

# Eastern Regional Power Committee, Kolkata

## Minutes of Special Meeting on Verification and updation of the Protection related data in PDMS of the Protection Database Project of ERPC held on 07.09.2017 at 11:00 Hrs. at ERPC, Kolkata.

List of participants in the meeting is enclosed in **Annexure – I**.

ERPC welcomed all the participants and thanked all for attending the meeting on a short notice. It was informed that the Protection Database Project is on the verge of completion and more than 80% of protection related data has already been uploaded in PDMS. This meeting was convened for fixing the timeline for 1) submission of pending relay settings data and 2) Validation of substation data as available in PDMS. The following issues related to PDMS were discussed:

### **A. Access to the Website of PDMS:**

1. OPTCL, OHPC Burla and BSPTCL reported that some of the user id(s) assigned to them are not opening. OHPC Burla and BSPTCL submitted the user id details. ERPC advised OPTCL send the User-id details to ERPC and PRDC.

PRDC was advised to check and resolve.

2. OPTCL also suggested to incorporate back button in PDMS webpage which will take the user back to the previous session.
3. CESC Limited reported that the website is slow at times, and some relay data is not getting opened.

During the meeting CESC relays were opened and it was found that the issue has been resolved. Further, Constituents were advised to report such type events immediately to ERPC/PRDC.

4. TVNL representative informed that they have no user-id for accessing PDMS and also they have not attended any training on PDMS.

It was informed that several training programs have been conducted at ERPC and Jharkhand in which TVNL could not attend.

However, one more training program will be held at ERPC, which TVNL may attend.

Regarding issue of user id, TVNL was advised to send the details of their representative to ERPC mail.

5. All other constituents informed that access to website is satisfactory.

### **B. Issues and remarks on the data available in PDMS:**

It was informed that state-wise summary of Relay Settings populated in server is as follows:

- |    |              |                                      |
|----|--------------|--------------------------------------|
| 1. | Odisha:      | 92.77%                               |
| 2. | Jharkhand:   | 91.34%                               |
| 3. | West Bengal: | 92.152%                              |
| 4. | Bihar:       | 70.617% (PGCIL ER-I data is pending) |
| 5. | Sikkim:      | 92.408%                              |

The Constituent-wise actual list of pending relay data was discussed with all the utilities (The list of Sub-station whose relay data is pending is placed at **Annexure-II**). The gist of discussion is as placed below:

**1. BSPTCL:**

BSPTCL informed that the collection of pending relay data is in process and all the relay settings would be furnished by end of September, 2017. Regarding verification of data in PDMS, BSPTCL informed that the same is in process and would be completed by 30<sup>th</sup> September, 2017

PRDC informed that Valmikinagar S/S is pending for data collection, which will be visited in September, 2017.

**2. JUSNL**

JUSNL informed that relay data mismatch is observed in PDMS for some substations has been forwarded to ERPC/PRDC.

PRDC to check and resolve.

JUSNL agreed to send the pending relay data which are contains non-communicable (KBCH/MIT/DUOBIAS relays) will be sent by within 15/09/17. However, the settings of Chinese make relays (CSC) would not be possible to share at this juncture as they are not able to communicate with these relays due to unavailability of software as well as password for HMI interface.

Members felt that such type of non-communicable relays may be replaced at the earliest to ensure proper protection co-ordination.

**3. OPTCL:**

OPTCL have provided a list of issues regarding relay data present in PDMS to PRDC.

PRDC was advised to check and resolve each issue.

The list of Pending relay data was shared with OPTCL.

OPTCL agreed to send all pending relay data by the end of September, 2017.

Further, it was informed that PRDC will visit 10 new grid substations of OPTCL for data collection in the month of September, 2017.

OPTCL was also advised to verify the substation data of PDMS by 30<sup>th</sup> September, 2017.

**4. OHPC**

The pending list for relay data was shared with OHPC and OHPC informed that all settings will be provided by 30<sup>th</sup> September, 2017. They also informed that Burla station SLD to be rectified. DMNS is not accessible for Upper Indravati and Rengali users.

PRDC was advised to check and resolve.

**5. WBSETCL**

WBSETCL informed no discrepancies have been found regarding the data present in PDMS and the pending relay data, will be provided by Testing Division, WBSETCL.

ERPC advised WBSETCL to provide all the pending data by the end of September, 2017 and also to verify their Substation data in PDMS and report by 30.09.2017.

**6. WBPDC**

WBPDC informed that pending data for BKTPP, BTPS (Generator units only) and KTPS would be sent to PRDC. Data verification were done for all the stations and CT/PT data for BKTPP are not available.

PRDC was advised to check and resolve.

It was informed that all the relay settings of STPS had been received in text and pdf format. WBPDC informed they will send the same in csv or xml format.

## 7. CESC Limited

CESC informed that some of data had been verified in PDMS and remaining verification will be completed within September,2017. The pending relay data list is available with CESC. All pending data will be furnished within end of September, 2017.

CESC suggested that Feeder name should be displayed during fetching the relay data in drop down of Bay and SLD of substations shall be available upon selecting the particular substation from drop-down in Relay Data page.

PRDC would discuss with their software team for feasibility of the same.

## 8. DPL

DPL informed that the data for DPL are verified and found all right. Generator Unit-7 relay settings are pending. PRDC informed that those relays are NR electric (China) Make, which will be developed and uploaded by 22.09.17.

## 9. NTPC

Pending relay list was shared with NTPC. Representative from KhSTPS, NTPC was advised to co-ordinate with other NTPC stations and send all the pending data by 30<sup>th</sup> September,2017.

For Kahalgaon station, relay data was received in excel sheets, so it was advised to NTPC to provide the data in csv or xml formats.

## 10. NHPC

NHPC informed that in Teesta V station generator and feeder relay settings are not available. PRDC informed that development for Toshiba relays which are installed in those feeders is in process. All the pending settings will be uploaded by 15/09/17.

ERPC informed NHPC to verify relay data for all other stations. Pending data for NHPC to be shared by PRDC.

## 11. PGCIL

PGCIL ER-II informed that they have received pending list of relays from PRDC. For Malda station, transformers are identical so the settings shall be same. For other stations of West Bengal, settings will be furnished by PGCIL-ER2.

PGCIL-ER1 and Odisha were also advised to send the pending relay data at the earliest.

Further, Powergrid was advised to check and verify the Substation SLD and other data by 30<sup>th</sup> September, 2017.

All the constituents were advised to communicate their comments, queries and issues to PRDC (rahul.m@prdcinfotech.com) with a copy to ERPC (eeop.ercp@gov.in).

DVC, E&PD Sikkim, Powergrid (ER-I & Odisha) were not present in the meeting.

**After detail deliberation, it was decided that all constituents will check and verify their Substation data (relay /SLD/CT/PT etc) as available in PDMS and submit their observations by 30<sup>th</sup> September, 2017 to ERPC positively, otherwise the same would be considered as correct information.**

Meeting ended with vote of thanks to the chair.

\*\*\*\*\*

## Annexure- I

Participants in the meeting on verification and updation of the Protection data in PDMS

Venue: ERPC Conference Hall, Kolkata

Time: 11:00 hrs

Date: 07.09.2017 (Thursday)

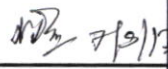
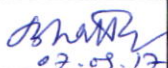
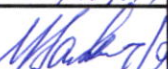
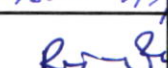
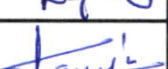
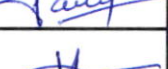
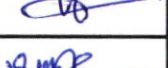
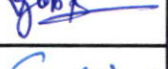
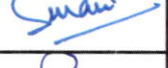


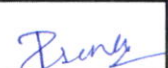
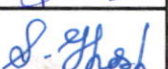
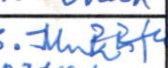
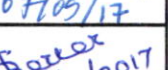
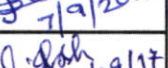
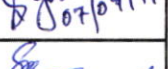
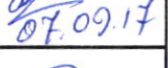
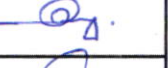

Sl No	Name	Designation/ Organization	Contact Number	Email	Signature
1	D.K. Bhowi	EE, ERPC	9883617236	ee of. erpc@gov.in	
2	J. G. Peo	RE, ERPC	9547891353	exec-cc@yahooin	
3	S. BANERJEE	DGM, ERLDC	9433041823	surajit.banerjee@erlco.in	
4	Deepak K. Thakur	AEE, BSPTCL	7033092545	deepak.aashish@gmail.com	
5	Arindam Choudhary	AE&E/BSPTCL	9572329275	CHOUDHARYARINDAM@gmail.com	
6	Ranjit Patra	D.M(EI.)	9438907810	ele.spatsa@optcl.co.in	
7	S. N. Sahu	D.M(Ele.)	9438907844	ele.snsahu@optcl.co.in	
8	Ravi Shekhar	Sr. Manager(E&I)	9650992115	ravishekhar@nhpc.co.in	
9	S. P. RATH	Manager(E) NHPC, TELFON	8170005662	SRK1975@gmail.com	
10	Saibal Ghosh	ERLDC,	8584072079	Saibalghosh@gmail.com	
11	RAHUL MAJUMDER	PRDC	8928953596	rahul.m@prdcinfotech.in	
12	Madhab Mukherjee	PRDC	7797827273	madhab.mukherjee@prdcinfotech.in	
13	Madhu. M. K	PRDC	9621980566	madhumk@prdcinfotech.com	
14	Govinda Sethi	OHPCL	7328840132	govindasethi@yahoo.com	 Green 07/09/2017
15	Chandra Sekhar Sethy	OHPCL	7328840108	chandra.sethy.nit@gmail.com	
16	Suvakanta Satapathy	OHPCL	7328840282	suva.csb@gmail.com	
17	Suryakanta Pradhan	OHPCL	7328840312	rajabkd1984@gmail.com	
18	Singh. Kaishm Gopal	OHPCL	7328840446	kaishm3153@gmail.com	
19	MANOJ KUMAR PATNAIK	O. H. P. C	7328840174	patnaikmanoj@gmail.com	
20	Sanil K. Setty	OHPCL	7328840209	Sanilsetty1@gmail.com	

**Participants in the meeting on verification and updation of the Protection data in PDMS**

Venue: ERPC Conference Hall, Kolkata

Time: 11:00 hrs

Date: 07.09.2017 (Thursday)

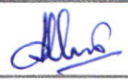
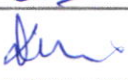

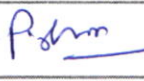
Sl No	Name	Designation/ Organization	Contact Number	Email	Signature
21	N. M. Dhar.	Sn. Mgr (PS) WBPDCL	8336903982	nmdhar@wbpdcl.co.in	
22	J. Bhattacharyya	Sr. Mgr. Testing STPS, WBPDCL	8336904059	jbhattacharyya@wbpdcl.co.in	
23	MALAY SARKAR	Manager (PS) KTPS, WBPDCL	8336904087	m.sarkar@wbpdcl.co.in	
24	Rajendra Pd	TVNL Jharkhand	9031049936	rp.ttps@gmail.com	
25	Tushar Ranjan	SLDC, JUSNL	9326374226	ranitushar@gmail.com	
26	Ajit Kumar	CRITL JUSNL	9431049515	ceeritl.jusnl@rediffmail.com	
27	VINOD KUMAR GUPTA	CRITL, Rsnohi	9801876504	cecritl.jusnl@rediffmail.com	
28	SURYA MANI ER	AEE/CRITL BSPTEL	7033091482	smk28aug@gmail.com	
29	PRASHANT KR.	AEE/CRITL BSPTEL	7763818080	prashantkumarsahay@yahoo.com	
30	Sibho Paul	EE/ERPC	9051089897	ercom1.erpc@gov.in	
31	P. P. Jena	AEE/ERPC	9376198991	ppjena-erpc@gov.in	
32	S. Ghosh	Mgr. CPS/WBPDCL	8336917005	sghosh04@wbpdcl.co.in	
33	S. Nandkumar	Mgr (P.S.) WBPDCL	9434469049	s.patra@wbpdcl.co.in	
34	S. Sarker	S.E. (E), WBSETCL	9434910133	soumava.sarker@wbsetcl.in	
35	SHIBAJI GHOSH	A.E. (E), WBSETCL	9434910331	shibaji.ghosh@wbsetcl.in	
36	Sayanti Sibalwa	D.E(E) W.B.S.E.T.E.L	9434910486	sayanti.sibalwa@gmail.com	
37	Anka Roy	Sr. Engg./ CESCLtd.	8584873772	anka.roy@rb-sg.in	
38	S. Mandal	Asst. Manr CESCLtd	916337709	sucharit.mandal@rb-sg.in	
39	A Ghoshal.	Manager/ CESCLtd.	9007015362	arghya.ghosal@rb-sg.in	
40	D. Gorai	Asst. Manager (E) DPL	9475939022	dipen.gorai@gmail.com	

**Participants in the meeting on verification and updation of the Protection data in PDMS**

Venue: ERPC Conference Room, Kolkata

Time: 11:00 hrs

Date: 07.09.2017 (Thursday)

Sl No	Name	Designation/ Organization	Contact Number	Email	Signature
41	Shanku Kumar Samal	Manager BTPS, WBPDCL	9647661226	sk.samal@wbpdcl.co.in	
42	Debasmita Basu	Head ER PRDC	9903010743	debasmita.basu@prdc.org.in	
43	Vishwajit Sen	A.M (CTMC) DPL	9474316956	vishwajit.sen@gmail.com	
44	P. HOSH	Dy. MGR (ER-D)	9434748263	partha.sharma@prdc.org.in	
45					
46					
47					
48					
49					
50					
51					
52					
53					
54					
55					
56					
57					
58					
59					
60					

"Coming together is a beginning, staying together is progress, and working together is success." –Henry Ford

**List of Sub-stations for pending relay data****BSPTCL**

SI No	Station Name	Status of Numerical Relay Data Collection
1	Ekma	NOT RECEIVED
2	Valmikinagar	NOT RECEIVED
3	MTPS	NOT RECEIVED
4	Bihta	NOT RECEIVED
5	Harnaut	NOT RECEIVED
6	Mohania	NOT RECEIVED
7	Barauni TPS	NOT RECEIVED
8	Rajgir	NOT RECEIVED
9	Ekanga Sarai (Ekanagar)	NOT RECEIVED
10	Tehta	NOT RECEIVED
11	Shekhpura	NOT RECEIVED
12	Jamalpur	NOT RECEIVED
13	AURANGABAD	PARTIALLY COLLECTED
14	BIHTA	PARTIALLY COLLECTED
15	BIKRAMGANJ GSS	PARTIALLY COLLECTED
16	BUXAR	PARTIALLY COLLECTED
17	DIGHA	PARTIALLY COLLECTED
18	Dumraon GSS	PARTIALLY COLLECTED
19	FATUHA	PARTIALLY COLLECTED
20	GAIGHAT	PARTIALLY COLLECTED
21	Harnaut	PARTIALLY COLLECTED
22	HULASGANJ	PARTIALLY COLLECTED
23	IMMAMGUNJ	PARTIALLY COLLECTED
24	JAHANABAD	PARTIALLY COLLECTED
25	JAGDISHPUR	PARTIALLY COLLECTED
26	KARBIGHAIYA	PARTIALLY COLLECTED
27	KARAMNASA	PARTIALLY COLLECTED
28	KATRA	PARTIALLY COLLECTED
29	KHAGAUL	PARTIALLY COLLECTED
30	MOHANIA	PARTIALLY COLLECTED
31	PASAULI 220kV	PARTIALLY COLLECTED
32	SASARAM	PARTIALLY COLLECTED
33	SHERGHATI	PARTIALLY COLLECTED
34	SIPARA	PARTIALLY COLLECTED
35	SONENAGAR (OLD)	PARTIALLY COLLECTED
36	TEHTA	PARTIALLY COLLECTED
37	TEKARI	PARTIALLY COLLECTED
38	BANKA	PARTIALLY COLLECTED
39	BARH	PARTIALLY COLLECTED
40	BEGUSARAI	PARTIALLY COLLECTED
41	JAMALPUR	PARTIALLY COLLECTED
42	KAHALGAON	PARTIALLY COLLECTED
43	KUSHESHWARSTHAN	PARTIALLY COLLECTED
44	LAKHISARAI	PARTIALLY COLLECTED
45	NAWADA	PARTIALLY COLLECTED
46	RAJGIR	PARTIALLY COLLECTED
47	SABOUR	PARTIALLY COLLECTED
48	SHEIKHPURA	PARTIALLY COLLECTED
49	SULTANGANJ	PARTIALLY COLLECTED
50	BELSAND	PARTIALLY COLLECTED
51	DARBHANGA(NEW)	PARTIALLY COLLECTED
52	DHAKA GSS	PARTIALLY COLLECTED
53	EKMA	PARTIALLY COLLECTED
54	GANGWARA	PARTIALLY COLLECTED
55	HAJIPUR OLD	PARTIALLY COLLECTED
56	JAYNAGAR	PARTIALLY COLLECTED
57	MADHEPURA	PARTIALLY COLLECTED
58	MAINHAITAR	PARTIALLY COLLECTED
59	MUZAFFARPUR	PARTIALLY COLLECTED

60	PANDAUL	PARTIALLY COLLECTED
61	PURNEA	PARTIALLY COLLECTED
62	RAMNAGAR GSS	PARTIALLY COLLECTED
63	SKMCH	PARTIALLY COLLECTED
64	SAMASTIPUR	PARTIALLY COLLECTED
65	SAHERSA	PARTIALLY COLLECTED
66	SONEBARSA	PARTIALLY COLLECTED
67	SUPAUL GSS	PARTIALLY COLLECTED
68	UDAKISHANGANJ	PARTIALLY COLLECTED
69	VAISHALI	PARTIALLY COLLECTED

**JUSNL**

SL. NO.	SS NAME	STATUS OF NUMERICAL RELAY COLLECTION
1	HATIA OLD	PARTIALLY COLLECTED
2	HATIA NEW	PARTIALLY COLLECTED
3	GUMLA	ONLY KAMDARA FEEDER, REST ALL PENDING
4	KANKE	PARTIALLY COLLECTED
5	NAMKUM	PARTIALLY COLLECTED
6	LOHARDAGA	PARTIALLY COLLECTED
7	KAMDARA	PARTIALLY COLLECTED
8	SIKIDIRI	PARTIALLY COLLECTED
9	LATEHAR	PARTIALLY COLLECTED
10	ABCIL	ALL PENDING
11	GARWA ROAD	PARTIALLY COLLECTED
12	JAPLA	PARTIALLY COLLECTED
13	DALTONGUNJ	PARTIALLY COLLECTED
14	DEOGHAR	PARTIALLY COLLECTED
15	MAHARO DUMKA	ALL PENDING
16	PAKUR	PARTIALLY COLLECTED
17	SAHEBGANJ	PARTIALLY COLLECTED
18	CHANDIL	PARTIALLY COLLECTED
19	CHAKRADHARPUR	PARTIALLY COLLECTED

**DVC**

SL. NO.	SS NAME	STATUS OF NUMERICAL RELAY COLLECTION
1	BTPS_B	PARTIALLY COLLECTED
2	CTPS NEW	PARTIALLY COLLECTED
3	PATHERDIH	PARTIALLY COLLECTED
4	KTPS	PARTIALLY COLLECTED
5	MAITHON DAM	PARTIALLY COLLECTED
6	PANCHET DAM	PARTIALLY COLLECTED
7	KONAR	PARTIALLY COLLECTED
8	BELMURI	PARTIALLY COLLECTED
9	BSL	ALL PENDING

**OPTCL**

Sl no.	Station	STATUS OF NUMERICAL RELAY COLLECTION
1	Chainpal	All MICOM relay data pending
2	OPCL	All relay data pending
3	BRG	All relay data pending
4	Burla	Partially Collected
5	Bargarh	All SEL relay data pending
6	SUNDARGARH	All relay data pending
7	ROURKELLA	Partially Collected
8	CHHEND	Partially Collected
9	TARKERA	Partially Collected
10	JODA	Partially Collected
11	PALASPONGA	Partially Collected
12	DHENKANAL	Partially Collected
13	SRI GANESH SWITCHING	Partially Collected
14	Bhawanipatna	Partially Collected
15	Junagarh	Partially Collected
16	Kesinga	Partially Collected
17	Sonepur	Partially Collected
18	Bidanasi	Partially Collected



19	Angul	Partially Collected
20	Shyam DRI	Partially Collected
21	Rairakhol	Partially Collected
22	Rajgangpur	Partially Collected
23	Balasore 220kV	Partially Collected
24	Somenathpur	Partially Collected
25	Nayagarh	Partially Collected
26	Arti Steel	Partially Collected
27	Kamakhyanagar	Partially Collected

**WBSETCL**

SL. NO.	SS NAME	STATUS OF NUMERICAL RELAY COLLECTION
1	ARAMBAG (WBSETCL)	Partially collected
2	ASANSOL (WBSETCL)	Partially collected
3	BIDHANNAGAR 400KV (WBSETCL)	Partially collected
4	BIRSINGHA (WBSETCL)	Partially collected
5	BISHNUPUR 132KV (WBSETCL)	Partially collected
6	BISHNUPUR 220KV (WBSETCL)	RECEIVED IN PDF
7	BOLPUR (WBSETCL)	Partially collected
8	BARJORA (WBSETCL)	Partially collected
9	CONTAI (WBSETCL)	Partially collected
11	EGRA (WBSETCL)	Partially collected
12	KATWA (WBSETCL)	Partially collected
13	KHATRA (WBSETCL)	Partially collected
28	MAHACHANDA (WBSETCL)	Partially collected
40	MANKAR (WBSETCL)	Partially collected
41	NEW HALDIA 132 KV (WBSETCL)	Partially collected
46	NIZ (WBSETCL)	Partially collected
51	PURULIA (WBSETCL)	Partially collected
60	RAGHUNATHPUR (WBSETCL)	Partially collected
61	RAINA (WBSETCL)	Partially collected
62	RISHRA (WBSETCL)	Partially collected
63	SATGACHIA (WBSETCL)	Partially collected
64	TAMLUK (WBSETCL)	Partially collected
65	UKHRA (WBSETCL)	Partially collected
66	ADISAPTAGRAM (WBSETCL)	Partially collected
67	ASHOKENAGAR (WBSETCL)	Partially collected
68	BAGNAN (WBSETCL)	Partially collected
69	BANGAON (WBSETCL)	Partially collected
70	BARASAT (WBSETCL)	Partially collected
71	BEHALA(JOKA) (WBSETCL)	Partially collected
72	CHANDITOLA (WBSETCL)	Partially collected
73	DHARAMPUR 132 KV (WBSETCL)	Partially collected
74	DHARAMPUR 220 KV (WBSETCL)	Partially collected
75	FALTA (WBSETCL)	Partially collected
76	FOOD PARK (WBSETCL)	Partially collected
77	FOUNDARY PARK (WBSETCL)	Partially collected
78	HOWRAH (WBSETCL)	Partially collected
79	KALYANI (WBSETCL)	Partially collected
80	KASBA (WBSETCL)	Partially collected
81	KRISHNANAGAR (WBSETCL)	Partially collected
82	LAKSHMIKANTAPUR (WBSETCL)	Partially collected
83	LILUAH (WBSETCL)	Partially collected
84	NAZIRPUR (WBSETCL)	Partially collected
85	NEW TOWN AA-1 (WBSETCL)	Partially collected
86	NEW TOWN AA-3 (WBSETCL)	Partially collected
87	RANAGHAT (WBSETCL)	Partially collected
88	SALT LAKE AIS (WBSETCL)	Partially collected
89	SERAKOLE (WBSETCL)	Partially collected
90	SONARPUR (WBSETCL)	Partially collected
91	SUBHASHGRAM 220 KV (WBSETCL)	Partially collected

92	TARAKESWAR (WBSETCL)	Partially collected
93	TITAGARH (WBSETCL)	Partially collected
94	ULUBERIA (WBSETCL)	Partially collected
95	BAJKUL (WBSETCL)	Partially collected
96	BERHAMPORE (WBSETCL)	Partially collected
97	C.K.ROAD (WBSETCL)	Partially collected
98	DEBAGRAM (WBSETCL)	Partially collected
99	DHULIAN (WBSETCL)	Partially collected
100	GOKARNA 220 KV (WBSETCL)	Partially collected
101	GOKARNA 400 KV (WBSETCL)	Partially collected
102	HIZLI (WBSETCL)	Partially collected
103	HIZLI TSS (WBSETCL)	Partially collected
104	JHARGRAM (WBSETCL)	Partially collected
105	KHARAGPUR (WBII DC) (WBSETCL)	Partially collected
106	KHARAGPUR 400KV (WBSETCL)	Partially collected
107	KOLAGHAT (WBSETCL)	Partially collected
108	MIDNAPORE 220 KV (WBSETCL)	Partially collected
109	PINGLA (WBSETCL)	Partially collected
110	RAGHUNATHGANJ (WBSETCL)	Partially collected
111	RAMPURHAT (WBSETCL)	Partially collected
112	SAINTHIA (WBSETCL)	Partially collected
113	VIDYASAGAR PARK (WBSETCL)	Partially collected
114	BALURGHAT (WBSETCL)	Partially collected
115	DALKHOLA (WBSETCL)	Partially collected
116	GANGARAMPUR (WBSETCL)	Partially collected
117	KHEJURIA GIS (WBSETCL)	Partially collected
118	KURSEONG (WBSETCL)	Partially collected
119	MALDA (WBSETCL)	Partially collected
120	NBU (WBSETCL)	Partially collected
121	RAIGANJ (WBSETCL)	Partially collected
122	SAMSI (WBSETCL)	Partially collected
123	UJANU (WBSETCL)	Partially collected
124	PPSP 132KV S/S	Partially collected

**WBPDC**

SL NO	STATION NAME	STATUS OF NUMERICAL RELAY COLLECTION
1	KOLAGHAT THERMAL POWER STATION	CHAIBASA FEEDER OVER VOLTAGE RELAY(P922 MICOM AREVA)
2	SANTALDIH THERMAL POWER STATION	SETTINGS received in TEXT AND PDF FORMAT
3	SAGARDIGHI THERMAL POWER PLANT	
4	BAKRESWAR THERMAL POWER PLANT	PASS BAY TRANSFORMER RELAY SETTING RECEIVED FROM W.B.S.E.T.C.L. ALL OTHER SETTINGS RECEIVED AS HARDCOPY SNAPSHOTS.
5	B.T.P.S (WBPDC)	GENERATOR RELAY SETTINGS PENDING

**PGCIL**

SL NO	Substation	STATUS OF NUMERICAL RELAY COLLECTION
1	SASARAM 765KV	PARTIAL PENDING
2	GAYA 765KV	PARTIAL PENDING
3	BANKA 400KV	ALL NR RELAY PENDING
4	BIHARSHARIFF 400KV	ALL NR RELAY PENDING
5	MUZAFFARPUR 400KV	ALL NR RELAY PENDING
6	NEW PURNEA 400KV	ALL NR RELAY PENDING
7	PATNA 400KV	ALL NR RELAY PENDING
8	LAKHISARAI 400KV	PARTIAL PENDING
9	KISHANGANJ 400KV	ALL NR RELAY PENDING
10	PURNEA 220KV	ALL NR RELAY PENDING
11	ARRAH 220KV	ALL NR RELAY PENDING
12	Ranchi_N(765/400kv)	PARTIAL PENDING

13	Chandwa JHK POOL(400kv)	ALL RELAY SETTINGS ARE IN PDF AND M1 &M2 PROTECTION ARE IN SAME PDF
15	Mithon(400/220kv)	PARTIAL PENDING
16	Jamshedpur(400/220kv)	ALL NR RELAY PENDING
17	Chaibasa(400/220kv)	ALL NR RELAY PENDING
18	Binaguri 400 Kv	PARTIAL PENDING
19	BirparaPG 132kv	PARTIAL PENDING
20	Siliguri PG 220kv	ALL RELAY AVAILABLE IN PDF
21	Malda PG 400kv	PARTIAL PENDING
22	BERAMPUR PG 400kv	ALL RELAY AVAILABLE IN PDF
23	SUBHAS GRAM PGCIL 400kv	ALL RELAY AVAILABLE IN PDF
24	Parulia PGCIL 400kv	ALL NR RELAY PENDING
25	Dalkhola PG 220kv	ALL NR RELAY PENDING
32	Kaniha 400/220	ALL RELAY SETTINGS PENDING
33	Keonjhar 400/220	PARTIAL PENDING
34	Kuchei/Baripada 400/220	ALL RELAY AVAILABLE IN PDF
35	Rengali 400/220	PARTIAL PENDING
36	Pandiabil 400/220	PARTIAL PENDING

**CESC**

SL. NO.	SS NAME	STATUS OF NUMERICAL RELAY COLLECTION
1	B.B.D BAG	Partially collected
2	BRS	Partially collected
3	DUM DUM	Partially collected
4	CHAKMIR	Full Pending
5	EMSS	Partially collected
6	B.GARDEN	Received in PDF
7	B.T.ROAD	Received in PDF
8	EAST CALCUTTA	Partially collected
9	TARATOLA	Received in PDF
10	JADAVPUR	Received in PDF
11	TRS & TGS	Partially collected
12	NCSS	Received in PDF
13	PARK LANE	Partially collected
14	PATULI	Received in PDF
15	PRS	Partially collected
16	BBGS	Partially collected

**NTPC**

SL. NO.	SS NAME	STATUS OF NUMERICAL RELAY COLLECTION
1	KAHALGAON	Partially collected
2	FARAKKA	Partially collected
3	MUZAFFARPUR TPS	All pending
4	PTPS	All pending
5	TSTPS	Received in PDF
6	TTPS	Partially collected

**NHPC**

SL. NO.	SS NAME	STATUS OF NUMERICAL RELAY COLLECTION
1	Teesta 3 Lower Dam	Partially Collected
2	Teesta 5	Partially Collected
3	Teesta 4	Partially Collected

**OHPC**

SL. NO.	SS NAME	STATUS OF NUMERICAL RELAY COLLECTION
1	BALIMELA	Partially Collected
2	Chiplima	Partially Collected
3	Machkund	Partially Collected
4	Burla	All pending