



National Load Despatch Centre
POWER SYSTEM OPERATION CORPORATION LIMITED
(A wholly owned subsidiary of POWERGRID)
CIN No.: U40105DL2009GOI188682
B-9, QUTUB INSTITUTIONAL AREA, KATWARIA SARAI, NEW DELHI -110016

Ref: POSOCO/NLDC/SO/Weekly Report

Date: 07th June 2019

To,

1. कार्यपालक निदेशक, पू. क्षे. भा. प्रे. के., 14, गोल्फ क्लब रोड, कोलकाता - 700033
Executive Director, ERLDC, 14 Golf Club Road, Tollygunge, Kolkata, 700033
2. कार्यपालक निदेशक, ऊ. क्षे. भा. प्रे. के., 18/ ए, शहीद जीत सिंह सनसनवाल मार्ग, नई दिल्ली - 110016
Executive Director, NRLDC, 18-A, Shaheed Jeet Singh Marg, Katwaria Sarai, New Delhi - 110016
3. कार्यपालक निदेशक, प. क्षे. भा. प्रे. के., एफ-3, एम आई डी सी क्षेत्र, अंधेरी, मुंबई - 400093
Executive Director, WRLDC, F-3, M.I.D.C. Area, Marol, Andheri (East), Mumbai-400093
4. कार्यपालक निदेशक, ऊ. पू. क्षे. भा. प्रे. के., डोंगतिह, लोअर नोंग्रह, लापलंग, शिलोंग - 793006
Executive Director, NERLDC, Dongteih, Lower Nongrah, Lapalang, Shillong - 793006, Meghalaya
5. कार्यपालक निदेशक, द. क्षे. भा. प्रे. के., 29, रेस कोर्स क्रॉस रोड, बंगलुरु - 560009
Executive Director, SRLDC, 29, Race Course Cross Road, Bangalore-560009

Sub: Weekly Status Report 27th May 2019 to 02nd June 2019.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.- 5.5.1 के प्रावधान के अनुसार, 27 मई 2019 से 02 जून 2019, सप्ताह की अखिल भारतीय प्रणाली की ग्रिड निष्पादन रिपोर्ट रा०भा०प्रे०के० की वेबसाइट पर निम्न लिंक पर उपलब्ध है :-

As per article 5.5.1 of the Indian Electricity Grid Code, the weekly status report pertaining power supply position report of All India Power System for the week 27th May 2019 to 02nd June 2019, is available at the NLDC website.

Thanking You.

Yours faithfully,

f GM (SO)

पॉवर सिस्टम ऑपरेशन कारपोरेशन लिमिटेड
राष्ट्रीय भार प्रेषण केंद्र, नई दिल्ली

साप्ताहिक रिपोर्ट (27 मई से 02 जून 2019 तक)

रिपोर्टिंग तिथि:-

7-Jun-19

(आई० ई० जी० सी० की धारा संख्या-5.5.1 के अंतर्गत)

1. अधिकतम मांग आपूर्ति और अधिकतम कमी (मे०वा०)

दिनांक	उत्तरी क्षेत्र		पश्चिमी क्षेत्र		दक्षिणी क्षेत्र		पूर्वी क्षेत्र		पूर्वोत्तर क्षेत्र		कुल	
	अधिकतम मांग आपूर्ति	अधिकतम कमी	अधिकतम मांग आपूर्ति	अधिकतम कमी	अधिकतम मांग आपूर्ति	अधिकतम कमी	अधिकतम मांग आपूर्ति	अधिकतम कमी	अधिकतम मांग आपूर्ति	अधिकतम कमी	अधिकतम मांग आपूर्ति	अधिकतम कमी
	(मे०वा०)	(मे०वा०)	(मे०वा०)	(मे०वा०)	(मे०वा०)	(मे०वा०)	(मे०वा०)	(मे०वा०)	(मे०वा०)	(मे०वा०)	(मे०वा०)	(मे०वा०)
27-05-2019	53530	944	51613		43142		21552		2460	158	172297	1102
28-05-2019	54812	761	51413		44278		20474		2645	86	173622	847
29-05-2019	55876	884	51761		43693		22349		2702	114	176381	998
30-05-2019	56513	560	51494		43549		20641		2601	168	174798	728
31-05-2019	56432	1107	50970		43386		19749		2408	87	172945	1194
01-06-2019	55018	999	51120		44145		21380		2482	250	174145	1249
02-06-2019	53424	1074	47839		36710		17663		2544	128	158180	1202

2. ऊर्जा आपूर्ति और पनबिजली उत्पादन (मि०यू०)

क्षेत्र / तिथि	उत्तरी क्षेत्र		पश्चिमी क्षेत्र		दक्षिणी क्षेत्र		पूर्वी क्षेत्र		पूर्वोत्तर क्षेत्र		कुल	
	ऊर्जा आपूर्ति	पनबिजली उत्पादन	ऊर्जा आपूर्ति	पनबिजली उत्पादन	ऊर्जा आपूर्ति	पनबिजली उत्पादन	ऊर्जा आपूर्ति	पनबिजली उत्पादन	ऊर्जा आपूर्ति	पनबिजली उत्पादन	ऊर्जा आपूर्ति	पनबिजली उत्पादन
	(मि०यू०)	(मि०यू०)	(मि०यू०)	(मि०यू०)	(मि०यू०)	(मि०यू०)	(मि०यू०)	(मि०यू०)	(मि०यू०)	(मि०यू०)	(मि०यू०)	(मि०यू०)
27-05-2019	1235	258	1254	28	1008	71	485	90	43	17	4025	463
28-05-2019	1277	263	1266	26	1051	67	483	77	47	18	4124	451
29-05-2019	1306	259	1260	21	1024	47	490	75	48	16	4129	418
30-05-2019	1347	276	1263	19	1018	52	472	75	46	15	4145	435
31-05-2019	1342	306	1253	23	1027	47	445	67	45	15	4112	459
01-06-2019	1333	325	1164	19	994	56	465	68	46	16	4002	484
02-06-2019	1324	334	1211	15	946	39	420	66	48	14	3949	468

3. आवृत्ति (प्रतिशत समय में)

तिथि	49.8-49.9	<49.9	49.9-50.05	>50.05	Average	FVI
	ऑ० ई० ग्रिड	ऑ० ई० ग्रिड	ऑ० ई० ग्रिड	ऑ० ई० ग्रिड	ऑ० ई० ग्रिड	ऑ० ई० ग्रिड
27-05-2019	13.15	16.85	75.13	8.02	49.99	0.063
28-05-2019	7.41	7.97	75.31	16.71	50.02	0.040
29-05-2019	3.36	3.36	77.21	19.43	49.99	0.030
30-05-2019	4.56	4.56	64.11	31.33	49.99	0.043
31-05-2019	1.31	1.44	69.26	29.31	50.01	0.034
01-06-2019	12.84	14.13	63.08	22.79	50.00	0.063
02-06-2019	3.90	4.58	56.03	39.39	50.03	0.079

*NEW & SR grid running in synchronisation.

4. NEW ELEMENTS COMMISSIONED

1. 400KV kaithar-Khenyampatti 1&2 first time (Idle) charged at 15:02Hrs and 15:25Hrs from Kaithar end on 27-05-2019

5. Maximum Demand Met during the day & Peak Hour Shortage in States (in MW)

Region	Date	27-05-2019		28-05-2019		29-05-2019		30-05-2019		31-05-2019		01-06-2019		02-06-2019	
	States	Max. Demand Met during the day	Peak hr Shortage	Max. Demand Met during the day	Peak hr Shortage	Max. Demand Met during the day	Peak hr Shortage	Max. Demand Met during the day	Peak hr Shortage	Max. Demand Met during the day	Peak hr Shortage	Max. Demand Met during the day	Peak hr Shortage	Max. Demand Met during the day	Peak hr Shortage
NR	Punjab	7132	0	7521	0	7858	0	8115	0	8640	0	8866	0	8517	0
	Haryana	8100	100	8337	130	8286	350	8803	20	8790	63	8972	0	8775	0
	Rajasthan	11072	0	12103	0	11634	0	11668	0	11528	0	11755	0	11710	0
	Delhi	5499	0	5701	0	5966	0	6207	0	6371	0	6386	0	6507	0
	UP	20284	340	20939	350	20989	710	21493	0	20903	560	21142	180	20310	0
	Uttarakhand	2101	0	2135	0	2075	0	2101	0	2155	0	2113	0	1992	0
	HP	1382	0	1415	0	1424	24	1391	0	1457	0	1452	0	1263	0
	J&K	2415	604	2284	571	2177	544	2247	562	2195	549	2062	516	2193	387
	Chandigarh	266	0	284	0	295	0	308	0	327	0	332	0	309	0
WR	Chhattisgarh	4033	0	3970	0	3731	0	3927	0	3811	0	3868	0	3887	0
	Gujarat	17789	0	17969	0	17725	0	18062	0	18094	0	17913	0	16987	0
	MP	9774	0	9873	0	9827	0	9782	0	9893	0	9777	0	9614	0
	Maharashtra	22799	0	23276	0	23134	0	22774	0	22294	0	22758	0	21559	0
	Goa	541	0	541	0	541	0	541	0	541	0	541	0	541	0
	DD	325	0	329	0	339	0	344	0	332	0	321	0	313	0
	DNH	727	0	753	0	736	0	759	0	736	0	738	0	725	0
	Essar steel	350	0	310	0	375	0	334	0	328	0	291	0	327	0
SR	Andhra Pradesh	9725	0	9700	0	9622	0	9026	0	9500	0	9394	0	9382	0
	Telangana	8247	0	8511	0	8684	0	8344	0	8568	0	7758	0	7567	0
	Karnataka	10185	0	10540	0	10135	0	10632	0	10905	0	9986	0	9279	0
	Kerala	4177	0	4219	0	4091	0	4216	0	3856	0	4084	0	3921	0
	Tamil Nadu	15170	0	15004	0	15328	0	15718	0	15352	0	15100	0	13757	0
	Pondy	436	0	436	0	434	0	437	0	429	0	430	0	396	0
ER	Bihar	5354	0	5270	0	5291	0	4734	0	4831	0	5098	0	4830	0
	DVC	3213	0	3104	0	3203	0	3138	0	3003	0	3168	0	3147	0
	Jharkhand	1351	0	1217	0	1272	0	1156	0	1000	0	1179	0	1000	0
	Odisha	4539	0	4415	0	4395	0	4629	0	4779	0	4837	0	4366	0
	West Bengal	9546	0	9537	0	9458	0	8932	0	8329	0	8906	0	8836	0
	Sikkim	94	0	92	0	88	0	80	0	91	0	89	0	79	0
NER	Arunachal Pradesh	123	4	121	1	123	1	116	1	104	3	134	2	144	2
	Assam	1548	41	1666	63	1706	83	1618	112	1507	36	1595	153	1613	68
	Manipur	158	3	178	3	180	2	179	1	153	4	157	2	167	1
	Meghalaya	272	2	309	0	314	0	313	0	306	0	315	0	298	0
	Mizoram	96	1	90	2	91	1	94	2	85	2	92	1	75	1
	Nagaland	112	3	106	3	120	2	124	2	118	2	112	2	114	2
Tripura	242	13	282	4	288	3	291	4	263	2	273	6	253	2	

6. Energy Consumption in States (MUs)

Region	States	27-05-2019	28-05-2019	29-05-2019	30-05-2019	31-05-2019	01-06-2019	02-06-2019
NR	Punjab	155.9	166.3	175.9	183.6	188.8	186.4	186.9
	Haryana	165.3	173.6	179.3	185.9	189.1	188.4	182.0
	Rajasthan	248.1	257.9	256.2	250.0	255.7	261.6	260.2
	Delhi	111.8	114.9	121.6	128.1	131.6	132.2	132.7
	UP	428.2	435.6	444.4	469.0	445.2	438.9	439.0
	Uttarakhand	45.0	46.5	46.3	46.7	47.8	47.7	43.0
	HP	28.9	29.4	29.2	30.3	30.5	28.8	27.0
	J&K	46.7	47.8	47.2	47.0	47.4	42.3	46.8
	Chandigarh	5.2	5.4	5.6	6.0	6.2	6.4	6.0
WR	Chhattisgarh	94.3	89.0	85.0	88.6	86.2	37.2	88.5
	Gujarat	385.7	391.1	389.9	394.1	392.8	393.0	376.2
	MP	224.0	227.4	226.3	226.4	226.6	223.9	215.2
	Maharashtra	509.5	516.4	515.8	509.6	505.9	500.6	489.6
	Goa	12.4	11.8	12.3	12.3	12.3	12.3	12.3
	DD	7.1	7.3	7.5	7.5	7.4	7.2	7.1
	DNH	14.6	17.4	16.7	17.8	16.5	17.2	16.3
	Essar steel	6.3	6.0	6.9	6.4	5.7	5.6	6.1
SR	Andhra Pradesh	197.0	201.0	197.1	183.2	196.3	197.3	194.2
	Telangana	176.0	181.8	186.6	177.5	181.2	170.9	167.0
	Karnataka	194.9	214.1	206.3	213.1	212.7	198.9	184.8
	Kerala	85.6	88.1	79.6	85.1	84.1	81.7	77.6
	Tamil Nadu	345.5	356.2	345.2	349.5	343.0	336.8	313.7
	Pondy	9.2	9.4	8.9	9.3	9.2	8.6	8.2
ER	Bihar	105.3	108.7	107.7	92.4	80.5	99.7	88.8
	DVC	67.9	68.8	68.7	72.0	66.0	65.9	66.3
	Jharkhand	28.2	28.5	28.2	26.3	24.8	25.3	25.1
	Odisha	96.5	89.5	86.6	91.6	96.6	96.8	85.8
	West Bengal	185.5	186.1	198.1	189.0	175.9	176.0	153.4
	Sikkim	1.3	1.3	1.1	1.0	1.2	1.2	0.9
NER	Arunachal Pradesh	2.2	2.1	2.2	2.1	2.1	2.2	2.0
	Assam	25.2	28.0	28.6	27.0	26.7	28.8	29.8
	Manipur	2.5	2.7	2.8	2.5	2.4	2.2	2.3
	Meghalaya	4.7	5.0	5.3	4.9	4.9	5.5	5.9
	Mizoram	1.5	1.7	1.8	1.7	1.7	1.8	1.7
	Nagaland	2.2	2.0	2.1	2.2	2.1	2.2	2.5
	Tripura	5.0	5.0	5.6	5.3	4.8	3.3	4.4
ALL INDIA TOTAL		4025.2	4123.6	4128.6	4145.1	4111.9	4034.9	3949.3

पॉवर सिस्टम ऑपरेशन कारपोरेशन लिमिटेड
राष्ट्रीय भार प्रेषण केंद्र, नई दिल्ली

साप्ताहिक रिपोर्ट (27 मई से 02 जून 2019 तक)

(आई० ई० जी० सी० की धारा संख्या-5.5.1 के अंतर्गत)							
7. अंतर्क्षेत्रीय विनिमय [प्रथम क्षेत्र से द्वितीय क्षेत्र को आयात (+) / निर्यात (-)]							
दिनांक	27-05-2019	28-05-2019	29-05-2019	30-05-2019	31-05-2019	01-06-2019	02-06-2019
East to North	-78.9	-66.5	-60.9	-63.6	-75.3	-72.1	-71.0
East to West	63.5	70.7	67.6	65.3	63.0	64.2	55.3
East to South	-75.7	-76.6	-81.2	-83.4	-82.8	-73.4	-75.3
East to North-East	3.3	0.9	-2.6	-5.9	-6.0	-7.7	-12.1
North-East to North	-7.4	-8.5	-9.7	-9.7	-9.7	-9.9	-12.1
West to North	-146.5	-153.8	-168.6	-167.5	-152.2	-160.9	-141.5
West to South	-57.9	-52.9	-58.1	-57.6	-48.8	-57.1	-44.2

**भूटान , नेपाल एव बाग्लादेश के साथ अंतरराष्ट्रीय विद्युत विनिमय INTERNATIONAL
EXCHANGE WITH BHUTAN, NEPAL AND BANGLADESH**

साप्ताहिक रिपोर्ट (27 मई से 02 जून 2019 तक)

अंतरराष्ट्रीय विद्युत विनिमय [भारत से दूसरे देश को आयात (+) / निर्यात (-)] Transnational Exchange from India (Import=(+ve) /Export =(-ve))

दिनांक Date	भूटान BHUTAN		नेपाल NEPAL			बाग्लादेश BANGLADESH		
	Energy Exchange	Day Average (MW)	Energy Exchange	Day Peak (MW)	Day Average (MW)	Energy Exchange	Day Peak (MW)	Day Average (MW)
27-05-2019	10.4	434	-10.5	-557	-439	-26.5	-1133	-1103
28-05-2019	9.3	388	-10.3	-545	-430	-26.1	-1130	-1085
29-05-2019	8.6	356	-10.8	-582	-448	-26.4	-1135	-1100
30-05-2019	9.4	391	-8.4	-448	-349	-27.1	-1147	-1127
31-05-2019	10.0	418	-8.1	-514	-339	-25.8	-1121	-1076
01-06-2019	9.6	398	-8.9	-392	-372	-26.3	-1140	-1097
02-06-2019	8.4	352	-6.9	-420	-286	-22.6	-1132	-940
कुल Total	65.7		-64.0			-180.7		

8). Major Grid Incidences (Provisional):-

S.No.	Region	Name of Elements (Tripped/Manually opened)	Owner / Agency	Outage		Revival		Outage Duration	Event (As reported)	Generation Loss(MW)	Load Loss(MW)	Category as per CEA Grid Standards
				Date	Time	Date	Time					
1	NR	1) 220kV Amargarh(NRSS29)-Delina(JK) 2) 220kV Delina(JK)-Zainkote(JK) 3) 220kV Kishenganga(NHPC)-Delina(JK) ckt-1 4) 110MW Unit#1 at Kishenganga(NHPC) 5) 110MW Unit#3 at Kishenganga(NHPC)	J&K, NHPC and NRSS29	26-05-2019	17:50	26-05-2019	18:32	00:42	220kV Ziankote-Delina line tripped due to inclement weather condition (Details Awaited from SLDC J&K) followed by tripping of all other 3 nos. line from Delina including 220kV Bus. This resulted outage of 2 nos. 110MW Units & generation loss of 134 MW at Kishenganga HEP. As per PMU, R-V fault is observed in the system. In antecedent conditions, 220kV Amargarh(NRSS29)-Delina(JK) & 220kV Delina(JK)-Zainkote(JK) carrying 11MW & 70MW respectively.	130	100	GD-1
2	NR	1) 220kV Chamera III(NHPC)-Chamera pool(PG) ckt-1 2) 220kV Chamera III(NHPC)-Budhil(Lanco) 3) 77MW Unit#1, #2 & #3 at 220kV Chamera III(NHPC) 4) 35MW Unit#1 & #2 at 220kV Budhil(Lanco)	POWERGRID, NHPC & Lanco	29-05-2019	13:42	30-05-2019	22:25	08:43	220kV Chamera III(NHPC)- Chamera pool(PG) ckt-1 tripped due to conductor snapped during dismantling of tower near Span 24-25. 220 kV Chamera III (NHPC)- Chamera pool(PG) ckt. 2 is already under forced outage since 14.05.19, due to Circuit Breaker problem at Chamera III. Generation loss of around 228 MW of Chamera III and 69 MW of Budhil Hydro-station occurred due to non-availability of evacuation path. As per PMU, R-N fault with no auto-reclosing is observed in the system.	300		GD-1
3	NR	1) 220kV Bus-II at 220/132kV Khetri (Raj) 2) 220kV Khetri(Raj)-Behror(Raj) 3) 220kV Khetri(Raj)-Ratangarh(Raj) ckt-1 & 2 4) 220kV Khetri(Raj)-Jhunjhunu(Raj) 5) 220kV Khetri(Raj)-Babai(Raj) ckt-1 & 2 6) 220kV Khetri(Raj)-Dadri(BBMB) ckt-1 & 2 7) 100MVA ICT 4 at 220/132kV Khetri (Raj) 8) 100MVA ICT 5 at 220/132kV Khetri (Raj) 9) 100MVA ICT 6 at 220/132kV Khetri (Raj)	Rajasthan & BBMB	30-05-2019	23:59	31-05-2019	01:36	01:37	220kV Khetri(Raj)-Behror(Raj) tripped due to Y-Ph CT blast at Khetri end. Due to this, 220kV Bus-II bus bar protection operated leading to tripping of the lines and ICTs connected to 220 kV Bus-II (at Khetri). As per PMU, three phase fault is observed in the system. In antecedent conditions, 100MVA ICT 5 & 6 carrying 31MW & 36MW respectively.		80	GD-1
4	NR	1) 115MW Unit#5 at 220kV Salal HEP(NHPC) 2) 115MW Unit#1 at 220kV Salal HEP(NHPC) 3) 115MW Unit#2 at 220kV Salal HEP(NHPC) 4) 115MW Unit#3 at 220kV Salal HEP(NHPC) 5) 115MW Unit#4 at 220kV Salal HEP(NHPC) 6) 115MW Unit#6 at 220kV Salal HEP(NHPC)	NHPC	31-05-2019	18:40	31-05-2019	18:52	00:12	Unit#5 at 220kV Salal HEP(NHPC) tripped on overcurrent and other 5 units tripped due to overloading after tripping of Unit#5. As per PMU, R-N fault with delayed clearance of 400ms is observed. In antecedent conditions, Unit#1,2,3,4,5 & 6 carrying 118MW,118MW,117MW,122MW,122MW & 121MW respectively.	715		GD-1
5	WR	Tripping of 1.400/220 kv 500 MVA Asoj ICT 1 2.400 kv Asoj-Chorania 2	GETCO	24-05-2019	09:06	24-05-2019	10:32	01:26	At 400/220 kv Asoj s/s, Y phase Unit of 400/220 kv 500 MVA ICT 1 blasted and resulted in tripping of the ICT along with the chorania 2 line. To control the fire and isolate the faulty unit of ICT remaining 400 kv elements in the Asoj s/s were H/T at 09:45 Hrs.	Nil	Nil	GI-2
6	WR	Tripping of 1.400 kv VSTPS-Jabalpur 1&2 2.400 kv Vindhychal- Satna 1&2 3.210 MW VSTPS Unit 1 4.500 MW VSTPS Unit 8 6.500 kv HVDC Vindhychal Pole 2 7.400 kv VSTPS-Korba 8.400 kv VSTPS-Essar Mahan 9.400/132 kv Vindhychal ICT 1	NTPC/PGCIL	28-05-2019	12:09	28-05-2019	13:11	01:02	At Vindhychal power station, 400 kv bus 4 was under shutdown and all other elements were shifted to 400 kv Bus 3. Only 400 kv Vindhychal - Jabalpur 1 was connected through TBC. R phase Isolator of TBC opened in on-load condition and resulted in tripping of 400 kv Bus 3 on busbar protection operation. It was found that the Isolator limit switch control wiring was loose and was earthed due to which the bus bar protection operated.	710	Nil	GI-2
7	ER	400 kv Kishangunj - Darbhanga D/C 400 kv bus II at Darbhanga	ISTS	29-05-2019	21:44	Yet to be restored		--	400 kv Darbhanga - Kishangunj D/C along with 400 kv bus II at Darbhanga tripped at 21:44 hrs due to collapse of Tower No 385(Loc. 96/0) suspension type collapsed due to high speed cyclone at Supaul Area (Bihar)-Near Koshi River.	0	0	GI-1

S.No.	Region	Name of Elements (Tripped/Manually opened)	Owner / Agency	Outage		Revival		Outage Duration	Event (As reported)	Generation Loss(MW)	Load Loss(MW)	Category as per CEA Grid Standards
				Date	Time	Date	Time					
8	SR	1. 220kV Edamon - Edappon 2. 220kV Edamon - Sabarigiri ckt-1, 2 & 3 3. 220kV Edamon - Pothencode ckt-1 &2 4. 220kV Edamon - Kundara 5. 220kV Edamon - Tirunelveli ckt-1&2 6. 100MVA transformer 1 &2	KSEB	27-05-2019	12:30	27-05-2019	12:42	00:12	Complete outage of 220kV Edamon SS of KSEB. Triggering incident was three phase to earth fault in 220kV Edamon Bus 1 and 2. Bus 1 and 2 Bus bar protection operated resulting in the tripping of all connected elements. This resulted in complete loss of supply at 220kV Edamon SS.	-----	600	GD-1
9	SR	1. 220kV Kodalalli - Kaiga 2. 220kV Kodalalli - Kadra 3. 220kV Kodalalli - Nagjheri ckt-1&2 4. Unit # 3 at Kodalalli	KPCL	30-05-2019	13:34	30-05-2019	14:12	00:38	Complete outage of 220kV Kodalalli HEP of KPCL. As per report of KPCL, Bus isolator of Unit-3 opened online due to DC earth fault which in turn led to occurrence of fault. Delayed clearance of fault (200msec) observed from PMU data. It is mentioned in the report of KPCL that there was operation of LBB protection of Unit #3 CB. The reason for non-operation of busbar protection needs further investigation and details are awaited from KPCL. All connected elements got tripped at 220kv Kodalalli Hydro station	27	-----	GD-1
10	SR	1. 400/220kV ICT-1,2,3 & 4 at Ghanapur 2. All elements connected to 220kV Bus-2 at Ghanapur.	TSTRANSCO	27-05-2019	02:04	27-05-2019	03:14	01:10	Multiple tripping at 220kV Ghanapur station of TSTRANSCO: Triggering incident was failure of B-phase CT of bus coupler of Bus-2. Bus bar protection of 220kV Bus-2 operated resulting in tripping of all elements connected to Bus-2.	----	----	GI-1