

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



Eastern Regional Power Committee

14, गोल्फ क्लब रोड, टालीगंज, कोलकाता-700033 14 Golf Club Road, Tollygunj, Kolkata-700033

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NO. ERPC/PROTECTION/2016/

DATE: 02.11.2016

FAX MESSAGE NO. 735

To,

As per list enclosed.

Sub: Notice for 49th Protection Coordination sub-Committee (PCC) meeting of ERPC

Notice is hereby given that **49**th **PCC meeting** of ERPC will be held on **29**th **November 2016** (Tuesday) at 11: 00 hrs at ERPC Conference Room, Kolkata.

The tentative agenda items for discussion will be as follows:

- 1) Confirmation of the minutes of 48th Protection sub-Committee Meeting of ERPC
- 2) Follow-up action on decision of previous Protection sub-Committee Meetings
- 3) Analysis of following grid disturbances of October, 2016:
- ➤ Disturbance at 400/220 kV Meramundali (OPTCL) S/s on 05-10-16 at 18:10 hrs.
- Multiple tripping at 132kV Purnea (PG) and 132kV Forbisgunj (BSPTCL) system on 08-10-16 at 03:33hrs & 09-10-16 at 00:05 hrs.
- Disturbance at JUSNL system on 09-10-16 at 18:25 Hrs.
- Disturbance at 220 kV Begusarai (BSPTCL) S/s on 21-10-16 at 12:12hrs
- > Disturbance at 220 kV Ramchandrapur (JUSNL) S/s on 22-10-16 at 19:16 hrs
- 4) Multiple elements tripping without load loss:
- ➤ Disturbance at 400 kV Rangpo(PG) S/s on 05-10-16 at 14:25hrs.
- Disturbance at 400 kV Meramundali (OPTCL) S/s on 10-10-16 at 16:35 Hrs.
- ➤ Disturbance at 400kV Rourkela(PG) S/s on 28-10-16 at 16:39 hrs.
- Single line tripping incidences enclosed at Annexure-I.

You are requested to kindly furnish the detail report along with all records (SLD, SOE, DR, Relay and schematic diagram of auxiliary supply, wherever applicable) related to above trippings for meaningful analysis during the meeting.

Your participation in the meeting is highly solicited. Please confirm your participation in the meeting along with name and designation of the participants.

Yours faithfully,

-sd(A. K. Bandyopadhyaya)
Member Secretary

LIST OF ADDRESSES:

| CI: AF : T (OALA | TI I D (ODJET) |
|--|--|
| Chief Engineer, Trans (O&M) | Electrical Superintending Engineer (CRITL) |
| Bihar State Electricity Board, Vidyut Bhawan, | Bihar State Electricity Board, Vidyut Bhawan, |
| Bailey Road, Patna-800021 | Bailey Road, Patna-800021 |
| Chief Engineer (SLDC) | Chief Engineer (CTC) |
| Damodar Valley Corporation, GOMD-I Premises, | Damodar Valley Corporation, P.O. Maithon Dam, |
| P.O Danesh Seikh Lane, Howrah- 711109 | Dist. Dhanbad, Jharkhand-828207 |
| Chief Engineer, Trans (O&M) | Electrical Superintending Engineer (CLD) |
| Jharkhand State Electricity Board | Jharkhand State Electricity Board, Kusai Colony, |
| Kusai Colony, Doranda, Ranchi-834002 | Doranda, Ranchi-834002 |
| Chief General Manager (O&M), | Sr. General Manager (PPA), Technical Wing, |
| OPTCL, Janpath, Bhubaneswar, | OHPCL, Orissa State Police Housing & Welfare |
| Odisha – 751 022. FAX: 0674-2542932 | Corpn. Bldg. Vanivihar Chowk, |
| cgm.onm@optcl.co.in | Janpath,Bhubaneswar-752022 |
| Chief Load Dispatcher, SLDC | Chief Engineer (Testing), WBSETCL |
| OPTCL, P.O. Mancheswar Rly. Colony | Central Testing Laboratory, Abhikshan, Salt Lake, |
| Bhubaneswar-751017 | Kolkata-700091 (Fax no. 2367-3578/1235) |
| Chief Engineer (CLD) | Addl. Chief Engineer (ALDC) |
| WBSETCL, P.O. Danesh Sheikh Lane, | West Bengal Electricity Distribution Company Ltd |
| Andul Road, Howrah-711109 | Vidyut Bhavan, 7 th Floor, Bidhannagar, Sector-I |
| / man roud, 110 with / 1110/ | Salt Lake City, Kolkata-700091(Fax-033-2334-5862) |
| Dy. Chief Engineer (Testing)/ Sr. Manager (Testing) | General Manager (O&M) |
| CESC Ltd.,4, Sasi Sekhar Bose Road, | KhSTPS, NTPC Ltd., P.O. Deepti Nagar, |
| Kolkata-700025 | Dist. Bhagalpur, Bihar-813203 |
| | Dy. General Manager (Engineering), |
| General Manager(O&M) | |
| FSTPS, NTPC Ltd., P.O. Nabarun, | WBPDCL,OS Dept. Corporate Office, 3/C,L.A Block, |
| Dist. Murshidabad, West Bengal-742236 | Salt Lake-III, Kolkata-700098 (Fax-033-23350516) |
| General Manager (O&M) | General Manager (OS), ERHQ-II, NTPC Ltd., 3 rd flr. |
| Barh STPS, NTPC Ltd., P.O. NTPC Barh, | OLIC Building, Plot no. N 17/2, Nayapalli, Unit-8 |
| Dist. Patna, Bihar-803213 | Bhubaneswar- 751012 (Fax No. 0674-2540919) |
| General Manager(O&M) | General Manager (O&M) |
| TSTPS, NTPC Ltd. | POWERGRID, Odisha Projects |
| P.O.Kaniha, Dist. Angul, Orissa-759117 | Sahid Nagar, Bhubaneswar – 751 007 |
| General Manager(OS), ERHQ-I, NTPC Ltd., | Director (GM Division) |
| Loknayak Jaiprakash Bhawan, (2 nd Floor), | Central Electricity Authority |
| Dak Bunglow Chawk, Patna-800001 | Sewa Bhawan, R. K. Puram, New Delhi-110066 |
| Executive Director (O&M) | Electrical Superintending Engineer, TTPS, |
| NHPC Ltd., NHPC Office Complex, Sector-33, | Tenughat Vidyut Nigam Ltd., |
| Faridabad, Haryana-121003 (Fax-01292272413) | Lalpania, Dist. Bokaro, Jharkhand-829149 |
| Dy. General Manager (Electrical) | General Manager (OS), ER-I |
| IB Thermal Power Station, OPGCL | Power Grid Corporation of India Ltd., |
| Banhapalli, Dist. Jharsuguda-768234,Orissa | Alankar Place, Boring Road, Patna-800001 |
| Chief Engineer (Trans.) | Sr. Manager (CTMC) |
| Power Deptt., Govt. of Sikkim, | Durgapur Projects Limited, |
| Gangtok-731010 | Durgapur-713201 |
| General Manager, | Manager (Electrical), Adhunik Power & Natural |
| ERLDC, POSOCO | Resources Ltd. "Lansdowne Towers, Kolkata-700020 |
| 14, Golf Club Road, Tollygunge, Kolkata-700033 | (Fax No. 033-2289 0285) |
| General Manager (OS), ER-II | Shri A.K.Nayak/Shri Sumit S Ghosh |
| Power Grid Corporation of India Ltd., | Maithon Power Limited, Maithon Office, MA 5 |
| J-I-15, Block-EP, Sector-V,Salt Lake,Kolkata-91 | Gogna, Dist. Dhanbad, Jhankand State, PIN-828207 |
| General Manager (P&O), PTC Ltd., | Vice President, Sesa Sterlite Ltd. |
| Kanchanjunga Bldg., 18, Barakhamba Road, | 1 st floor, City Mart Complex, Baramunda, |
| New Delhi-110001 | Bhubaneswar-751012 |
| Managing Director, Bhutan Power Corporation | Managing Director, Druk Green Power Corprn. |
| Post Box no. 580, Thimpu, Bhutan. | P.O. Box-1351, Thimpu, Bhutan. |
| - 22. 201. 10. 000, Timipa, Diamii. | |
| SUPERINTENDENT ENGINEER, ERPC | ASSISTANT SECRETARY, ERPC |
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| | List of important transmission lines (220 kV & above) in ER which tripped in September'16 | | | | | | | | | | | | |
| S.NO | LINE NAME | TRIP DATE | TRIP TIME | RESTORATION DATE | RESTORATION TIME | Reason | Fault Clearance time in msec | Relay Indication LOCAL END | Relay Indication REMOTE END | Auto Recloser status | DR/EL RECEIVED FROM LOCAL END | DR/EL RECEIVED FROM REMOTE END | Remarks |
| | Fault clearing time is violating protection standard (As per PMU data) | | | | | | | | | | | | |
| 1 | 400KV BINAGURI- BONGAIGON-III | 27.10.16 | 11:55 | 27.10.16 | 12:07 | R-N FAULT | 1100 ms | TEF, IR 1.5 kA | Yet to be received | | <u>Yes</u> | No | |
| Multiple tripping at same time | | | | | | | | | | | | | |
| 1 | 220 KV RAMCHANDRAPUR - CHANDIL | 07.10.16 | 16:20 | 07.10.16 | 17:42 | B-N FAULT | <100 | B-N, Z-I, 4.73 KM from RCP, F/C 13.3 KA | B-N, Z-II, F/C 3.1 kA, 32.1 km from Chandil | No autoreclose operation observed in PMU data | Yes | <u>Yes</u> | 315 MVA 400/220 KV ICT I & II at Ramchandrapur tripped at same time due to operation of master trip relay |
| Fault Not observed in PMU data | | | | | | | | | | | | | |
| 1 | 220KV DALKHOLA - DALKHOLA-II | 01.10.16 | 15:12 | 01.10.16 | 15:27 | SPURIOUS TRIPPING | | SPURIOUS BROKEN CONDUCTOR INDICATION AT PG END | Yet to be received | | No | No | |
| 2 | 400 KV RANCHISIPAT-II | 03.10.16 | 13:03 | 03.10.16 | 15:13 | DT RECEIVED AT BOTH END | | DT received | DT received | | No | <u>Yes</u> | First DT received at Sipat end and three phase breakers opened & then o/v occurred at Sipat end and DT was sent to Ranchi end |
| 3 | 400KV BARH - GORAKHPUR-I | 06.10.16 | 18:11 | 06.10.16 | 20:07 | DT RECEIVED AT BARH | | DT Received | Yet to be received | | No | No | |
| 4 | 400KV RANCHI - SIPAT-II | 07.10.16 | 13:09 | 07.10.16 | 14:15 | DT RECEIVED AT SIPAT END | | Did not trip | DT received | | | <u>Yes</u> | |
| 5 | 400KV BIHARSHARIFF- VARANASI-I | 17.10.16 | 10:16 | 17.10.16 | 10:30 | DT RECEIVED AT VARANASI | | Did not trip | DT received | | | <u>Yes</u> | Line tripped from Varanasi end only on DT receipt |
| 6 | 765KV NEW RANCHI - DHARAMJAYGARH-I | 26.10.16 | 20:08 | 26.10.16 | 20:54 | DT RECEIVED AT N.RACHI | | DT Received | o/v | | <u>Yes</u> | No | |
| No autorecloser operation observed in PMU data | | | | | | | | | | | | | |
| 1 | 400KV BAKRESWAR- JEERAT | 26.10.16 | 13:04 | 26.10.16 | 13:23 | B-N FAULT | <100 | Y-N, Z-I | Pole discrepency | No autoreclose operation observed in PMU data | No | No | |
| 2 | 400KV KOLAGHAT- KHARAGPUR | 28.10.16 | 11:27 | 28.10.16 | 11:46 | B-N FAULT | <100 | B-N, Z-I, IB = 3.722 kA, 73.19 km from KTPP, A/R successful from KTPP end | B-N, Z-I, 5.95 kA, 17.27 km from KGP | No autoreclose operation observed in PMU data | <u>Yes</u> | No | A/R successful from KTPP end |