

## **ADDITIONAL AGENDA – III for 43<sup>rd</sup> TCC/46<sup>th</sup> NRPC meetings**

### **Frequent Tripping of 220kV Lines emanating from Meerut, Baghpat & Saharanpur Sub Station**

Please refer the frequent tripping in 220kV System (owned by UPPTCL) wherein total 134 nos. of tripping took place since April 19 (refer Annexure). Due to these frequent tripping, heavy current is being fed through 400/220kV Transformers at Meerut, Baghpat & Saharanpur. The heavy fault current not only reduces the residual life of transformer but reduce the useful life of 220kV switchgear equipment.

We has already experienced the failure of transformer and abnormal rise in fault gases due to external fault in 220KV, which affect the availability of transmission system and huge commercial impact to POWERGRID.

We are already facing the premature failure of 220kV Circuit Breakers. As per IEC 62271-100, test duty T100a (asymmetric fault clearing) and T100s -Symmetric fault clearing is guaranteed for sum of fault current ( $\sum kA^2$ ) being fed through CB. Manufacturer does not guarantee the circuit breaker if sum of fault current ( $\sum kA^2$ ) exceeds prescribed limit and in above tripping incident, due to heavy and frequent fault current, residual life of CB is at stake.

POWERGRID has already raised the matter multiple times with UPPTCL/NRLDC, but **NO** reduction in tripping has been observed. In the interest of Grid Security and Equipment Safety, it is proposed that ***Auto re-closure of all 220kV lines emanating from Meerut, Baghpat & Saharanpur Sub Station will be kept in “OFF” condition and in case of any tripping in future, line will be charged after rectification of fault.***

Members may kindly deliberate

**TRIPPING Details of 220KV Lines from MEERUT, BAGHPAT & SAHARANPUR  
(APRIL-19 to 13-SEP-19)**

S. No.	ELEMENT NAME	OUTAGE		RESTORATION		Duration	REASON OF OUTAGE
		DATE	TIME	DATE	TIME		
1	220KV BAGHPAT-MURADNGR	01-04-19	01:52	04-04-19	19:34	89:42	Tripped from Bagpat end only due to DT received from Muradnagar end.
2	220KV MEERUT-NARA	05-04-19	05:56	05-04-19	06:30	00:34	Line tripped only from Nara(UPPCL) end and Auto reclosed from Meerut end on Y-N fault in UPPCL portion. FLR-Meerut-10KM / 13.3 KA.
3	220KV SAHARANPUR-SAMLI	12-04-19	03:19	12-04-19	03:58	00:39	Line tripped on B-N fault. FLR- Saharanpur- 20.4 km/ 5.28 KA
4	220KV MEERUT-SHTBDNGR	12-04-19	04:32	12-04-19	05:20	00:48	CB A/T tripped only at Shatabdhi Nagar-UP end on Y-N fault during tripping/ fault on their 220 kv Mrt-Gajraula Line. No Flag Facia reported at Mrt end and line remain normal charged..
5	220KV MEERUT-GAJRAULA	12-04-19	04:32	12-04-19	15:03	10:31	Line tripped only from Gajraula end on Y-N fault. FLRr- Gajraula- 87.0 km
6	220KV MEERUT-NARA	13-04-19	22:45	13-04-19	22:45	00:00	Line Auto reclosed on B-N fault,Meerut-13.09KM/10.57 KA.Fault is in UPPCL portion.
7	220KV SAHARNPR- KHARA	15-04-19	11:36	15-04-19	21:56	10:20	Tripped on R-N fault.FLR:Saharanpur:73.95km/1.175kA
8	220KV SAHARNPR- SAHARNPR(UP)	17-04-19	20:05	17-04-19	22:53	02:48	Tripped on R-N fault .FLR-Saharanpur-67.3 km/3.2KA
9	220KV MEERUT-NEHTAUR	17-04-19	20:37	17-04-19	22:48	02:11	Tripped on R-N-Y fault .FLR-Meerut-149 km,Zone 3 .IF-3.2KA
10	220KV MEERUT-NARA	24-04-19	00:42	24-04-19	01:17	00:35	Tripped on R-N fault in UPPCL Portion. FLR:Meerut-25.93km/7.2kA,Nara-6.59km.
11	220KV MEERUT-NARA	25-04-19	20:22	25-04-19	20:22	00:00	Line Auto reclosed successfully on B-N fault in UPPCL portion.. FLR-Meerut-12 KM/11.3 KA.
12	220KV SAHARNPR- KHARA	27-04-19	11:51	27-04-19	14:30	02:39	Line tripped on R-Y fault. FLR-Saharanpur-51.85 km/ Ir-3.5 Kamp, ly-3.5 KA
13	220KV BAGHPAT-SHAMLI	27-04-19	12:03	27-04-19	18:06	06:03	Line tripped on B-N fault. FLR-BGPT-169.0 km/ lf-10.01 KA
14	220KV SAHARNPR- KHARA	28-04-19	15:56	28-04-19	17:12	01:16	Line tripped on R-N fault. FLR- Saharanpur-59.5 km/20.5 Kamp
15	220KV SAHARANPUR-SAMLI	29-04-19	00:55	29-04-19	06:29	05:34	Line tripped on B-N fault. FLR- Saharanpur-25.69 km/5.15 Kamp
16	220KV SAHARNPR- KHARA	29-04-19	11:37	29-04-19	13:21	01:44	Line tripped on R-N fault. FLR-Saharanpur-70.63 km/ IF-1.16 KA.
17	220KV SAHARNPR- KHARA	01-05-19	18:39	01-05-19	20:27	01:48	Line tripped on R-Y-N fault,FLR-Saharanpur-75.23 KM/2.9KA.
18	220KV MEERUT-NEHTAUR	03-05-19	08:13	03-05-19	09:16	01:03	No flag facia reported at Meerut.Distance protection operated Zone-1
19	220KV SAHARNPR- KHARA	04-05-19	07:19	04-05-19	09:13	01:54	Tripped only from Saharanpur on R-N fault .FLR-Sha-19.79km,IF-1.5KA.Zone-4 .
20	220KV SAHARNPR- KHARA	05-05-19	15:09	05-05-19	17:30	02:21	Line tripped on R-Y fault. FLR- Saharanpur- 45.86 km/3.9 Kamp
21	220KV MEERUT-GAJRAULA	17-05-19	17:59	17-05-19	19:07	01:08	Tripped on Zone-3 distance protection.
22	220KV BAGHPAT-MURADNGR	19-05-19	04:45	19-05-19	05:43	00:58	Tripped only from Bagpat end on B-N fault.Bagpat-34.1km/3.9kA
23	220KV MEERUT-SIMBHOLI	23-05-19	14:01	23-05-19	18:21	04:20	Tripped on B-N fault in UPPCL portion. FLR:Meerut-17.49km/8.5KA, Further, UPPCL took S/D via NRLDC code-1858 for tree cutting in their TL portion.
24	220KV BAGHPAT-MURADNGR	24-05-19	01:11	24-05-19	01:45	00:34	A/R from Mrdngr & trpd from Baghpt end on B-N fault. FLR, Baghpt-25.5km/4.94KA.
25	220KV MEERUT-MPURAM-I	28-05-19	12:46	28-05-19	15:23	02:37	Tripped on Y-N fault in UPPCL portion. FLR:Mrt-8.05km,14.4KA ,Modipuram-4.1km (POWERGRID Jurisdiction-2.3km from Meerut).
26	220KV BAGHPAT-BAROT-II	30-05-19	11:03	30-05-19	13:14	02:11	Line tripped on R-Y fault,FLR-BGPT-3.5 KM/10.5KA.
27	220KV MEERUT-NEHTAUR	30-05-19	13:52	30-05-19	17:14	03:22	Line tripped on B-N fault,FLR-MRT -73.6 KM/ 2.7 KA
28	220KV BAGHPAT-SHAMLI	31-05-19	11:37	31-05-19	14:48	03:11	Line tripped on Y-B fault,FLR-Bagpat-41.44KM/4.09KA,Zone-II
29	220KV BAGHPAT-SHAMLI	31-05-19	11:37	31-05-19	14:48	03:11	Line tripped on Y-B fault,FLR-Bagpat-41.44KM/4.09KA,Zone-II

S. No.	ELEMENT NAME	OUTAGE		RESTORATION		Duration	REASON OF OUTAGE
		DATE	TIME	DATE	TIME		
30	220KV SAHARANPUR-SAMLI	06-06-19	10:19	06-06-19	11:38	01:19	Tripped on Y-N fault/ FLR- SRNPR-17.7 km/ 6.2 KA
31	220KV MEERUT-GAJRAULA	08-06-19	00:15	08-06-19	00:15	00:00	Line A/R on R-N fault. FLR-MRT-38.5 km/ 4.81 KA
32	220KV BAGHPAT-SHAMLI	12-06-19	20:52	12-06-19	22:59	02:07	Tripped on Y-B fault.FLR-Bgpr-42.4km/4.6kA
33	220KV BAGHPAT-SHAMLI	21-06-19	03:10	21-06-19	05:01	01:51	Tripped on R-N fault.Bgpt-36.61km,IF-4.3KA
34	220KV BAGHPAT-SHAMLI	24-06-19	20:00	24-06-19	21:22	01:22	Tripped on B-N fault only from Baghpat end. FLR, Baghpat-45km/3.7KA.
35	220KV SAHARANPUR-SAMLI	24-06-19	20:00	24-06-19	21:32	01:32	Tripped on B-N fault only from Shrnpr end. FLR,Shrnpr-53.5km/2.7KA.
36	220KV SAHARANPUR-SAMLI	25-06-19	13:03	25-06-19	14:58	01:55	Tripped on Y-N fault . FLR,Shrnpr-43.9km/2.8KA.
37	220KV BAGHPAT-SHAMLI	26-06-19	21:01	26-06-19	22:05	01:04	Tripped on Y-N fault . FLR,Bagpat-35.4km/3.87KA.
38	220KV SAHARNPR- SRSAWAN-II	27-06-19	17:10	27-06-19	21:25	04:15	Tripped from SRSAWAN(UP) end only and remained charged from Saharanpur end.
39	220KV BAGHPAT(PG)-BAGHPAT(UP)	30-06-19	14:00	30-06-19	16:31	02:31	Tripped on B-N fault,FLR-Bagpat-9.9KM/10.2KA.
40	220KV BAGHPAT-MURADNGR	30-06-19	14:05	30-06-19	20:22	06:17	Tripped on R-N fault,FLR-Bagpat-13.9KM/7.4KA.Further S/D taken by UPPCL to attend opened jumper at loc-167.
41	220KV BAGHPAT(PG)-BAGHPAT(UP)	30-06-19	20:32	01-07-19	00:00	03:28	Tripped on Y-N fault,FLR-Bagpat-16.6 KM / 9.47 KA.
42	220KV BAGHPAT(PG)-BAGHPAT(UP)	30-06-19	20:32	01-07-19	16:46	20:14	Tripped on Y-N fault,FLR-Bagpat-16.6 KM / 9.47 KA.
43	220KV SAHARNPR- KHARA	05-07-19	07:31	05-07-19	11:24	03:53	Tripped on B-N fault.FLR:Sahampur-5.6km/12.1kA
44	220KV MEERUT-SIMBHOLI	07-07-19	11:32	07-07-19	14:02	02:30	Tripped on R-N fault, FLR-Meeurt-46.39KM/3.93KA. Fault in UPPCL jurisdiction.
45	220KV MEERUT-NARA	10-07-19	05:10	10-07-19	05:10	00:00	Autoreclosed successfully on R-N fault. FLR, Meerut-22.48KM /6.5KA, Nara-10KM.Fault in UPPCL portion.
46	220KV SAHARANPUR-SAMLI	10-07-19	09:00	10-07-19	12:05	03:05	Tripped on Y-N fault,FLR-Saharanpur-52.02KM/2.5KA.
47	220KV SAHARANPUR-SAMLI	10-07-19	16:47	10-07-19	18:50	02:03	Tripped on B-N fault,FLR-Saharanpur-51.02KM/2.KA.
48	220KV SAHARNPR- SRSAWAN-I	10-07-19	17:29	10-07-19	17:29	00:00	Autoreclosed successfully on B-N fault,FLR-Saharanpur-11 KM/6.63KA.
49	220KV BAGHPAT-MURADNGR	10-07-19	18:59	10-07-19	21:00	02:01	Tripped on R-N fault,FLR-Bagpat-35.2 KM/ 4.87 KA.
50	220KV SAHARNPR- KHARA	11-07-19	04:47	11-07-19	06:07	01:20	Tripped on B-N fault,Saharanpur-20.23KM/5.7KA.
51	220KV SAHARNPR- KHARA	11-07-19	11:43	11-07-19	16:30	04:47	Tripped on R-Y fault,Saharanpur-42.2KM/lr-4.5KA,Iy-4.1KA.
52	220KV SAHARNPR- KHARA	13-07-19	12:16	13-07-19	12:42	00:26	Tripped on Y-N fault .Saharanpur-7.3 km/10.89 kA
53	220KV SAHARNPR- KHARA	13-07-19	20:45	14-07-19	19:23	22:38	Tripped on B-N fault .Saharanpur-13.42km/8.318kA
54	220KV BAGHPAT-SHAMLI	15-07-19	08:33	15-07-19	10:07	01:34	Tripped on R-N fault .Bagpat-38.5km,IF-4.09KA.
55	220KV SAHARNPR- SRSAWAN-I	15-07-19	09:56	15-07-19	09:56	00:00	A/R on B-N fault.Saharapur-11 km/8.10KA,Sarsawan-Y-B fault
56	220KV BAGHPAT-SHAMLI	16-07-19	02:50	16-07-19	04:42	01:52	Tripped on Y-N fault.FLR-BGPT-32.8km,IF-5.1KA.
57	220KV SAHARNPR- NANAUTA	16-07-19	05:11	16-07-19	06:26	01:15	Tripped only from Nanauta end.A/R from Saharanpur end.FLR-Shrnpr-22.23km,/6.8KA(Zone-2)
58	220KV BAGHPAT-SHAMLI	16-07-19	07:32	16-07-19	09:07	01:35	Tripped on Y-N Fault, FLR:Baghpat-22Km/6.05KA
59	220KV SAHARANPUR-SAMLI	16-07-19	09:52	16-07-19	10:36	00:44	Tripped on B-N Fault, FLR:Saharanpur-39Km/3.5KA
60	220KV BAGHPAT-MURADNGR	18-07-19	04:52	18-07-19	06:17	01:25	Tripped on B-N Fault, FLR:Baghpat-25.2KM/4.98KA
61	220KV SAHARANPUR-SAMLI	18-07-19	07:05	18-07-19	08:05	01:00	Tripped on Y-N fault,Saharanpur-48.4KM/2.739KA.

S. No.	ELEMENT NAME	OUTAGE		RESTORATION		Duration	REASON OF OUTAGE
		DATE	TIME	DATE	TIME		
62	220KV MEERUT-SIMBHOLI	18-07-19	08:03	18-07-19	10:21	02:18	Tripped only from Simbholi end on B-N fault,FLR-22.25KM/5.406KA.Line remain charged from Meerut end. Fault in UPPCL jurisdiction.
63	220KV BAGHPAT-MURADNGR	18-07-19	12:06	18-07-19	14:24	02:18	Tripped on B-N fault,Bagpat-16.5KM/6.3KA.
64	220KV MEERUT-NARA	19-07-19	13:48	19-07-19	13:48	00:00	A/R on B-N fault, FLR, Mrt-15.1km/9KA, Fault in UPPCL portion.
65	220KV BAGHPAT-MURADNGR	19-07-19	18:56	19-07-19	19:49	00:53	Tripped on Y-N fault. FLR, Baghpt-14.7km/7.41KA.
66	220KV MEERUT-NARA	20-07-19	14:53	20-07-19	14:53	00:00	Successfully Auto-reclose on B-N fault.FLR, Mrt-15.1km/8.7 KA, Fault in UPPCL portion.
67	220KV MEERUT-NARA	21-07-19	07:06	21-07-19	07:06	00:00	Auto-reclosed successfully on B-N fault.FLR, Mrt-15.18KM/8.94 KA.Fault in UPPCL portion.
68	220KV MEERUT-GAJRAULA	21-07-19	12:37	21-07-19	13:32	00:55	Tripped on R-Y-B fault.
69	220KV MEERUT-SIMBHOLI	21-07-19	17:26	21-07-19	17:26	00:00	Auto-reclosed successfully on Y-N fault.FLR, Mrt-40.3KM/4.5 KA.Fault in UPPCL portion.
70	220KV SAHARANPUR-SAMLI	21-07-19	20:48	21-07-19	22:04	01:16	Tripped on R-N fault.FLR:Sharanpur-31.93km/3.12kA
71	220KV BAGHPAT-MURADNGR	22-07-19	07:19	22-07-19	09:46	02:27	Tripped on R-N fault.FLR-BGPT-37.6km/4.62KA
72	220KV BAGHPAT(PG)-BAGHPAT(UP)	22-07-19	08:48	22-07-19	09:34	00:46	Tripped on B-N fault.FLR-BGPT-5.2km/12.7kA
73	220KV SAHARANPUR-SAMLI	22-07-19	16:27	22-07-19	17:08	00:41	Tripped on B-N fault,FLR-Saharanpur-35.6km/3.48KA.A/R from Shamli end.
74	220KV SAHARANPUR-SAMLI	25-07-19	07:07	25-07-19	07:56	00:49	Tripped on Y-N fault,FLR-Saharanpur-23.66 KM/5.35KA,Shamli-34.3KM/2.71KA.
75	220KV BAGHPAT-MURADNGR	25-07-19	12:42	25-07-19	15:13	02:31	Tripped on Y-N fault,Bagpat-14.1KM/6.93KA.
76	220KV SAHARANPUR-SAMLI	25-07-19	16:22	25-07-19	16:56	00:34	Tripped on R-N fault,FLR-Saharanpur-31.08 KM/3.73 KA,Shamli-34.3KM/2.71KA.
77	220KV BAGHPAT-SHAMLI	25-07-19	18:33	25-07-19	19:23	00:50	Tripped on R-N fault,FLR-Bagpat-9.7KM/10.2KA.
78	220KV MEERUT-SHTBDNGR	26-07-19	01:50	26-07-2019	02:56	01:06	Tripped on Y-N fault in UPPCL section from Shtbdinagar end. FLR-Meerut-25.3KM/6.4KA, Shatbdngr-17KM/8.3KA. Successfully A/R at Meerut end.
79	220KV SAHARANPUR-SAMLI	26-07-19	23:57	27-07-19	00:40	00:43	Tripped on Y-N fault,FLR-Saharanpur-13.1KM/8.09KA.
80	220KV BAGHPAT-SHAMLI	27-07-19	05:12	27-07-19	05:47	00:35	Tripped on R-N fault,FLR-Bagpat-35.5KM/4.61KA.
81	220KV SAHARANPUR-SAMLI	27-07-19	19:06	28-07-19	20:30	25:24	Tripped on B-N fault,FLR-Saharanpur-21.1KM/5.9KA.
82	220KV MEERUT-NEHTAUR	01-08-19	09:40	01-08-19	10:48	01:08	Tripped on Y-N Fault, Z1, FLR:Merrut-46.14KM/3.420KA
83	220KV BAGHPAT-SHAMLI	02-08-19	18:48	02-08-19	20:47	01:59	Tripped on R-N fault only from Bagpat end,FLR-Bagpat-39.8KM/3.97KA Zone-II ,Shamli-A/R-1.8KM.
84	220KV MEERUT-MPURAM-II	03-08-19	00:20	03-08-19	00:20	00:00	Auto reclosed successfully on R-N fault,FLR-Meerut-4.00KM/18.71KA.
85	220KV MEERUT-SHTBDNGR	03-08-19	10:07	03-08-19	11:05	00:58	A/Reclosed at Meerut but tripped from Shatabdingr end during B-N fault in UPPCL jurisdiction. FLR:Meerut-10.9km/11.4KA.
86	220KV MEERUT-SHTBDNGR	03-08-19	20:00	03-08-19	21:45	01:45	A/Reclosed at Meerut but tripped from Shatabdingr end during B-N fault in UPPCL jurisdiction. FLR:Mrt-13.38km/9.92kA.
87	220KV BAGHPAT-SHAMLI	04-08-19	01:04	04-08-19	01:34	00:30	Tripped on Y-N fault only from Bagpat end,FLR-Bagpat-14.3 KM/ 7.3 KA Zone-II.
88	220KV MEERUT-NEHTAUR	05-08-19	02:07	05-08-19	03:32	01:25	Tripped on distance protection, No Flag/facia reported
89	220KV MEERUT-SHTBDNGR	05-08-19	08:22	05-08-19	08:22	00:00	Successfully Autorecolse on B-N fault in UPPCL portion. FLR:27.26km/7.26kA.
90	220KV SAHARANPUR-SAMLI	05-08-19	20:43	05-08-19	22:08	01:25	Tripped on Y-N fault.FLR:Saharanpur-50.9km/2.51kA
91	220KV MEERUT-SIMBHOLI	06-08-19	19:14	06-08-19	19:14	00:00	Successfully Autorecolse on R-N fault. FLR:18.7 km/8.1 kA. Fault in UPPCL portion.

S. No.	ELEMENT NAME	OUTAGE		RESTORATION		Duration	REASON OF OUTAGE
		DATE	TIME	DATE	TIME		
92	220KV SAHARANPUR-SAMLI	07-08-19	07:23	07-08-19	14:57	07:34	Tripped on B-N fault.FLR-Saharnpur-65.75km,IF-2.25KA
93	220KV BAGHPAT-SHAMLI	07-08-19	08:18	07-08-19	12:35	04:17	Tripped only from BGPT end on Y-N fault.FLR:BGPT-9.7km/10.29kA
94	220KV MEERUT-NARA	08-08-19	13:46	08-08-19	15:47	02:01	Tripped on Y-N fault in UPPCL portion .FLR-Mrt-3.78km/ 15.69ka, Nara-29.13km.,
95	220KV MEERUT-MPURAM-I	08-08-19	15:56	08-08-19	16:53	00:57	Tripped on 220KV Bus-I LBB relay mal -operation of 220KV MEERUT-NEHTAUR (UPPCL) line.
96	220KV MEERUT-SIMBHOLI	08-08-19	15:56	08-08-19	16:54	00:58	Tripped on 220KV Bus-I LBB relay mal -operation of 220KV MEERUT-NEHTAUR (UPPCL) line.
97	220KV MEERUT-NEHTAUR	08-08-19	15:56	08-08-19	19:10	03:14	220KV Bus-I Meerut tripped due to LBB relay mal -operation of 220KV MEERUT-NEHTAUR (UPPCL) line..Nothing found abnormal in testing.
98	220KV SAHARANPUR-SAMLI	09-08-19	03:42	09-08-19	19:26	15:44	Tripped only from Saharanpur end on Y-N fault.FLR-Saharnpur-65.75km,IF-2.25KA.A/R from Samli end.
99	220KV BAGHPAT-MURADNGR	09-08-19	12:01	10-08-19	16:36	28:35	Tripped due to DT received at Baghpat end. Line out due to continous DT is being received at baghpat end.
100	220KV SAHARNPR- SRSAWAN-II	10-08-19	09:51	13-08-19	11:05	73:14	Tripped on Y-N fault, FLR:Saharanpur-4.3KM/16.06KA.
101	220KV SAHARANPUR-SAMLI	12-08-19	08:22	12-08-19	16:32	08:10	Tripped only from Saharanpur end on Y-N fault & A/R from Samli end.FLR-Saharnpur-52km./2.4KA.After tripping UPPCL taken S/D for replacement of Y-phase flash over insulator at T/loc no-326.
102	220KV BAGHPAT-SHAMLI	13-08-19	18:54	13-08-19	19:31	00:37	Tripped on Y-N fault.FLR:Bagpat-35km/4.08kA
103	220KV SAHARANPUR-SAMLI	14-08-19	05:22	14-08-19	19:46	14:24	Tripped only from Saharanpur end on Y-N fault & A/R from Samli end.FLR-Saharnpur-14km/8 KA.
104	220KV SAHARANPUR-SAMLI	16-08-19	08:59	16-08-19	18:40	09:41	Tripped on R-N fault.FLR: Saharanpur-9.5km/8.83 kA.
105	220KV SAHARANPUR-SAMLI	18-08-19	03:54	18-08-19	17:38	13:44	Tripped on Y-N Fault. FLR: Saharanpur-24.1Km/5.030KA. Later S/D taken at 1504 hrs by UPPCL for rectification of flash over polymer insulator at Loc. 234.
106	220KV BAGHPAT-SHAMLI	18-08-19	10:07	18-08-19	17:42	07:35	Tripped on B-N Fault. FLR: Baghpat-16.1Km/6.95KA.
107	220KV BAGHPAT-MURADNGR	18-08-19	13:38	18-08-19	19:38	06:00	Tripped on B-N Fault. FLR: Baghpat-18.2Km/6.03KA.
108	220KV SAHARANPUR-SAMLI	18-08-19	18:48	19-08-19	10:37	15:49	Tripped on Y-N Fault. FLR: Saharanpur-46.0Km/2.79KA.
109	220KV BAGHPAT-SHAMLI	18-08-19	18:49	18-08-19	22:02	03:13	Tripped on R-N Fault. FLR: Baghpat-39.5Km/3.89KA.
110	220KV BAGHPAT-MURADNGR	19-08-19	09:06	19-08-19	17:54	08:48	Tripped on Y-N Fault ,FLR: Baghpat-13Km/7.37 KA.Later S/D taken by UPPCL for rectification work in line.(N-1230)
111	220KV BAGHPAT-SHAMLI	19-08-19	12:00	19-08-19	20:16	08:16	Tripped on R-N Fault from Bagpat end only. FLR: Baghpat- 35.7 Km/3.88 KA.Later S/D taken by UPPCL for rectification work in line.(N-1234)
112	220KV SAHARANPUR-SAMLI	20-08-19	01:34	20-08-19	14:59	13:25	Tripped on B-N fault at Saharanpur end only.FLR-Saharanpur-18.1KM/6.1KA.
113	220KV MEERUT-NEHTAUR	22-08-19	20:01	22-08-19	21:16	01:15	Tripped on R-N fault .FLR:Meerut- 26.8km/6.1kA
114	220KV SAHARNPR- KHARA	24-08-19	17:57	24-08-19	19:13	01:16	Tripped only from saharanpur end on B-N fault.FLR-Sah-5.71km,IF-12.9KA.
115	220KV SAHARANPUR-SAMLI	25-08-19	14:03	25-08-19	19:57	05:54	Tripped only from Saharnpr on B-N fault. FLR, Shrnpr-47.2km /2.86KA, Shamli-8.5km/4.65KA. Further forced S/D taken by UPPCL for replacement of B phase polymer is flashed/defective at loc no 309.
116	220KV BAGHPAT-SHAMLI	25-08-19	14:28	25-08-19	16:51	02:23	Tripped only from Baghpat and A/R at Shamli on R-N fault. FLR, Baghpt-39.6km/3.85KA.
117	220KV MEERUT-SHTBDNGR	26-08-19	09:23	26-08-19	10:10	00:47	Tripped on B-N fault in UPPCL portion. FLR-Meerut-18.2KM/7.55KA. Shtbdngr-26.53KM/6.41KA.
118	220KV BAGHPAT-SHAMLI	26-08-19	16:45	26-08-19	20:21	03:36	Tripped on R-N fault. FLR, Baghpt-1.6km/1.4 KA.
119	220KV SAHARANPUR-SAMLI	28-08-19	12:35	28-08-19	19:18	06:43	Tripped on B-N fault. FLR, Shrnpr-6.6km/13.17KA, Samli-54.4km/2.4KA.
120	220KV MEERUT-SHTBDNGR	29-08-19	01:48	29-08-19	02:39	00:51	Tripped on Bus-Bar protection operated at Stbdngr(UPPCL) end due to B-ph CT of 160 MVA Trfrmr-I blast at Satabdng(UPPCL) end.
121	220KV SAHARANPUR-SAMLI	29-08-19	15:03	29-08-19	21:44	06:41	Tripped on B-N fault. FLR, Shrnpr-48.5 km/2.87 KA, Shamli-8.6 km/3.48 KA.
122	220KV BAGHPAT-SHAMLI	29-08-19	15:34	29-08-19	17:16	01:42	Tripped due to DT received at Bagpat PG end.

S. No.	ELEMENT NAME	OUTAGE		RESTORATION		Duration	REASON OF OUTAGE
		DATE	TIME	DATE	TIME		
123	220KV BAGHPAT-SHAMLI	30-08-19	02:47	30-08-19	16:26	13:39	Tripped on B-N fault.FLR:Bagpat-11.9km/8.49kA
124	220KV MEERUT-SHTBDNGR	31-08-19	04:34	31-08-19	08:09	03:35	Tripped on B-N fault in UPPCL portion. FLR-Meerut-14.89km/9.83kA. Satabdngnr-27.3km/5.96KA.
125	220KV MEERUT-NARA	01-09-19	09:55	01-09-19	10:05	00:10	Tripped on R-N fault in UPPCL portion. FLR-Meerut-23.58km/7.36KA, Nara-8.813Km.
126	220KV MEERUT-SIMBHOLI	01-09-19	16:41	01-09-19	16:41	00:00	Successfully A/R on Y-N Fault. FLR:Merrut-12.85Km/11.62Ka, Simbholi-33.25Km. Fault in UPPCL jurisdiction.
127	220KV MEERUT-GAJRAULA	01-09-19	12:20	01-09-19	12:20	00:00	Successfully A/R on Y-N Fault, FLR: Merrut-25.41Km/6.97KA.
128	220KV SAHARNPR- KHARA	02-09-19	22:47	03-09-19	07:00	08:13	Tripped on B-N Fault. FLR: Saharanpur- M1-27.9Km/4.15KA, M2-28.06Km/3.95KA.
129	220KV SAHARNPR- SAHARNPR(UP)	03-09-19	13:42	03-09-19	19:14	05:32	Tripped on R-N fault,FLR-saharanpur(PG)-09.1KM/11.180KA
130	220KV SAHARANPUR-SAMLI	03-09-19	16:53	03-09-19	23:37	06:44	Tripped on B-N fault,FLR-Saharanpur-50.8KM/2.59KA,Shamli-5.6KM/5.09KA.Further Shutdown taken by UPPCL(NRLDC-207).
131	220KV MEERUT-NARA	04-09-19	09:13	04-09-19	09:48	00:35	Tripped on R-N fault due to Earth wire snapped at loc-23 in UPPCL portion. FLR, Meerut-26.3KM/6.75KA, Nara-7.03KM.
132	220KV SAHARANPUR-SAMLI	05-09-19	20:18	06-09-19	12:08	15:50	A/R from Shamli & trpd from Saharanpr on Y-N fault. FLR, 38.6km/3.2KA, Shamli-17km/4.06KA.
133	220KV BAGHPAT-SHAMLI	06-09-19	12:37	06-09-19	21:21	08:44	Tripped on Y-N fault,FLR-Bagpat-17.3KM/6.45KA.
134	220KV MEERUT-NEHTAUR	06-09-19	20:48	06-09-19	21:56	01:08	Tripped on R-N fault,FLR-Meerut-11.77KM/11.57KA.
135	220KV BAGHPAT(PG)-BAGHPAT(UP)	08-09-19	12:55	08-09-19	18:07	05:12	Tripped on B-N fault.FLR-BGPT-10km/9.93KA and s/d by UPPCL to attend jumper broken at T/Loc.no-12.
136	220KV SAHARANPUR-SAMLI	10-09-19	12:03	10-09-19	12:59	00:56	Tripped on R-N Fault. Saharanpur-63.02Km/1.73Ka, Zone-2 fault.
137	220KV MEERUT-NARA	10-09-19	22:01	10-09-19	22:01	00:00	Successfully A/R on R-N Fault. FLR: Meerut-22.8km/4.17kA,NARA-31Km.
138	220KV MEERUT-NARA	13-09-19	01:12	13-09-19	01:12	00:00	Successfully A/R on Y-N Fault.FLR-Meerut-22.35KM/7.03KA,Nara-10.13KA,Fault is in UPPCL portion.