



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

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सं./NO. पू.क्षे.वि.स./PROTECTION/2022/35

दिनांक /DATE: 04.04.2022

सेवा में / To,

संलग्न सूची के अनुसार / As per list enclosed.

विषय : पू.क्षे.वि.स. की 113 वीं संरक्षण समन्वय उप-समिति (पीसीसी) की बैठक हेतु सूचना।

**Sub: Notice for 113<sup>th</sup> Protection Coordination sub-Committee (PCC) meeting of ERPC.**

Sir/Madam,

यह सूचित किया जाता है कि पू.क्षे.वि.स की 113वीं पीसीसी बैठक 12 अप्रैल 2022 (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।

Notice is hereby given that 113<sup>th</sup> PCC meeting of ERPC will be held on 12<sup>th</sup> April, 2022 (Tuesday) 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 112<sup>th</sup> Protection sub-Committee Meeting of ERPC
- 2) Analysis of following grid disturbances of March, 2022:
  - Disturbance at 220 kV Tenughat (TVNL) S/s on 07.03.2022 at 05:32 Hrs and on 24.03.2022 at 21:37 Hrs
  - Total Power failure at 220 kV Tashiding S/s on 11.03.2022 at 23:33 Hrs
  - Disturbance at 220/132 kV CTPS A(DVC) S/S on 18.03.2022 at 20:05 Hrs
  - Disturbance at 400/220/132 kV Lapanga (OPTCL)S/s on 27.03.2022 at 12:47 Hrs
  - Total Power failure at 220 kV Garhwa(JUSNL) S/s on 30.03.2022 at 18:22 Hrs
- 3) Follow up of decision of previous Protection Coordination sub-Committee Meetings.
- 4) Single line tripping incidences of transmission elements for March 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](http://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](http://www.erpc-protectiondb.in).)

बैठक में आपकी उपस्थिति महत्वपूर्ण है।

Your participation in the meeting is highly solicited.

भवदीय / Yours faithfully,

*P.P. Jena*  
04.04.2022

(पी.पी.जेना / P.P.Jena)  
Executive Engineer (PS)  
कार्यपालक अभियंता(पी.एस)

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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
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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 March-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 Discpancy	DR/RECEIVED FROM LOCAL END	DR/RECEIVED FROM REMOTE END	LOCAL UTILITY	REMOTE UTILITY
1	220kV-DEHRI-GAYA-1	03-03-2022	12:23	03-03-2022	12:58	Dehri:B_N, Zone-1, 67.96km, Ib-1.22 kA	Gaya : B_N, 18.8 km Ib- 3.7 kA	B-Earth	100	A/r failed after 1 second		Yes	Yes	BSPTCL	PG ER-1
2	400kV-JEERAT-BAKRESWAR-1	04-03-2022	11:05	04-03-2022	11:24	Jeerat: B-N, 102.6 km Ib- 3.248 kA	Bakreswar: B-N, zone - 1, 59.08 km	B-Earth	100	A/r successful. Line tripped again within reclaim time		Yes	No	WBSETCL	WBPDCL
3	400kV-JEERAT-BAKRESWAR-1	05-03-2022	12:54	05-03-2022	13:20		BKTPP:B_N, Z1, 6.85km, Ib-7.27kA	B-Earth	100	Tripped from Bakreswar within 100 msec and A/r attempt after 1 second failed. However, from Jeerat arcing contiued till 35 seconds. WBSETCL may explain		No	No	WBSETCL	WBPDCL

4	400kV- JEERAT- NEW CHANDITAL A-1	05-03-2022	12:54	05-03-2022	13:15		N.Chanditala: BN, Ib-470A, DT sent	B-Earth	750	Tripped on O/C E/F from New Chanditala. DT sent to Jeerat. WBSETCI may explain		Yes	Yes	WBSET CL	WBSETCL	
5	400kV- ALIPURDUAR (PG)- BINAGURI-3	07-03-2022	12:10	07-03-2022	23:25	Alipurduar:B_N,Z one-1 73.22km Ib-1.262kA,	Binaguri : B_N 50.1 Km Ib- 4.9 KA	B-Earth	300	Highly resistive fault. A/r failed after 1 second		Yes	Yes	PG ER-2	PG ER-2	
6	220kV- CHAIBASA(P G)- CHAIBASA(J USNL)-1	08-03-2022	23:30	09-03-2022	00:21	Didn't trip	CT SF6 low, tripped only JUSNL end	No fault	NA	Repeated tripping from JUSNL end on SF6 low		NA	Yes	PG ER-1	JUSNL	
7	220kV- CHAIBASA(P G)- CHAIBASA(J USNL)-1	09-03-2022	10:58	09-03-2022	11:51	Didn't trip	Maloperation of CT SF6 density monitor at JSEB end	No fault	NA				NA	Yes	PG ER-1	JUSNL
8	220kV- CHAIBASA(P G)- CHAIBASA(J USNL)-1	09-03-2022	13:45	09-03-2022	17:35	Didn't trip	Maloperation of CT SF6 density monitor at JSEB end	No fault	NA				NA	Yes	PG ER-1	JUSNL
9	400kV- RENGALI- KEONJHOR( PG)-1	09-03-2022	19:44	22-03-2022	18:05	Rengali: Y_N, 60.536 km, Iy-5.409 kA		Y-Earth	120	A/r failed after 1 second. Conductor snapped between loc. 172-174		No	No	PG Odisha Projects	PG Odisha Projects	

10	400kV- DURGAPUR- KAHALGAO N-1	10-03-2022	11:08	10-03-2022	16:40	Durgapur: Y-N, Z1, 6.4km, Iy- 8.16kA;	KHSTPP: Y-N, 240km, Iy- 1.08kA	Y- Earth	100	A/r successful. Line tripped again within reclaim time	Yes	No	PG ER-2	NTPC KhSTPP
11	400kV- ALIPURDUA R (PG)- BINAGURI-3	11-03-2022	11:48	11-03-2022	12:29	Alipurduar B_N, Z- 1, 23km, Ib- 1.26 kA.	Binaguri B_N, 50.13km, Ib- 1.6 kA.	B- Earth	180	Resistive fault. A/r successful. Tripped again within reclaim time	Yes	Yes	PG ER-2	PG ER-2
12	400kV-PPSP- BIDHANNA GAR-1	11-03-2022	13:01	11-03-2022	13:28	PPSP: B_N Zone-1 34.8 KM	Bidhannagar: B_N Zone-1, 134.3KM, Ib- 1.21KA	B- Earth	120	3 phase tripping for single phase fault. A/r not in service as per OEM advice	No	Yes	WBSED CL	WBSETCL
13	220kV- BUDHIPADA R-KORBA-2	11-03-2022	12:52	11-03-2022	14:46	Budhipadar B_N Ib- 5.03kA		B- Earth	150	Three phase tripping for single phase fault	Yes	NA	OPTCL	WR
14	400kV- LAPANGA- OPGC (IB THERMAL)-2	13-03-2022	12:39	13-03-2022	13:19	Lapanga: R_N Z-1, 5km Ir- 13.67 kA, A/R successful ;	OPGC: R_N Z-1, 19.5km Ir- 11 kA	R- Earth	100	A/r succesful from Lapanga end only.	Yes	No	OPTCL	OPGC

15	220kV-DALTONGA NJ-CHATRA-2	14-03-2022	13:12	14-03-2022	15:57	Daltonganj: Y_B, Z-2, 123.9km 1.21 kA, 1.20 kV,	Chatra: Zone-1, 26km, Iy-992.4A,Ib-994.8A.	Y-B	100	Phase to phase fault	Yes	No	PG ER-1	JUSNL
16	400kV-MAITHON-MEJIA-2	15-03-2022	12:13	15-03-2022	14:02		Mejia: R_N, heavy spark occurred in R_ph jumper at Mejia	R-Earth		DT received at Maithon. R_ph opened at 12:13:12 Hrs. Other two phase opened at 12:13:15 Hrs at Mejia. DVC may explain.	Yes	No	PG ER-2	DVC
17	220kV-CHANDIL-STPS(WBPD CL)-1	15-03-2022	11:29	15-03-2022	16:19	Chandil: B_N Z-2 97.7km, Ib-0.78kA.	STPS B_N Z1 12.4km	B-Earth	100	Three phase tripping for single phase fault	Yes	No	JUSNL	WBPDC
18	315 MVA 400/220 KV ICT-3 AT ARAMBAGH	15-03-2022	12:30	15-03-2022	19:10	Differential relay operated		B-Earth	100	WBSETCL may explain	No	NA	WBSETCL	NA
19	400kV-SUBHASGRAM-HALDIA-1	15-03-2022	17:05	15-03-2022	20:43	DT received at Subhasgram	Master Trip Relay Operated at Haldia end ,	No fault	NA	HEL may explain.	Yes	Yes	PG ER-2	HEL
20	400kV-NEW PPSP-ARAMBAGH-2	15-03-2022	21:49	15-03-2022	21:54	Spurious tripping from New PPSP during opening of 400 kV New PPSP-New Ranchi		No fault	NA	WBSETCL may explain	No	No	WBSETCL	WBSETCL

21	220kV- KHAGARIA- NEW PURNEA-1	16-03-2022	11:42	16-03-2022	12:54	Khagaria: Y-B, 23.9km Iy-4kA,Ib- 3.99kA	New Purnea: Y_B 72.6km,Iy-2.96kA,Ib- 2.95kA.	Y-B	100	Phase to phase fault	Yes	Yes	BSPTCL	PG ER-2
22	400kV- MERAMUND ALI- LAPANGA-2	16-03-2022	13:51	16-03-2022	17:17	Meramundali: B_N, 115km, Ib-2 kA	Lapanga: B_N , 84km, Ib- 3.58kA	B- Earth	100	A/r failed after 1 second. Tie bay A/r attempt after failure of main bay A/r at Lapanga	Yes	Yes	OPTCL	OPTCL
23	400kV- BIHARSARIF (PG)- LAKHISARA I(PG)-1	16-03-2022	20:02	16-03-2022	21:14	Due to LBB mal operation of its tie bay at Biharsharif (under shutdown)		No fault	NA	LBB of tie bay operated, which was under shutdown. PG ER-1 may explain	Yes	Yes	PG ER-1	PG ER-1
24	400/220 kV ICT-1 at Biharsharif	16-03-2022	20:02	16-03-2022	21:31			No fault	NA		No	NA	PG ER-1	BSPTCL
25	400kV- MERAMUND ALI- LAPANGA-2	17-03-2022	12:40	17-03-2022	17:36	Meramundali: B-N 116.5km Ib- 2.11 kA	Lapanga: B-N, 75km Ib- 4.4 kA	B- Earth	100	A/r failed after 1 second. Tie bay A/r attempt after failure of main bay A/r at Lapanga	Yes	Yes	OPTCL	OPTCL



26	400kV- BINAGURI- TALA-2	17-03-2022	16:10			Binaguri: B_N, 2.77 kA, Zone-2, DT received		B- Earth	100	Single phase fault seen in Zone02 by Binaguri and DT was received instead of carrier signal from Tala and all three phase tripped	Yes	NA	PG ER-2	Bhutan
27	500 MVA 400/220 KV ICT-2 AT NAUBATPU R	17-03-2022	18:56	18-03-2022	16:57	Differential relay operated		No fault	NA	No fault observed in PMU. BGCL may explain	No	NA	BGCL	NA
28	400kV- MERAMUND ALI- LAPANGA-2	18-03-2022	13:37	18-03-2022	17:40	Meramundali:B-N, Z1 203.7km , Ib- 1.9kA	Lapanga: B-N, Z1 24km Ib- 10.31kA	B- Earth	100	A/r failed after 1 second. Tie bay A/r attempt after failure of main bay A/r at Lapanga	Yes	Yes	OPTCL	OPTCL
29	220kV- BUDHIPADA R-KORBA-2	19-03-2022	10:16	19-03-2022	11:21	Budhipadar: B_N Z- 1	Korba: B_N Z-1, 140.6 km, 1.064 kA	B- Earth	100	Three phase tripping for single phase fault	Yes	NA	OPTCL	WR

30	400kV-ALIPURDUAR (PG)-BINAGURI-3	19-03-2022	11:49	21-03-2022	20:56	Alipurduar: B_N 100.5 km, Ib- 1.89 kA	Binaguri: B_N 49.43 km, Ib- 5.75 kA;	B-Earth	120	A/r failed after 1 second	Yes	Yes	PG ER-2	PG ER-2
31	220kV-BUDHIPADAR-KORBA-2	19-03-2022	16:07	19-03-2022	19:04	Budipadar: Y_B, Z-I, 25.06km 8.77 kA,	Korba D/P operated in Z2,140.6 Km, IL3-1.064kA	B-Earth	100	Three phase tripping for single phase fault	Yes	NA	OPTCL	WR
32	220kV-BARIPADA-BALASORE-2	20-03-2022	10:53	20-03-2022	11:49	Baripada: DT received	Balasore: Did not trip	No fault	NA	OPTCL/PG Odisha may explain	No	No	PG Odisha Projects	OPTCL
33	220kV-MAITHON-DUMKA-1	20-03-2022	11:50	20-03-2022	12:37	Maithon: Y_B, Z1 134.4km Iy- 6.1kA, Ib-5.9kA	Dumka: Y_B Z1, 36.55km, Iy: 2.57kA, Ib: 2.81kA	Y-B	100	Phase to phase fault	Yes	Yes	PG ER-2	JUSNL
34	400kV-BARIPADA-TISCO-1	20-03-2022	12:26	20-03-2022	13:53	BARIPADA: Y_N Z2, 82.8km 3.61kA	TISCO: 0.226 km 11.3 kA	Y-Earth	500	As observed in PMU, line tripped in Zone-2 from Baripada	No	No	PG Odisha Projects	DVC
35	220kV-TTTPS-TSTPP-1	20-03-2022	13:38	20-03-2022	14:35	TTTPS: R_N Z-1, 15.84km Ir- 5.65 kA	TSTTPP: R_N 17.9 km, Ir- 6.29 kA	R-Earth	120	Three phase tripping for single phase fault	No	No	OPTCL	NTPC TSTPP

36	220kV- DALTONGA NJ-CHATRA- 2	20-03-2022	11:57	20-03-2022	18:40	Daltonganj: Y-B 12.5 km, Iy-3.9 kA, Ib-3.9 kA		Y-B	100	Phase to phase fault	Yes	No	PG ER-1	JUSNL
37	220kV- PUSAULI- DEHRI-1	21-03-2022	11:37	21-03-2022	12:35	PUSAULI: B_N, Z- 1, 12.72 km, Ib- 7.11 kA	DEHRI: B_N Z-1, 46 km, Ib1.9 kA	B- Earth	300	Zone-1 fault cleared in 300 msec from Dehri end. A/r successful at Pusauli	Yes	Yes	PG ER-1	BSPTCL
38	220kV- DEHRI- GAYA-1	22-03-2022	16:17	22-03-2022	16:39	Dehri: B- Earth 13.90 km Ib- 4.414kA	Gaya: B_N Z1 66.3km, Ib-2.73kA	B- Earth	120	A/r failed after 750 msec from Dehri and after 1 second from Gaya	Yes	Yes	BSPTCL	PG ER-1
39	400kV LAPANGA- OPGC (IB THERMAL)-1	23-03-2022	12:26	23-03-2022	16:37	Lapanga: Y_B_N, 20.51 km, Iy-16.1 kA, Ib-15.79 kA	OPGC: B_N, Ib-1.45 kA, Zone-3	Y- B_Ear th	1000/ 350	Highly resistive fault in B phase which was cleared 1 second in Zone-3 from OPGC only. 600 msec after clearance of fault from OPGC, Y_B- Earth fault occurred in line which was cleared by Lapanga in Zone-2	Yes	Yes	OPTCL	OPGC

40	400kV LAPANGA- OPGC (IB THERMAL)-1	23-03-2022	16:44	23-03-2022	19:03	Lapanga: Y-B, 20km Iy-14kA, Ib- 13kA	OPGC: Y-B, 1.5 km, Iy-18.46 kA, Ib-16.88 kA	Y- B_Ear th	100	Same nature of fault as previous instance, however Power swing block initiated at OPGC and blocked Zone-3 operation from OPGC. 1.5 second later fault was seen in Zone-1 from OPGC and in Zone- 2 from Lapanga and cleared within 100 msec from both ends	Yes	Yes	OPTCL	OPGC
41	400KV- LAPANGA- OPGC (IB THERMAL)-2	23-03-2022	12:46	23-03-2022	17:53	Lapanga: R_N, Zone-2, 20.4 km Ir- 8.35 kA	OPGC: R_N, 13.79 kA	R- Earth	100	A/r failed from both ends	Yes	Yes	OPTCL	OPGC
42	400KV- KHARAGPU R- CHAIBASA-1	24-03-2022	14:10	24-03-2022	15:04	Kharagpur Y_N Z- 1, 83.1 km Iy 3kA	Chaibasa Y-N Z-1, 116.4 km Iy- 2.58 kA	Y- Earth	100	A/r successful after 1 second. Line tripped again within reclaim time	Yes	Yes	WBSET CL	PG ER-1

43	400KV-LAPANGA-OPGC (IB THERMAL)-1	24-03-2022	10:16	24-03-2022	22:48	Lapanga: Y-B, 20.36 km, Iy-16.54 kA, Ib-16.22 kA	OPGC: B-N, Zone-3, 17 km, 1.65 kA	Y-B_Earth	1000/350	Highly resistive fault in B phase which was cleared 1 second in Zone-3 from OPGC only. 300 msec after clearance of fault from OPGC, Y_B-Earth fault occurred in line which was cleared by Lapanga in Zone-2	Yes	Yes	OPTCL	OPGC
44	400KV-BARIPADA-TISCO-1	24-03-2022	16:19	25-03-2022	07:16	Baripada: B_N, 114.3 km , Ib- 4.27 kA		B-Earth	500	As observed from PMU, A/r failed at Baripada after 1 second. Line tripped in Zone-2 from TISCO	No	No	PG Odisha Projects	DVC
45	220KV-CHANDIL-STPS(WBPD CL)-1	25-03-2022	02:20	25-03-2022	16:56	Chandil: B_N, 66 km, Ib1.3 kA		B-Earth	100	Three phase tripping for single phase fault	Yes	No	JUSNL	WBPDCL
46	400KV-DURGAPUR-JAMSHEDPUR-1	26-03-2022	13:44	27-03-2022	00:37	Durgapur:B_N 151.2km Ib- 2.23 kA		B-Earth	100	A/r successful. Line tripped again within reclaim time	Yes	Yes	PG ER-2	PG ER-1

47	400KV-MERAMUND ALI-LAPANGA-2	27-03-2022	12:02	27-03-2022	20:00	Meramundali: B_N, 2.5 kA	Lapanga: B_N, 3.7 kA, 74 km	B-Earth	100	A/r failed after 1 second. Tie bay A/r attempt after failure of main bay A/r at Lapanga		Yes	Yes	OPTCL	OPTCL
48	400KV-PPSP-NEW PPSP-2	27-03-2022	14:02	27-03-2022	16:57	PPSP : B_N, 99.62 km, Ib-0.9668 kA	N.PPSP : B_N, 92.7 km, Ib- 0.86 kA	B-Earth	100	As observed from PMU, all three phase tripped at PPSP		No	No	WBSEDC	WBSETCL
49	400KV-RENGALI-KEONJHOR(PG)-1	27-03-2022	11:12	27-03-2022	21:14	Rengali- B_N 37.93km, Ib- 5.19kA	Keonjhor- B-N , 6.347km, Ib-2.047kA	B-Earth	100	A./r failed after 1 second		No	No	PG Odisha Projects	PG Odisha Projects
50	400KV-ARAMBAGH-BAKRESWAR-1	28-03-2022	04:54	28-03-2022	21:55	Arambagh: Y_N Z 1,32.4km, Iy- 5.32kA	Bakreshwar: Y_N Z1, 99.2km, Iy-3.91kA	Y-Earth	100	A/r failed after 1 second		Yes	No	WBSETCL	WBPDC
51	220KV DALTONGA NJ-CHATRA-2	28-03-2022	12:43	28-03-2022	15:59	Daltonganj: Y_B, 64.3 km, Iy-2.06 kA, Ib-2.05 kA		Y-B	100	Phase to phase fault		Yes	No	PG ER-1	JUSNL
52	400 KV MERAMUND ALI-LAPANGA-2	28-03-2022	13:17	28-03-2022	18:06	Meramundali: B_N, 97.8 km, 2.29 kA		B-Earth	100	A/r failed after 1 second. Tie bay A/r attempt after failure of main bay A/r at Lapanga		Yes	Yes	OPTCL	OPTCL

53	220 KV RANCHI- CHANDIL-1	28-03-2022	13:21	28-03-2022	15:29	Ranchi: Y_B, 3.19 kA, 59.9 km	Chandil: B_N, 2.95 kA	Y- B_Ear th	500	Three phase tripping for single phase fault from Chandil end in Zone- 1. Phase to phase fault seen by Ranchi in Zone-2 which was cleared in 500 msec. No carrier sent from Chandil	Yes	Yes	PG ER-1	JUSNL
54	220 KV DALTONGA NJ-CHATRA- 2	29-03-2022	13:04	29-03-2022	14:29	Daltonganj: Y_B, Zone-1, 64.54 km, Iy-2.07 kA, Ib-2.05 kA	Chatra: Y_B, 113.5 km	Y-B	100	Phase to phase fault	Yes	No	PG ER-1	JUSNL
55	765 KV ANGUL- JHARSUGUD A-1	29-03-2022	19:30	29-03-2022	20:57	Angul: B_N, 262 km, 3.43 kA	Jharsuguda: B_N, Zone-1, 16 km, 19 kA	B- Earth	100	A/r failed after 1 second	Yes	Yes	PG Odisha Projects	PG Odisha Projects