Iy 12.96 kA	R-Y- Earth	100	Phase-to-phase fault		Yes	Yes	

14	220KV- CHAIBASA(P G)- CHAIBASA(J USNL)-1	04-05-2022	09:30	04-05-2022	16:34		Chaibasa(JUSNL): CT SF6 operation	No fault	NA	Details maybe shared by JUSNL		NA	No	
15	220KV- DALTONGAN J-GARWAH (NEW)-1	04-05-2022	09:47	04-05-2022	18:19		Daltonganj: R_N, 9.91km, 4.7 kA	R- Earth	100	A/r failed after 1 second at Daltonganj		Yes	No	
16	220KV- DALTONGAN J-CHATRA-1	04-05-2022	19:46	04-05-2022	21:45		Daltonganj : Y_B, 4.84 km, Iy= 4.85kA, Ib= 4.84 kA,	Y-B	100	Phase-to-phase fault		Yes	No	
17	400KV- MAITHON- KHSTPP-2	05-05-2022	14:38	05-05-2022	15:57		Maithon : R-N, 59.1 km, Ir= 3.49 kA	R- Earth	100	A/r successful from Maithon end only. Other two phae at Kahalgaoon tripped after 2.5 seconds on PD		No	No	

18	765KV- ANGUL- SRIKAKULA M-1	05-05-2022	14:46	05-05-2022	16:42	Angul: B_N, Z- 1, 242 km, Ib= 2.89 kA		B- Earth	100	A/r successful from Angul end only		Yes	NA	
19	765KV- ANGUL- SRIKAKULA M-2	05-05-2022	14:51	05-05-2022	17:44	Angul : R-N, Z-1, 78.3km, Ir=5.82 kA		R- Earth	100	No A/r observed. Other two phase tripped after 1.1 second from Angul		Yes	NA	
20	400KV- ALIPURDUAR (PG)- BINAGURI-3	06-05-2022	12:33	06-05-2022	16:23	Alipurduar: B-N, 47.7 km, 3.49 kA	Binaguri: B-N, 84 km, 2.8 kA	B- Earth	100	A/r successful. Tripped again within reclaim time		Yes	Yes	
21	220KV-NEW MELLI- TASHIDING-2	06-05-2022	16:53	06-05-2022	17:25	New Melli: Directional E/F	Tashiding: DT received.	B- Earth	1200	Highly resistive fault. Tripped on DEF at New Melli		Yes	No	

22	220KV-DARBHANGA (DMTCL)-LAUKAHI-2	06-05-2022	17:54	06-05-2022	19:00	Darbhangha : B_N Z-2, 102.8 km , 1.789 kA		B-Earth	100	Three phase tripping at Laukahi	DR not time synchronized at Laukahi	No	Yes	
23	220KV-DARBHANGA (DMTCL)-LAUKAHI-1	06-05-2022	17:54	06-05-2022	19:50		Laukahi: B-Ph Z-1, 4.28 km, 5.89 kA	B-Earth	100	Three phase tripping at Laukahi	DR not time synchronized at Laukahi	No	Yes	
24	220KV-DEHRI-GAYA-2	08-05-2022	21:02	08-05-2022	22:08	Dehri : B-N, Z-1, 58.2 km, 1.78 kA	Gaya: B_N, 43.1 km, 1.77kA	B-Earth	800	Highly resistive fault. Tripped in Zone-2 time from Gaya.		Yes	Yes	
25	400KV-SAHARSA-DARBHANGA (DMTCL)-2	09-05-2022	00:24	09-05-2022	03:17	Saharsha :Y-N, Z-1, 3.3 km, 13.13 kA	Darbhangha :Y_N,49 km, 1.75 kA	Y-Earth	100	O/V St.-2 operated after 400 msec. Line reactor didn't trip during single phase tripping at Darbhanga.		Yes	Yes	
26	400KV-KISHANGANJ-RANGPO-2	09-05-2022	13:48	09-05-2022	16:33	Kishanganj: DEF, B_N, 2.43 kA, NGR Buchholz operated	Rangpo: DEF, 4.8 kA	B-Earth	1250	Tripped on DEF from both ends		Yes	Yes	

27	400KV- MEERAMUN DALI-TSTPP-2	10-05-2022	15:24	10-05-2022	16:52	Meeramundali : R_N 15.5 km Ir=10.24 kA	Talcher R_N 37.6 km Ir=8.87 kA	R- Earth	100	A/r failed after 1 second		Yes	Yes	
28	220KV- ARRAH- NAUBATPUR- 1	11-05-2022	14:56	11-05-2022	15:40	Arrah: DR_N, A/r successful	Naubatpur: R_N, 37.5 km. 2.96 kA	R- Earth	100	A/r successful from Ara end only		Yes	No	
29	220KV- BINAGURI- SILIGURI-1	12-05-2022	13:16	12-05-2022	15:22	Binaguri: B_N, 7.39 km, 11.3 kA	Siliguri: B_N, 2.66 km, 7.18 kA	B- Earth	100	A/r successful. Line tripped again within reclaim time		Yes	No	
30	400KV- BIHARSHARI F-VARANASI- 1	12-05-2022	14:47	12-05-2022	16:54	Biharsharif: R_N, 198.5 km, 2.289 kA	Varanasi: Didn't trip	R- Earth	100	A/r failed after 1 second		Yes	NA	
31	220KV- TENUGHAT- BIHARSHARI F-1	12-05-2022	22:06	12-05-2022	22:46	Tenughat: Y_N, Zone- 1, 10.12 km, 6.919 kA	Biharsharif: Y_N, 143.1 km, 1.5 kA	Y- Earth	100	Three phase tripping for single phase fault		Yes	No	
32	220 KV- DALKHOLA- PURNEA-1	13-05-2022	04:35	13-05-2022	06:33	Dalkhola: R_N, Zone- 1, 11.45 km, 7.39 kA	Purnea: R_N, 25.689 km, 5.6 kA, A/r successful	R- Earth	100	Other two phase tripped after 1.1 second at Dalkhola. A/r successful at Punrea		Yes	Yes	
33	220KV- KARMNASHA (NEW)- PUSAULI-1	13-05-2022	09:48	13-05-2022	11:55	Karmnasah: Master trip relay operated		No fault	NA	Detials maybe shared by BSPTCL		Yes	No	

34	220KV- CHANDIL- SANTALDIH-1	13-05-2022	12:30	13-05-2022	12:50	Chandil: B_N, Zone-1, 18.1 km, 1.97 kA	Santalalih: B_N, Zone-2, 101.33 km, 1.585 kA	B- Earth	500	Tripped in Zone-2 time from Santalalih. Single phase tripping at Chandil	DR leng th less at Cha ndil	Yes	Yes	
35	400KV- DURGAPUR- KHSTPP-1	13-05-2022	14:41	13-05-2022	15:42	Durgapur: Y_N, 5.1 kA	KhSTPP: Master trip relay faulty	Y- Earth	100	A/r successful from Durgapur end only		Yes	Yes	
36	220 KV DARBHANGA (DMTCL)- LAUKAHI-1	13-05-2022	16:22	13-05-2022	17:17	Darbhangha: R_N, 57.55 km, 2.448 kA	Laukahi: R_N, 3.08 kA	R- Earth	100	Three phase tripping for single phase fault		No	Yes	
37	220 KV DARBHANGA (DMTCL)- LAUKAHI-2	13-05-2022	16:22	13-05-2022	22:39	Darbhangha: R_N, 59.5 km, 2.74 kA		R- Earth	100	Three phase tripping at Laukahi		No	Yes	
38	400KV PATNA- BALIA-1	13-05-2022	18:38	13-05-2022	19:41	Patna: O/V St.1		O/V	NA	Voltage in R_ph & B_ph touched 480 kV while Y_ph voltage was 230 kV. O/V St.1 operated at Patna. PG may explain		Yes	NA	

39	400KV GAYA- MAITHON-2	13-05-2022	19:02	13-05-2022	23:36	Gaya: R_Y, 37.58 km, Ir=Iy=13 kA	Maithon: R_Y, Ir- 2.6 kA, Iy-2.47 kA	R-Y- Earth	100	Phase-to-phase fault		Yes	Yes	
40	220 KV DALTONGAN J-CHATRA-2	14-05-2022	09:30	14-05-2022	10:13	Daltonganj: Y_B, Iy=Ib=2.4 kA	Chatra: Y_B, 118.54 km	Y-B	100	Phase-to-phase fault	DR chan nels not conf igur ed prop erly	Yes	Yes	
41	400 KV RANCHI- SIPAT-1	14-05-2022	16:04	15-05-2022	07:46	Ranchi: Y_N, 41.5 km, 6.02 kA		Y- Earth	100	Another fault in B_ph after 800 msec		Yes	NA	
42	400 KV RANCHI-NEW RANCHI-3	14-05-2022	16:04	15-05-2022	06:20	Ranchi: R_N, 78.6 km, 1.48 kA	New Ranchi: R_N, 1.51 kA	R- Earth	100	Another fault in Y_ph after 250 msec. One more fault after 300 msec in B_ph		Yes	Yes	
43	400 KV RANCHI-NEW RANCHI-4	14-05-2022	16:04	15-05-2022	06:22	Ranchi: R_N, 78.1 km, 8.9 kA	New Ranchi: R_N, 19.1 kA	R- Earth	100	Three phase tripping occurred.		Yes	Yes	

44	220 KV RANCHI- HATIA-2	14-05-2022	16:12	14-05-2022	16:38	Ranchi: B_N, 32 km, 3.14 kA, A/r successful	Hatia: B_N, 102.5 km	B- Earth	100	A/r failed after 1 sec		Yes	Yes	
45	220 KV RANCHI- HATIA-3	14-05-2022	16:12	14-05-2022	18:14	Ranchi: B_N, 40.1 km, 2.4 kA		B- Earth	100	A/r failed after 1 sec		Yes	Yes	
46	400 KV RANCHI- ROURKELA-1	14-05-2022	18:17	14-05-2022	23:10	Ranchi: R_B, 13 km, Ir 10.34 kA, Ib-10.52 kA	Rourkela: R_B, 97.4 km, Ir-4.78 kA, Ib-5.21 kA	R-B- Earth	100	Phase-to-phase fault		Yes	Yes	
47	400 KV PPSP- BIDHANNAG AR-1	14-05-2022	18:23	14-05-2022	19:00	PPSP: R_N, Zone-1, 132.3 km	Bidhannagar: R_N, Zone-1, 42.09 km, 7.045 kA	R- Earth	100	Three phase tripping for single phase fault. A/r kept in non-auto as per OEM advise		No	Yes	
48	400 KV JEERAT- BAKRESWAR- 1	14-05-2022	19:15	14-05-2022	19:48	Jeerat: B_N, Zone-2, 141 km, 3.154 kA	Bakreswar: B_N, Zone-1, 39.16 km, 9.388 kA	R- Earth	100	Three phase tripping for single phase fault. A/r kept in non-auto as per OEM advise		Yes	No	
49	400 KV KHARAGPUR- CHAIBASA-1	14-05-2022	20:02	14-05-2022	21:18	Kharagpur: B_N, Zone- 1, 124.3 km, 1.454 kA	Chaibasa: B_N, Zone-1, 0.727 km, 15.669 kA	B- Earth	100	A/r successful. Line tripped again within reclaim time		Yes	Yes	

50	400 KV PPSP-BIDHANNAGAR-1	15-05-2022	12:20	15-05-2022	12:56	PPSP: R_N, Zone-1, 120 km	Bidhannagar: R_N, Zone-1, 42 km, 6.82 kA	R-Earth	100	Three phase tripping for single phase fault. A/r kept in non-auto as per OEM advise		No	Yes	
51	220 KV DALTONGANJ-CHATRA-1	15-05-2022	12:56	15-05-2022	13:35	Daltonganj: B_N, 106.45 km, 1.1 kA	Chatra: B_N, 0.9 kA	B-Earth	400	Three phase tripping for single phase fault.	DR channels not configured properly	Yes	No	
52	220 KV CHANDIL-SANTALDIH-1	15-05-2022	17:22	15-05-2022	17:37	Chandil: Y_N, Zone-1, 39.1 km, 2.95 kA	SantalDIH: Didn't trip	Y-Earth	100	A/r was in blocked condition at Chandil. Three phase tripped	DR length less	Yes	Yes	
53	400 KV JAMSHEDPUR-MAITHON-1	15-05-2022	17:28	15-05-2022	18:04	Jamshedpur: Y_N, Zone-1, 59.14 km, 3.2 kA	Maithon: Y_N, 59.14 km, 3.2 kA	Y-Earth	100	A/r successful. Tripped again within reclaim time		Yes	Yes	
54	220 KV BUDHIPADAR-RAIGARH-1	15-05-2022	21:51	15-05-2022	23:47	Budhipadar: R_N, Zone-1, 1.4 km, 22.8 kA	Raigarh: R_N, 37 km, 2.47 kA	R-Earth	100	Three phase tripping for single phase fault		Yes	NA	

55	400 KV GAYA- MAITHON-1	16-05-2022	15:35	17-05-2022	08:18	Gaya: R_N, 187.3 km, 2.2 kA	Maithon: R_N, 95.3 km, 4.04 kA	R- Earth	100	A/r successful. Line tripped again within reclaim time		Yes	Yes	
56	400 KV PPSP- BIDHANNAG AR-1	16-05-2022	17:20	16-05-2022	17:58	PPSP: R_N, 157.7 km	Bidhannagar: R_N, Zone-1, 20.9 km, 10.58 kA	R- Earth	100	Three phase tripping for single phase fault. A/r kept in non-auto as per OEM advise		No	Yes	
57	400 KV PPSP- BIDHANNAG AR-2	16-05-2022	17:20	16-05-2022	17:55	PPSP: Y_N, Zone-1, 162.5 km	Bidhannagar: Y_N, Zone-1, 20.09 km, 10.6 kA	Y- Earth	100	Three phase tripping for single phase fault. A/r kept in non-auto as per OEM advise		No	Yes	
58	400 KV FSTPP- KHSTPP-2	16-05-2022	19:30	16-05-2022	20:07	FSTPP: Y_N	KhSTPP: Y_N, 40.03 km, 6.9 kA	Y- Earth	100	A/r successful at FSTPP end only (Main bay A/r successful).		No	No	
59	400 KV KISHANGANJ- RANGPO-2	17-05-2022	01:54	17-05-2022	06:48	Kishanganj: R_B, 65.06 km, Ir=Ib=9.977 kA	Rangpo: R_B, Zone-1, 132.2 km, Ir=3.69 kA, Ib=4.16 kA	R-B- Earth	100	Phase-to-phase fault		Yes	Yes	
60	400 KV NEW PPSP-NEW RANCHI-1	17-05-2022	04:58	17-05-2022	08:18	New PPSP: Didn't trip	New Ranchi: PLCC malfunction	No fault	NA	Details maybe shared by PG/WBSETCL		No	No	
61	400 KV FSTPP- KAHALGAON- 1	17-05-2022	10:46	17-05-2022	16:01	FSTPP: DT receipt	Kahalgaon: Didn't trip	No fault	NA	Details maybe shared by NTPC KhSTPP/FSTPP		No	No	
62	RANCHI- RAGHUNATH PUR-3	17-05-2022	15:05	17-05-2022	16:12	Ranchi: B_N, 57.6 km, 6.15 kA	Raghunathpur: B_N, 132 km, 3.54 kA	B- Earth	100	A/r successful. Tripped again within reclaim time		Yes	Yes	
63	400 KV NEW RANCHI-NEW PPSP-2	17-05-2022	16:29	17-05-2022	17:26	New Ranchi: B_N, 112 km, 3.59 kA	New PPSP: B_N, 17.6 km, 7 kA	B- Earth	100	A/r failed after 1 sec at New PPSP. Another fault struck in Y_ph after 1 sec at New Ranchi		Yes	Yes	

64	400 KV GAYA- MAITHON-1	17-05-2022	16:52	17-05-2022	17:30	Gaya: R_N, 88.9 km, 3.59 kA	Maithon: R_N, 220.1 km, 2.11 kA	R- Earth	100	A/r failed after 1 sec		Yes	Yes	
65	220 KV CHANDAUTI (PMTL)- SONENAGAR- 2	18-05-2022	12:55	18-05-2022	18:08	Chandauti: Y_B, 22.36 km, Iy:10.15 kA, Ib: 6.97 kA	Sonenagar: Y_B, 50.41 km, Iy-1.7 kA, Ib-1.9 kA	Y-B	100	Phase-to-phase fault		Yes	Yes	
66	220 KV ARRAH- NAUBATPUR- 1	18-05-2022	14:03	18-05-2022	15:39	Arrah: B_N, 29.6 km, 1.456 kA, A/r successful	Naubatpur: B_N, 5.96 kA	B- Earth	100	A/r successful at Arrah only. BGCL may explain		Yes	No	
67	220 KV ARRAH- NAUBATPUR- 2	18-05-2022	14:03	18-05-2022	15:40	Arrah: Didn't trip		B- Earth	100	BGCL may explain.		No	No	
68	400 KV KISHANGANJ- RANGPO-1	18-05-2022	15:10	18-05-2022	15:53	Kishanganj: B_N, 187 km, 2.7 kA	Rangpo: B_N, 11.8 km, 5.66 kA	B- Earth	600	Highly resistive fault. A/r successful. Tripped again within reclaim time		Yes	Yes	
69	400 KV BIHARSHARI F-BALIA-2	19-05-2022	14:20	19-05-2022	15:45	Biharsharif: Y_N, 27.48 km, 9.5 kA		Y- Earth	100	Three phase tripping for single phase fault. No A/r observed		Yes	NA	
70	400 KV BARH- MOTIHARI-1	19-05-2022	15:02	19-05-2022	16:17	Barh: Y_N, 172.5 km, 2.38 kA	Motihari: Y_N, 10.2 km, 8.68 kA	Y- Earth	100	A/r failed after 1 sec		Yes	No	

71	400 KV MUZAFFARPUR- GORAKHPUR-1	19-05-2022	16:11	19-05-2022	19:20	Muzaffarpur: R_N, 9.78 kA		R- Earth	100	Three phase tripping for single phase fault		Yes	NA	
72	220 KV MUZAFFARPUR-HAJIPUR-2	19-05-2022	16:25	19-05-2022	18:28		Hajipur: B_N, 51.95 km, 1.344 kA	B- Earth	100	Three phase tripping for single phase fault		No	Yes	
73	400 KV MUZAFFARPUR- DHALKEBAR-2	19-05-2022	16:39	20-05-2022	01:53	Muzaffarpur: R_N, 43.6 km, 6.2 kA		R- Earth	100	PG may explain. Multiple A/r attempts at Muzaffarpur		No	No	
74	220 KV KHAGARIA- NEW PURNEA-1	19-05-2022	17:11	19-05-2022	19:33	Khagaria: Y_B, 38 km, Iy-4.1 kA, Ib-4.04 kA	New Purnea: Y_B, 58.3 km, Iy-3.31 kA, Ib-3.71 kA	Y-B	100	Phase-to-phase fault		Yes	Yes	
75	220 KV KHAGARIA- NEW PURNEA-2	19-05-2022	17:26	19-05-2022	20:02	Khagaria: Y_B, 38 km, Iy-4.1 kA, Ib-4.04 kA	New Purnea: Y_B, 50.4 km, Iy=Ib=4.04 kA	Y-B	100	Phase-to-phase fault		Yes	Yes	
76	400 KV BARH- MOTIHARI-2	19-05-2022	17:51	19-May	18:55	Barh: Y_N, 4.1 km, 21 kA	Motihari: Y_N, 212 km, 1.76 kA	Y- Earth	100	Three phase tripping for single phase fault. No A/r observed		No	No	
77	220 KV KHAGARIA- NEW PURNEA-1	19-05-2022	19:48	20-05-2022	10:03	Khagaria: Y_B, Iy=Ib=2.8 kA	New Purnea: Y_B, 58.8 km, Iy-3.3 kA, Ib-3.72 kA	Y-B	100	Phase-to-phase fault		Yes	Yes	

78	220 KV JSPL-JAMSHEDPU R-1	20-05-2022	17:05	20-05-2022	18:13	JSPL: Y_N, 1.19 kA	Jamshedpur: Y_N, 19.5 km	Y-Earth	400	Three phase tripping for single phase fault		No	Yes	
79	400 KV SAHARSA-KISHANGANJ-2	21-05-2022	00:39	21-05-2022	00:57	Saharsa: B_N, 101 km, 3.13 kA	Kishanganj: B_N, 78.3 km, 4.8 kA	B-Earth	100	A/r failed after 1 sec		Yes	Yes	
80	220 KV KHAGARIA-NEW PURNEA-1	21-05-2022	00:55	21-05-2022	17:38	Khagaria: Y_B_N, 43.71 km, Iy-3.2 kA, Ib-2.553 kA	New Purnea: Y_B_N, 3 km, Iy: 18.05 kA, Ib: 17.7 kA	Y-B-Earth	100	Phase-to-phase fault		Yes	No	
81	220 KV KHAGARIA-NEW PURNEA-2	21-05-2022	00:55	21-05-2022	17:36	Khagaria: Y_B, 94.08 km, Iy-1.67 kA, Ib-1.80 kA		Y-B-Earth	100	Phase-to-phase fault		Yes	No	
82	220 KV SAHARSA-KHAGARIA-1	21-05-2022	00:56	21-05-2022	02:58	Saharsa: R_N, 6.3 kA, DT received	Khagaria: LBB operated	R-Earth	100	DT received at Saharsa. Bus bar protection operated at Khagaria. BSPTCL may explain.		Yes	Yes	
83	220 KV SAHARSA-KHAGARIA-2	21-05-2022	00:56	21-05-2022			Khagaria: LBB operated	R-Earth	100	DT received at Saharsa. Bus bar protection operated at Khagaria. BSPTCL may explain.		Yes	Yes	
84	400 KV BINAGURI-MALBASE-1	21-05-2022	01:50	21-05-2022	02:15	Binaguri: B_N, 15.24 km, 7.9 kA, A/r successful		B-Earth	100	A/r successful from Binaguri only		Yes	NA	

85	400 KV MALDA-NEW PURNEA-1	21-05-2022	01:59	21-05-2022	02:34	Malda: Y_N, 7.73 kA, 32.54 km	New Purnea: A/r successful	Y- Earth	100	A/r successful at New Purnea. DT received at Malda after 1 sec. PG may explain.		Yes	Yes	
86	400 KV FSTPP- MALDA-2	21-05-2022	02:13	21-05-2022	23:37	FSTPP: R_N, 42 km, 8.392 kA	Malda: R_N, Zone- 1, 19.29 kA	R- Earth	100	A/r failed after 1 sec		No	Yes	
87	765 KV MEDINIPUR- NEW JEERAT- 2	21-05-2022	02:34	21-05-2022	03:49	Medinipur: Y_N, 16 km, 7.7 kA	New Jeerat: Y_N, 132 km	Y- Earth	100	A/r successful. Line tripped again within reclaim time		Yes	Yes	
88	400 KV KHARAGPUR- CHAIBASA-2	21-05-2022	03:41	21-05-2022	03:57	Kharagpur: R_N, 4.73 kA	Chaibasa: R_N, 101.8 km, 3.2 1A	R- Earth	100	A/r failed after 1 sec		Yes	Yes	
89	400 KV BAHARAMPU R- BHERAMARA- 2	21-05-2022	03:53	21-05-2022	04:38	Baharampur: R_N, 39.05 km, 7.144 kA		R- Earth	100	DT received at Behrampur		Yes	NA	
90	400 KV BAHARAMPU R- BHERAMARA- 3	21-05-2022	04:07	21-05-2022	04:40	Baharampur: R_N, 37.518 km, 4.436 kA		R- Earth	100	DT received at Behrampur		Yes	NA	

91	400 KV ALIPURDUAR- BONGAIGAO N-1	21-05-2022	07:40	21-05-2022	08:11	Alipurduar: R_N, 3.69 kA	Bongaigaon: R_N, 56 km, 5.1 kA	R-Earth	1300	DEF operated at Alipurduar. Resistive fault		Yes	NA	
92	220 KV RANCHI- HATIA-3	21-05-2022	13:05	21-05-2022	13:57	Ranchi: B_N, 27.9 km, 5 kA		B-Earth	100	A/r successful from Ranchi only		Yes	Yes	
93	400 KV DHANBAD- RANCHI-1	21-05-2022	13:14	21-05-2022	13:41	Dhanbad: B_N, Zone-2, 130 km, 2.68 kA	Ranchi: B_N, Zone-1, 13.5 km, 15.67 kA	B-Earth	100	A/r failed after 1 sec		No	Yes	
94	400 KV DHANBAD- RANCHI-2	21-05-2022	13:14	21-05-2022	13:50	Dhanbad: R_N, Zone-2, 153.5 km, 1.63 kA	Ranchi: R_N, Zone-1, 10.3 km, 15.39 kA	R-Earth	100	A/r failed after 1 sec		No	Yes	
95	400 KV NEW RANCHI-NEW PPSP-1	21-05-2022	12:51	21-05-2022	20:08	New Ranchi: Y_B, 0.9 km, Iy-24.27 kA, Ib-27.3 km	New PPSP: Y_B, Zone-2, 105 km, 1.722 kA	Y-B-Earth	100	Phase-to-phase fault		Yes	Yes	
96	400 KV DURGAPUR- JAMSHEDPU R-1	21-05-2022	14:38	21-05-2022	15:47	Durgapur: R_N, 135.2 km, 2.01 kA	Jamshedpur: R_N, 25.82 km, 3.06 kA	R-Earth	100	A/r successful. Tripped again within reclaim time		Yes	Yes	
97	400 KV MEDINIPUR- NEW CHANDITAL A-2	21-05-2022	15:42	21-05-2022	16:24	Medinipur: B_N, 52 km, 5.034 kA		B-Earth	100	A/r successful. Tripped again within reclaim time		Yes	No	

98	400 KV BIDHANNAGAR-NEW CHANDITAL A-1	21-05-2022	15:49	21-05-2022	16:12	Bidhannagar: B_N, 102.7 km, 3.61 kA		B- Earth	100	A/r successful. Tripped again within reclaim time		No	Yes	
99	400 KV JEERAT-NEW CHANDITAL A-1	21-05-2022	16:00	21-05-2022	17:26	Jeerat: B_N, Zone-2, 85.69 km, 4.395 kA	New Chanditala: R_Y, 0.284 km, Ir:29.32 kA, Iy: 19.68 kA	R-Y- Earth	100	Phase-to-phase fault. WBSETCL may explain.		Yes	Yes	
100	400 KV RAJARHAT- JEERAT-1	21-05-2022	16:55	21-05-2022	18:03	Rajarhat: Y_N, 0.2 km, 11.4 kA	Jeerat: Y_N, 36.2 km, 6.6 kA	Y- Earth	100	A/r successful. Tripped again within reclaim time		Yes	Yes	
101	400 KV RAJARHAT- GOKARNA-1	21-05-2022	17:05	21-05-2022	17:51	Rajarhat: B_N, 3.58 km, 11.06 kA	Gokarna: B_N, 249.7 km, 1.89 kA	B- Earth	100	Initially fault in Y_ph. Another fault struck B_ph after 1 sec		Yes	Yes	
102	220 KV BUDHIPADA R-KORBA-1	21-05-2022	17:55	22-05-2022	16:10	Budhipadar: R_N, 1 km, 23.5 kA		R- Earth	100	Three phase tripping for single phase fault		Yes	NA	

103	765 KV ANGUL- JHARSUGUD A-1	21-05-2022	17:59	21-05-2022	20:13	Angul: Y-B, 254.3 km, Iy-2.34 kA, Ib-2.31 kA	Jharsuguda: Y-B, 19.5 km, Iy-22.62 kA, Ib-21.7 kA	Y-B- Earth	100	Phase-to-phase fault		Yes	Yes	
104	220 KV BUDHIPADA R-RAIGARH-1	21-05-2022	18:27	22-05-2022	16:13	Budhipadar: Y_N, 6.1 km, 12.19 kA		Y- Earth	100	Three phase tripping for single phase fault		Yes	NA	
105	400 KV LAPANGA- STERLITE-1	21-05-2022	19:59	21-05-2022	23:00	Lapanga: B_N, Zone- 1, 11.07 km, 4.46 kA		B- Earth	100	A/r failed after 1 second		Yes	No	
106	765 KV JHARSUGUD A-RAIPUR (PS)-1	21-05-2022	20:27	22-05-2022	02:16	Jharsuguda: R_N, 57.1 km, 2.4 kA	Raipur: R_N, 233 km, 1.7 kA	R- Earth	600	DEF operated.		Yes	NA	
107	765 KV GAYA- VARANASI-2	21-05-2022	22:04	21-05-2022	23:21	Gaya: B_N, 70.9 km, 6.144 kA		B- Earth	100	A/r failed after 1 second		Yes	NA	
108	400 KV TSTPP- MERAMUND ALI-2	21-05-2022	22:10	21-05-2022	22:45	TSTPP: R_N, Zone-1, 36.8 km, 9.076 kA	Meramundali: R_N, 15.6 km, 10.28 kA	R- Earth	100	A/r failed after 1 second		Yes	Yes	

109	400 KV LAPANGA- STERLITE-1	21-05-2022	23:00	22-05-2022	16:44	Lapanga: B_N, 22.1 kA		B- Earth	100	Tripped on O/c at Lapanga. Zone-4 picked at Lapanga. Sterlite DR not available. OPTCL may explain		Yes	No	
110	400 KV TSTPP- MERAMUND ALI-2	21-05-2022	23:05	22-05-2022	05:19	TSTPP: R_N, 8.6 kA	Meramundali: R_N, 8.87 kA	R- Earth	100	A/r successful. Line tripped again within reclaim time		Yes	Yes	
111	220 KV DALOTNGAN J-GARHWA-1	22-05-2022	12:59	22-05-2022	16:22	Daltonganj: Y_B, 85.3 km	Garhwa: Y_B, 24.66 km, Iy=Ib=1.48 kA	Y-B	100	Phase-to-phase fault		Yes	Yes	
112	220 KV DALTONGAN J-GARHWA-2	22-05-2022	12:59	22-05-2022	14:37	Daltonganj: Didn't trip	Garhwa: Y_B, 46 km	Y-B	100	Phase-to-phase fault		Yes	Yes	
113	220 KV DALTONGAN J-CHATRA-1	22-05-2022	13:56	22-05-2022	15:06	Daltonganj: Y-B, 3.7 km, Iy=Ib=5.08 kA		Y-B	100	Phase-to-phase fault		Yes	No	
114	220 KV TENUGHAT- BIHARSHARI F-1	22-05-2022	16:41	22-05-2022	17:28	Tenughat: Y_N, 10.17 km, 7.3 kA	Biharsharif: Y_N, 142 km, 1.5 kA	Y- Earth	100	Three phase tripping for single phase fault		Yes	Yes	
115	220 KV DALTONGAN J-CHATRA-2	22-05-2022	16:16	22-05-2022	17:37	Daltonganj: Y-B, Iy-1.77 kA, Ib-1.31 kA	Chatra: Y_B, 34.9 km, Iy-1.011 kA, Ib-0.993 kA	Y-B- Earth	100	Phase-to-phase fault		Yes	No	

116	400 KV RANCHI- RAGHUNATH PUR-3	22-05-2022	17:18	22-05-2022	18:31	Ranchi: Y_N, Zone-1, 35.8 km, 7.73 kA	Raghunathpur: Y_N, 149.73 km, 2.810 kA	Y- Earth	100	Three phase tripping at Ranchi. A/r successful at Raghunathpur, tripped again within reclaim time		Yes	Yes	
117	400 KV RANCHI- DHANBAD-1	22-05-2022	18:33	22-05-2022	18:54	Ranchi: Y_N, 124.5 km, 3.18 kA	Dhanbad: Y_N, Zone-1, 49.2 km, 4.649 kA, A/r successful	Y- Earth	100	A/r successful at Dhanbad. Single phase tripping at Ranchi, however, no A/r attempt taken.		Yes	No	
118	765 KV JHARSUGUD A-RAIPUR (PS)-2	22-05-2022	18:36	22-05-2022	23:09	Jharsuguda: Y_B, 33.8 km, Iy-19.07 kA, Ib- 17.52 kA	Raipur: Y_B, 265 km, 5.5 kA	Y-B- Earth	100	Phase-to-phase fault		Yes	No	
119	220 KV KARAMNASH A-SAHUPURI- 1	23-05-2022	02:04	23-05-2022	03:05	Karamnasha: Master trip relay operated		No fault	NA	Details maybe shared by BSPTCL		Yes	NA	
120	220 KV JODA- RAMCHAND RAPUR-1	23-05-2022	09:48	23-05-2022	10:49	Joda: Y-B, 2.32 km, Iy- 1.304 kA, Ib-0.43 kA	Ramchandrapur: Y- B, 118.5 km, 2 kA	Y-B	450	Phase-to-phase fault		Yes	Yes	
121	400 KV RANCHI- RAGHUNATH PUR-2	23-05-2022	19:10	23-05-2022	20:23	Ranchi: B_N, 123.6 km, 3.8 kA	Raghunathpur: B_N, 80.67 km, 3.593 kA	B- Earth	100	A/r successful. Line tripped again within reclaim time		Yes	Yes	
122	400 KV RANCHI- SIPAT-1	23-05-2022	21:00	23-05-2022	22:16	Ranchi: R_N, 21.24 km, 9.8 kA, A/r successful		R- Earth	100	A/r successful from Ranchi		Yes	NA	

123	220 KV BUDHIPADA R-KORBA-1	23-05-2022	19:31	24-05-2022	00:51	Budhipadar: Pole discrepancy		No fault	NA	OPTCL may explain		Yes	NA	
124	765 KV ANGUL- SRIKAKULA M-1	23-05-2022	22:37	23-05-2022	23:37	Angul: Y_N, 3.945 kA, 276.4 km		Y- Earth	100	A/r successful from Angul end only. Three phase tripping occurred at Srikakulam		Yes	NA	
125	220 KV TENUGHAT- BIHARSHARI F-1	23-05-2022	22:54	23-05-2022	23:43	Tenughat: Y_N, 9.7 km, 7 kA	Biharsharif: Y_N, 141.8 km, 1.55 kA	Y- Earth	100	Three phase tripping for single phase fault		Yes	Yes	
126	400 KV BIHARSHARI F-BALIA-2	24-05-2022	20:16	25-05-2022	22:23	Biharsharif: B_N, 165.9 km, 2.6 kA	Balia: B_N, 72.2 km, 5.8 kA	B- Earth	100	A/r failed after 1 sec		Yes	NA	
127	220 KV DALTONGAN J-CHATRA-2	25-05-2022	00:35	25-05-2022	02:15	Daltonganj: B_N, 147 km, 1.028 kA		B- Earth	800	Three phase tripping for single phase fault	DR chan nels not conf igur ed prop erty	Yes	No	
128	400 KV MERAMUND ALI- LAPANGA-2	26-05-2022	08:24	26-05-2022	11:53	Meramundali: Y_N, 18.2 km, 8.24 kA	Lapanga: Y_N, 150 km, 2.563 kA	Y- Earth	100	A/r failed after 1 sec		Yes	Yes	

129	400 KV JAMSHEDPUR-ADHUNIK-1	26-05-2022	09:55	26-05-2022	19:27	Jamshedpur: DEF operated		R-Earth	600	R_ph current became zero at Jamshedpur first. Other two phases tripped after 14 seconds. Details maybe shared by PG/APNRL		Yes	No	
130	220 KV DALTONGANJ-CHATRA-2	26-05-2022	14:06	26-05-2022	16:45	Daltonganj: B_N, Zone 3, 200.4 km, .8 kA	Chatra: Didn't trip	B-Earth	800	Three phase tripping.		Yes	No	
131	220 KV KARAMNASHA-SAHUPURI-1	26-05-2022	16:34	26-05-2022	17:44	Master trip relay operated		R-Y-Earth	500	Zone-3 picked up at Karmnasha. Details maybe shared by BSPTCL		Yes	NA	
132	400 KV RANGPO-TEESTA 5 - 2	26-05-2022	19:56	26-05-2022	20:10	Rangpo: Didn't trip		No fault	NA	Tripped from Teesta-5 end only. Details maybe shared by Teesta-5		NA	No	
133	220 KV SASARAM-NADOKHAR-1	27-05-2022	14:14	27-05-2022	15:02		Tripped during changeover of power to Bus-2 from Bus-1 at Nadokhar	No fault	NA	Details maybe shared by BSPTCL		Yes	No	
134	220 KV TSTPP-TTPS-1	27-05-2022	20:16	27-05-2022	21:35	TSTPP: R_N, 5.80 km, 11.68 kA	TTPS: R_N, 42.23 km, 5.5 kA	R-Earth	100	Three phase tripping for single phase fault		No	No	

135	400 KV NAUBATPUR- BALIA-1	28-05-2022	01:14	28-05-2022	09:57		Balia: Y_N, 17.31 kA, 14 km	Y- Earth	100	As per PMU, A/r successful. Tripped again within reclaim time.		No	NA	
136	400/220 KV ICT-2 T NAUBATPUR	28-05-2022	01:14	28-05-2022	07:53	Differential protection operated				Details maybe shared by BGCL		No	NA	
137	400 KV NAUBATPUR- BALIA-2	28-05-2022	03:23	28-05-2022	05:01	Naubatpur: Y_B		Y-B- Earth	100	As per PMU, phase-to-phase fault occurred		No	NA	
138	220 KV NEW PURNEA- KHAGARIA-2	28-05-2022	12:42	28-05-2022	13:13	New Purnea: Y_B, 58.3 km, Iy-3.42 kA, Ib-3.40 kA	Khagaria: Y_B, Iy=Ib=3.5 kA	Y-B- Earth	100	Phase-to-phase fault		Yes	Yes	
139	400 KV RENGALI- INDRAVATI-1	28-05-2022	17:58	28-05-2022	21:05	PRV operated due to DC earth fault at sudden pressure switch of NGR		No fault	NA	DT sent from Indravati. Details maybe shared by PG		Yes	Yes	
140	220 KV BUDHIPADA R-KORBA-1	29-05-2022	12:21	29-05-2022	14:17	Budhipadar: B_N, 43.7 km, 2.8 kA		B- Earth	300	Tripped in Zone-2 time. Highly resistive fault		Yes	No	
141	400 KV MEDINIPUR- KHARAGPUR- 1	29-05-2022	13:24	30-05-2022	14:22	Medinipur: Y-B, 103.4 km, Iy-4.33 kA, Ib- 4.41 kA	Kharagpur: Y_B, 5.09 km, Iy-18.38 kA, Ib-17.26 kA	Y-B- Earth	100	Phase-to-phase fault		No	Yes	
142	220 KV BUDHIPADA R-KORBA-1	29-05-2022	14:34	29-05-2022	20:27	Budhipadar: B_N, 37.7 km, 2.58 kA	Korba: B_N, Zone- 2, 1.041 kA	B- Earth	100	Three phase tripping for single phase fault		Yes	NA	

143	765 KV JHARSUGUD A-RAIPUR-1	29-05-2022	18:32	29-05-2022	23:20	Jharsuguda: R_N, 27.73 kA, 1.608 kA	Raipur: R_N, 3.52 kA, 302 km	R- Earth	100	A/r successful. Tripped again within reclaim time		Yes	NA	
144	220 KV DALTONGAN J-GARHWA-1	30-05-2022	16:40	30-05-2022	18:11	Daltonganj: B_N, 36.187 km, 2.438 kA	Garhwa: Y_B, 58 km, Iy-0.23 kA, Ib- 0.296 kA	B- Earth	100	A/r failed after 1 sec from Daltonganj		Yes	No	
145	400 KV TSTPP- ROURKELA-2	30-05-2022	17:32	30-05-2022	18:18		Rourkela: DT received	B- Earth	2000 0	Line reactor of Ckt-1 isolator opened at NTPC TSTPP end, however, B_ph breaker was stuck at Rourkela. Arcing occurred		No	No	
146	220 KV ROURKELA- TARKERA-1	30-05-2022	17:32	30-05-2022	17:50		Tripped from Tarkera only	B- Earth	NA	DEF operated at Tarkera		No	Yes	
147	400 KV FSTPP- MALDA-2	31-05-2022	07:53	31-05-2022	15:44	FSTPP: R_N, 28.1 kA	Malda: R_N, 28.9 km, 8.9 kA, A/r successful	R- Earth	100	A/r successful at Malda. Three phase tripping at Farakka		No	No	
148	220 KV BUDHIPADA R-KORBA-2	31-05-2022	14:53	31-05-2022	17:05	Budhipadar: B_N, 23.3 kA	Korba: R_N, Zone- 2, 217.35 km, 0.868 kA	B- Earth	100	Three phase tripping for single phase fault		Yes	NA	
149	400 KV MEDINIPUR- KHARAGPUR- 2	31-05-2022	15:12	31-05-2022	15:44	Medinipur: Y_N, 88.8 km, 3.53 kA	Kharagpur: Y_N, 23.1 km, 8.70 kA	Y- Earth	100	A/r successful. Tripped again within reclaim time		No	Yes	