



सत्यमेव जयते



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

सं./NO. पू.क्षे.वि.स./PROTECTION/2024/265

दिनांक /DATE:10.05.2024

सेवा में / To,

संलग्न सूची के अनुसार / As per list enclosed.

विषय : पू.क्षे.वि.स. की 135 वीं संरक्षण समन्वय उप-समिति (पीसीसी) की बैठक हेतु सूचना।

Sub: Notice for 135th Protection Coordination sub-Committee (PCC) meeting of ERPC.

Sir/Madam,

यह सूचित किया जाता है कि पू.क्षे.वि.स की 135 वीं पीसीसी बैठक, 21 मई 2024 (संगलवार) को 10:30 बजे पूर्वाह्न से एम एस टीम्स(ऑनलाइन) के द्वारा वर्चुअल माध्यम से आयोजित की जाएगी। मीटिंग लिंक ई-मेल या संदेश के माध्यम से अग्रेषित किया जाएगा।

Notice is hereby given that 135th PCC meeting of ERPC will be held on 21st May 2024 (Tuesday) from 10:30 Hrs (Forenoon) through MS Teams(online) in virtual mode. 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 134th Protection sub-Committee Meeting of ERPC
- 2) Analysis of following grid disturbances of April 2024:
 - Total Power Failure at 220 kV Chatra(JUSNL) S/s on 06.04.2024 at 14:05 Hrs
 - Disturbance at 220 kV Tenughat(TVNL) S/s on 18.04.2024 at 22:12 Hrs
 - Total Power Failure at 220 kV Pratapsasan (OPTCL)S/s on 23.04.2024 at 14:22 Hrs
 - Disturbance at 220 kV Kasba (WBSETCL) S/s on 25.04.2024 at 21:42 Hrs and on 23:17 Hrs
- 3) Follow up of decision of previous Protection Coordination sub-Committee Meetings.
- 4) Single line tripping incidences of transmission elements for April 2024 as attached 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)

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

LIST OF ADDRESSES:

Chief Engineer, Trans (O&M) Bihar State Power Transmission Limited, Vidyut Bhawan, Bailey Road, Patna-800021	Chief Engineer (CRITL) Bihar State Power Transmission Limited, Vidyut Bhawan, 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 Urja Sancharan Nigam Limited Kusai Colony, Doranda, Ranchi-834002	Chief 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 Corp. 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, 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 (AM), POWERGRID, Odisha Projects, Sahid Nagar, Bhubaneswar – 751 007
General Manager (OS), ERHQ-I, NTPC Ltd., LoknayakJaiprakashBhawan, (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	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 (AM), ER-II Power Grid Corporation of India Ltd., J-I-15, Block-EP, Sector-V,Salt Lake,Kolkata-91	The Plant Head, Maithon Power Limited, Maithon Office, MA 5 Gogna, Dist. Dhanbad, Jhankand State, PIN-828207
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. (FAX:011-26139256-65)
General Manager, Sikkim Urja Limited, New Delhi (FAX:011-46529744)	President , TPPL, Bhikaji Cama Place, 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
The Plant Head, Dikchu HEP, Sikkim	

List of important transmission lines in ER which tripped in April-2024

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 Discrepancy	DR/EL RECEIVED FROM LOCAL END	DR/EL RECEIVED FROM REMOTE END
1	400KV-DURGAPUR-KHSTPP-1	01-04-2024	10:42	01-04-2024	13:55	Durgapur: B_N, A/r successful	KhSTPP: B_N, 3.43 kA	B-Earth	100	A/r successful from Durgapur only after 1.2 seconds. NTPC may explain the reason for non-operation of A/r at KhSTPP.		Yes	No
2	220KV-DARBHANGA (DMTCL)-DARBHANGA-2	01-04-2024	11:42	01-04-2024	13:50	DMTCL: R-N, 1.802 km, 14.24 kA		R-Earth	100	Three phase tripping for single phase fault. No A/r attempt at either end. DMTCL/BSPTCL may explain.		Yes	No

3	220KV-DARBHANGA (DMTCL)-DARBHANGA-1	01-04-2024	11:42	01-04-2024	13:46		Darbhangha: R-N, 4.1 km, 2.73 kA	R-Earth	100	Whether line tripped from DMTCL end. DMTCL/BSPTCL may explain.		No	No
4	400KV-GORAKHPUR-MOTIHARI-2	01-04-2024	11:56	02-04-2024	20:28		Motihari: B-N, 6.75 kA, 23.9 km (Initially A/R successful, later tripped in reclaim time)	B-Earth	100	A/r successful. Line tripped again within reclaim time.		NA	No
5	400KV-BINAGURI-BONGAIGAON-2	01-04-2024	12:37	01-04-2024	13:50	Binaguri: B_N, DEF, 2.7 KA		B-Earth	3000	Evolving resistive fault. DEF operated at Binaguri		Yes	NA
6	220KV-SAHARSA(PMTL)-BEGUSARAI-1	01-04-2024	12:44	01-04-2024	19:58	Saharsa: R_N, 5.07 kA	Begusarai: R_N, 61.4 Km, 2.4 2KA	R-Earth	100	A/r successful. Tripped again within reclaim time.		Yes	No
7	400KV-DURGAPUR-JAMSHEDPUR-1	03-04-2024	11:32	03-04-2024	20:01	Durgapur: B-N, 77.7 Km, 2.9 kA	Jamsedpur: B-N, 69.39 Km, 3.8 kA	B-Earth	100	A/r failed after 1 second		Yes	Yes
8	400KV-BINAGURI-BONGAIGAON-1	03-04-2024	15:34	03-04-2024	17:02	Binaguri: DT Received		No fault	NA	DT received at Binaguri. No fault in line. PG ER-2 may share details of the event.		Yes	NA
9	220KV-DARBHANGA (DMTCL)-DARBHANGA-1	04-04-2024	12:30	04-04-2024	15:25		Darbhangha - IL1-0.74 kA, IL2-.0.17 kA & IL3-0.59 kA, A/R lockout and Master trip relay (86).	B-Earth	1500	DEF operated at BSPTCL. Resistive fault		Yes	No

10	220KV-BUDHIPADAR-KORBA-2	05-04-2024	11:18	05-04-2024	14:27	Budhipadar: Y_B_N, 11.14 km, Iy=Ib=12.3 kA	Korba: Y_B, 142.51 Km	Y-B-Earth	1350	Resistive fault. Distance protection operated later when current increased suddenly		Yes	NA
11	220KV-ATRI-PANDIABILI-1	05-04-2024	12:39	05-04-2024	13:03	Atri: DT Received	Pandiabili: Not tripped	No fault	NA	DT received at Atri. No fault in line. OPTCL may explain.		No	NA
12	220KV-ATRI-PANDIABILI-2	05-04-2024	12:39	05-04-2024	13:03	Atri: DT Received	Pandiabili: Not tripped	No fault	NA	DT received at Atri. No fault in line. OPTCL may explain.		No	NA
13	220KV-BUDHIPADAR-KORBA-2	05-04-2024	14:45	24-04-2024	22:40	Budhipadar: Didn't trip		No fault	NA	Line tripped from Korba only		No	NA
14	220KV-BUDHIPADAR-KORBA-3	05-04-2024	15:00	24-04-2024	21:53	Budhipadar: Didn't trip		No fault	NA	Line tripped from Korba only		No	NA
15	220KV-JODA-RAMCHANDRAPUR-1	06-04-2024	12:37	06-04-2024	13:22	Joda: Y-N, 3.1 kA, 18.1 km	Ramchandrapur : Y_N, 109.4 Km, 1.83 kA	Y-Earth	100	A/r failed after 1 second	DR length less at Ramchandrapur	Yes	Yes
16	400KV-ARAMBAGH-BAKRESWAR-1	07-04-2024	06:52	07-04-2024	07:34	Arambagh: B-N, 33.63km, 12.97 kA	Bakreswar: B-N, 98.2 km, 2.50 kA	B-Earth	100	A/r successful. Tripped again within reclaim time.		Yes	No
17	400KV-DARBHANGA (DMTCL)-MUZAFFARPUR-2	07-04-2024	12:03	07-04-2024	12:20	Darbhanga : B-N,Z-1.,49 km, 4.64 kA	Muzaffarpur: A/R successful,B-N, 31.3 km,7.5 kA	B-Earth	100	A/r successful from Muzaffarpur only. No A/r attempt at Darbhanga and other two phase opened after 2.5 seconds on PD.	DR of another instance uploaded by DMTC L.	Yes	Yes

18	400KV-MENDHASAL-PANDIABILI-1	07-04-2024	18:02	07-04-2024	19:26	Mendhasal: Y_N	Pandiabili End: Y-N, 10.2 KA, 0.5 Km	Y-Earth	100	A/r successful at Pandiabili. No A/r attempt at Mendhasal. All three phase tripped during the fault.		No	Yes
19	220KV-DALTONGANJ-CHATRA-1	08-04-2024	18:47	08-04-2024	22:30	Daltonganj: B-N, 5.6 Km, 4.8 kA	Chatra: B-N, 5.78 Km, 0.4 kA	B-Earth	100	Three phase tripping for single phase fault. No A/r attempt at either end. PG ER-1/JUSNL may explain.		Yes	No
20	400KV-KISHANGANJ(PG)-SAHARSA-2	11-04-2024	21:42	11-04-2024	22:35	Kishanganj: B-N, 72 km, 3.3 KA	Saharsha: B-N, 115 km, 3.3 KA	B-Earth	180	Resistive fault. A/r failed after 1 second		Yes	Yes
21	400KV-LAKHISARAI-KHSTPP-2	12-04-2024	11:15	12-04-2024	12:43	Lakhisarai: Didn't trip	Tripped while availing shutdown of Bus 2 at KHSTPP	No fault	NA	No fault in line. R & Y_ph at Kahlagaon remained open for 20 seconds. After that, B_ph tripped. NTPC may explain.		No	No
22	400KV-DURGAPUR-KAHALGAON-2	12-04-2024	11:50	12-04-2024	13:57	Durgapur: Y-N, 66.441 km, 3.787 kA		Y-Earth	100	A/r failed after 1 second at Durgapur. No A/r attempt at Kahlagaon, other two phase tripped after 2.5 seconds on PD		Yes	No
23	220KV-DARBHANGA (DMTCL)-DARBHANGA-1	15-04-2024	13:02	15-04-2024	14:36		Tripped only from Darbhanga end:- E/F (Main-2 distance protection relay)	B-Earth	1200	Resistive fault.		No	No
24	400KV-JEERAT-BAKRESWAR-1	15-04-2024	14:24	16-04-2024	01:27	Jeerat: B-N, 163 km, 2.7 KA	Bakreswar:- B-N, 13 Km, 7.4 KA	B-Earth	100	A/r successful. Tripped again within reclaim time.		Yes	No

25	400KV-BINAGURI-TALA-1	16-04-2024	06:56	20-04-2024	11:41	Binagur: R-N, 140.3 Km, 3 kA, DT Received		R-Earth	100	A/r successful at Binaguri. After 500 msec of A/r, DT received at Binaguri and all three phase tripped.		Yes	No
26	765KV-ANGUL-JHARSUGUDA-1	17-04-2024	09:15	17-04-2024	10:07	Tripped due to 708 Tie LBB operated at Angul. Dia element i.e. 765/400 kV ICT-2 also tripped	Jharsuguda: DT received	No fault	NA	PG Odisha may explain.		Yes	Yes
27	220KV-MAITHON-DHANBAD-2	17-04-2024	10:38	17-04-2024	11:09	Maithon: Y-B, 44 km, Iy: 4.65 kA, Ib:4.40 kA	Dhanbad: Y-B, Z-1, 3 km	Y-B-Earth	100	Phase to phase fault		Yes	No
28	400KV-TENUGHAT-PVUNL-1	18-04-2024	13:07	18-04-2024	15:44	Tenughat: R_N, 55.83 km, 1.381 kA		R-Earth	400	Tripped in Zone-2 from Tenughat.		No	No
29	400KV-KOLAGHAT-NEW CHANDITALA-1	18-04-2024	13:18	18-04-2024	13:50	Kolaghat: Y-N, 13.18 Km, 14.69 KA	New Chandatala: Y-N, 52.31 Km, 5.337 KA	Y-Earth	100	A/r successful. Tripped again within reclaim time.		No	Yes
30	220KV-DEHRI-GAYA-2	18-04-2024	13:46	18-04-2024	15:52	Dehri : B-N, 1.007 KA	Gaya: B_N, 36.6 KM, 3.7 KA	B-Earth	100	A/r failed after 1 second. Y_ph breaker at Dehri didn't open during failed A/r attempt. It opened after 3 seconds. BSPTCL may explain		Yes	Yes
31	400KV-DSTPS(ANDAL)-RAGHUNATHPUR-1	19-04-2024	13:32	19-04-2024	18:07		Raghunathpur: B_N, 9.31 kA	B-Earth	100	A/r successful after 1 second. Line tripped again within reclaim time.	DR length less at Raghunathpur	No	Yes

32	400KV-MAITHON-GAYA-1	19-04-2024	13:48	19-04-2024	14:58	Maithon- R_N, 1.44 kA, DT received	Gaya: R-ph, 67.85 km, 2.14 kA	R-Earth	3000	Resistive fault. DEF operated.		Yes	Yes
33	220KV-TSTPP-MEERAMUNDALI-1	19-04-2024	13:49	19-04-2024	20:10		Meramundali: B_N, 17.3 kA	B-Earth	100	A/r failed after 1 second		No	Yes
34	220KV-DARBHANGA(DMTCL)-LAUKAHI-2	20-04-2024	12:24	20-04-2024	15:03	DMTCL: Didn't trip	Tripped only from Laukahi end only, R/I: IA:-2.592KA, IB-1.164KA, Ic-196.9A	R-Earth	100	S/d was availed by DMTCL at 11:04 Hrs. Line was extended from DMTCL at 12:24 Hrs. Line remained charged from DMTCL and tripped from Laukahi while closing the breaker at their end. BSPTCL may explain.		No	Yes
35	220KV-DARBHANGA(DMTCL)-LAUKAHI-1	20-04-2024	12:24	20-04-2024	21:21	DMTCL: R-Y, Ir-3.19 kA, Iy-3.18 kA, 70.9 Km	Laukahi End: Z-1, 13.26 Km, IA-0.00A, IB-222.9A, IC-225.2A	R-Y	100	Phase to phase fault. R_ph jumper snapped and touched Y_ph.		Yes	Yes
36	400KV-IBEUL-JHARSUGUDA-1	20-04-2024	15:19	20-04-2024	16:54		Jharsuguda : DT received	No fault	NA	DT received at Jharsuguda. IBEUL/PG Odisha may explain.		No	Yes
37	220KV-RANCHI-MTPS(DVC)-1	20-04-2024	16:15	20-04-2024	18:56		MTPS: Bus 4 PT burst	B-Earth	100	Bus 4 PT burst at Mejia. DVC may explain.		No	No

38	220KV-RENGALI(OPTCL)-RENGALI-1	20-04-2024	18:52	20-04-2024	20:22	Rengali (OPTCL): R Y B N , Over Current,Ia= 1.055 kA, Ib= 5.677 kA, Ic =1.640 kA	Rengali (PG): Not Tripped	Y-Earth	100	Non-directional hi-set O/c was enabled at Rengali (OPTCL) end. Y-Ph CT blast of 220 kV Deogharh feeder at Rengali (OPTCL).		Yes	N A
39	220KV-KHAGARIA-NEW PURNEA-2	21-04-2024	12:01	21-04-2024	13:20	Khagaria:Y- B, 22.24km, Iy- 4.783 kA, Ib- 4.674 kA	Purnea: Y-B, 22.24 km, 9.133 kA	Y-B-Earth	100	Phase to phase fault		Yes	No
40	220KV-DARBHANGA (DMTCL)-SAMASTIPUR-1	21-04-2024	13:25	21-04-2024	13:58	Darbhanga - Y_B, IY:5.26 kA, IB:5.21 kA ,39 km	Samastipur - Y_B, IY - 4.1 kA, IB: 4.2 kA , 7.81 km.	Y-B	400	Tripped in Zone-2 from Darbhanga. No carrier received. DMTCL/BSPTCL may explain.		Yes	No
41	220KV-KHAGARIA-NEW PURNEA-1	21-04-2024	13:52	21-04-2024	14:38	Khagaria - B_N, 76.8 km, Ib- 1.37 kA	New Purnea: B_N, 51.37 Km, 1.86 KA	B-Earth	280	Resistive fault. A/r attempted after 700 msec from Khagaria and this time fault was seen in Zone-2 and line tripped in Zone-2 after 450 msec.	DR length less at New Purnea	Yes	Yes
42	220KV-KHAGARIA-NEW PURNEA-1	21-04-2024	14:46	21-04-2024	18:48		New Purnea:-B-N, 48.7 km, 1.9kA	B-Earth	200	Resistive fault. A/r attempted after 700 msec from Khagaria and this time again resistive fault was there which was cleared in around 500 msec.	DR length less at New Purnea	Yes	Yes
43	400KV-TENUGHAT-PVUNL-1	21-04-2024	14:51	21-04-2024	16:17	Tenughat :B-N, 16.92 km, 1.456 kA		B-Earth	400	Tripped in Zone-2 from Tenughat.		Yes	No

44	220KV-NEW PURNEA-MADHEPURA-1	21-04-2024	14:55	22-04-2024	19:07	New Purnea: Y-B, 28.5 km, Iy-6.2 kA, IB- 6.2 kA		Y-B	100	Phase to phase fault		Yes	No
45	400KV-ARAMBAGH-NEW CHANDITALA-1	22-04-2024	13:09	22-04-2024	13:25	Arambag:R-N, 38.7 km, 5.28 kA	Chanditala: R_N, A/R successful	R-Earth	100	No A/r attempt at Arambagh. WBSETCL may explain.		Yes	Yes
46	220KV-CHANDIL-RANCHI-1	22-04-2024	14:39	22-04-2024	15:07	Tripped from chandil end.		No fault	NA	No fault observed from PMU. JUSNL may explain.		No	No
47	400KV-JEERAT-BAKRESWAR-1	23-04-2024	12:24	23-04-2024	12:44	Jeerat: R-N, 154 Km, 2.64 kA	Bakreswar: R-N, 24 km, 5.37 kA.			No fault observed from PMU. Whether line tripped or not. WBSETCL may explain.	DR of another instance uploaded	Yes	No
48	400KV-JEERAT-BAKRESWAR-1	23-04-2024	13:14	23-04-2024	13:30	Jeerat: B-N, 157.9 Km, 2.687 kA	Bakreswar: B-N, 22.72 km, 6.192 kA	B-Earth	100	A/r failed after 1 second		Yes	No
49	400KV-GAYA-CHANDWA-2	23-04-2024	18:42	23-04-2024	23:56	Gaya: Y-B , 26.4 km, Iy:24.5 kA, Ib: 24.1 kA	Chandwa: Y-B, Iy: 5.07 kA, Ib: 5.44 kA	Y-B-Earth	100	Phase to phase fault		Yes	Yes
50	400KV-GAYA-KODERMA-1	23-04-2024	18:51			Gaya: B-N, 17.7 kA, 9.6 km. After 200 msec R-N fault	Koderma: R-N, 3.04KA, 154.km	B-Earth	100	After 200 msec, another fault struck R_ph. 5 Nos. tower collapsed b/w loc. 204 to 208		Yes	No

51	400KV-GAYA-KODERMA-2	23-04-2024	18:51			Gaya: B-N, 18.1 kA, 9.2 Km,	Koderma: R-N, 2.67KA, 146.1 km	B-Earth	100	After 200 msec, another fault struck R_ph. 5 Nos. tower collapsed b/w loc. 204 to 208		Yes	No
52	400KV-KODERMA-BOKARO-1	23-04-2024	19:56	23-04-2024	21:13	Koderma: B_N	Bokaro: B-N, FC: 9.26 kA	B-Earth	100	No A/r attempt at Koderma. Other two phase tripped after 1.5 seconds. A/r successful at Bokaro and tripped again within reclaim time.	DR length less at Koderma	No	No
53	400KV-MAITHON-GAYA-1	23-04-2024	20:09	23-04-2024	23:07	Maithon: R-B, 245.80 km, Ir-2.5 kA, Ib-2.4 kA	Gaya:R-B, 38.3 Km, Ir-11.2KA, Ib-11.94 kA	R-B-Earth	9000	Resistive fault. Phase to phase to earth fault.		Yes	Yes
54	220KV-MAITHON-DHANBAD-2	23-04-2024	21:12	23-04-2024	21:45	Maithon: R-N, 7.6 km, 12.0 kA	Dhanbad: R-N, A/R Successful.	R-Earth	100	A/r not attempted at Maithon. Other two phase tripped after 1.5 seconds.		Yes	No
55	400KV-TENUGHAT-PVUNL-1	24-04-2024	12:20	24-04-2024	13:42	Tenughat:- R-N, z1		R-Earth	100	A/r failed after 1 second		No	No
56	400KV-PPSP-BIDHANNAGAR-2	25-04-2024	13:36	25-04-2024	14:03	PPSP: Y-N, 77.1 km	Bidhannagar: Y-N, 130 km, 2.3 kA	Y-Earth	160	Resistive fault. A/r kept disabled as per OEM advise		No	Yes
57	765KV-ANGUL-JHARSUGUDA-1	26-04-2024	11:23	26-04-2024	12:09	Angul: B-N, 12.634 km, 8.71 kA		B-Earth	100	A/r failed after 1.5 seconds		Yes	Yes
58	220KV-DALTONGANJ-LATEHAR(JUSNL)-1	26-04-2024	12:03	26-04-2024	12:59	Daltonganj: Y-B, Iy-1.797 kA, Ib-1.797 kA, 58.691 km		Y-B-Earth	800	Resistive phase to phase fault. Tripped in Zone-2 time from Daltonganj		Yes	No
59	400KV-DURGAPUR-JAMSHEDPUR-1	26-04-2024	13:42	26-04-2024	14:19		Jamshedpur:B-N, 3.634 kA, 83.303 km	B-Earth	100	A/r failed after 1 second		No	Yes

60	400KV-JEYPORE- GAJUWAKA-1	26-04-2024	16:26	26-04-2024	22:24	Jeypore: DT received		No fault	NA	RPC operation from NLDC for 650MW to 400MW, during operation CB didn't open due to mechanical issue in the Circuit Breaker, hand tripped line to isolate fault. Pole 1 also tripped. PG Odisha may explain.		Yes	NA
61	400KV-JEYPORE- GAJUWAKA-2	26-04-2024	16:28	26-04-2024	20:30			No fault	NA	Pole 1 tripped at 16:26 Hrs. Power then adjusted to Pole 2 , Pole-2 RPC gave a command for taking its own filter in to service, which tripped the other line on over voltage. Pole 2 tripped on NO AC Voltage. PG Odisha may explain		Yes	NA
62	765KV-MEDINIPUR-NEW JEERAT-2	27-04-2024	13:40	27-04-2024	14:18	Medinipur: R_N, 6.695 kA, 26 km	New Jeerat: R_N, 117.01 km, 2.846 KA	R-Earth	100	A/r successful. Tripped again within reclaim time.		Yes	Yes
63	400KV-ALIPURDUAR (PG)-PUNASANGCHUN- JIGMELING-1	28-04-2024	07:12	28-04-2024	08:21	DT received at Alipurduar.	R-Yphase fault with F/C L1: 0.76kA, L2:0.16 kA, L3: 0.06 kA at distance 66.1 km from Jigmeling.	R-Earth	1900	Resistive fault.		No	NA
64	400KV-ALIPURDUAR (PG)-PUNASANGCHUN- 1	28-04-2024	11:26	28-04-2024	12:21	Alipurduar: R-N, 135 Km, 1.1 KA	Punatsangchu: R_N, 93.9 km, 1.67 kA	R-Earth	700	Tripped in Zone-2 time from Alipurduar		No	NA

65	400KV-DSTPS(ANDAL)-RAGHUNATHPUR-1	28-04-2024	11:57	28-04-2024	17:55	DSTPS: B-N, 8.544 kA, 34.77 Km	RTPS : B- N, 34.05 Km, 6.945 kA	B-Earth	100	A/r failed after 1 second		No	No
66	400KV-BINAGURI-BONGAIGAON-2	28-04-2024	16:45	28-04-2024	17:58	Binaguri - Y_N , 119.5 Km, 3.7 KA	Bongaigaon: Y-N, 48.5 km, 5.1 kA	Y-Earth	100	DT received at Binaguri after 100 msec and three phase tripped. PG ER-2 may explain.		Yes	No
67	400KV-ALIPURDUAR (PG)-PUNASANGCHUN-JIGMELING-1	29-04-2024	09:53			Alipurduar: R-N, 148 km	Jigmelling: R-N, 95.5 km, 1.43 kA	R-Earth	100	Three phase tripping for single phase fault at Jigmelling. A/r failed at Alipurduar after 1 second		No	N A
68	400KV-KHARAGPUR-KOLAGHAT-1	30-04-2024	10:24	30-04-2024	15:21	Kharagpur: R-N, 6.066 kA, 37.11 km	Kolaghat: R-N, 5.95 KA, 32.33 Km	R-Earth	100	A/r failed after 1 second		Yes	No
69	400KV-MEDINIPUR-NEW CHANDITALA-2	30-04-2024	12:41	30-04-2024	13:11	Medinipur:R-N, 44 km, 4.475 kA	New Chanditala: R-N, 54.51km, 2.048 kA	R-Earth	100	A/r failed after 1 second		No	Ye s
70	400KV-MAITHON-GAYA-1	30-04-2024	13:45	30-04-2024	14:48	Maithon: R-N, 1.7kA, 157 km	Gaya: R-N, 38.9 km, 2.7 kA	R-Earth	1100	Resistive fault. DEF operated at Gaya and DT sent to remote end.		No	Ye s