

ICTE TLR 5 Investigation Report
Flowgate 1966
(Sheridan - Mabelvale 500 kV for the loss of White Bluff - Keo 500 kV)
TLR Level 5: July 29, 2010
Report Issued:

1. Description of purpose/cause of hold/curtailment.

This report is submitted in accordance with the NERC Transmission Loading Relief Investigation Procedure for the TLR 5 event that occurred on Flowgate 1966 on July 29, 2010. Flowgate 1966 is an Entergy flowgate. The TLR 5 was in effect from 11:34 AM until 8:31 PM on July 29, 2010. Projected post-contingent flows on the Sheridan - Mabelvale 500 kV line for the loss of the White Bluff - Keo 500 kV line exceeded the SOL.

2. Facility/flowgate limitations and flows at the time the TLR was initiated.

At the time the TLR 5a was issued, the Limiting Element was rated at 1732 MVA. Flow on the Limiting Element was 770 MVA. Flow on the Contingent Element was 1432 MVA. The LODF was approximately 76%. Post-contingent flow on the Limiting Element was approximately 1858 MVA.

3. TLR levels, timing, and relief requested amounts.

TLRs levels, timing and relief requested amounts are shown on pages 2 and 3.

4. Transmission and generation outages or changes from prediction that may have contributed.

There were no unplanned outages.

5. Procedures implemented prior to hold/curtailment.

Curtailed non-firm transactions, not enough non-firm to alleviate the flowgate.

6. The initial investigation shall compare all transaction curtailment lists as generated by the IDC with the list of transactions flowing as determined by the IDC (Whole Transaction Lists) both before and after curtailment. The reasons for any transactions that were excluded from curtailment shall be provided. For those transactions not curtailed, the Reliability Authority will identify those entities and any affiliation with said entities.

There were no known transactions excluded from curtailment for this TLR.

7. List of known transactions not in the IDC with Transaction Contribution Factors greater than the curtailment threshold and actions taken to curtail such transactions.

There were no known transactions not in the IDC.

8. Excerpts from the RA Operations Log containing information relevant to the TLR event.

Information was provided to Reliability Coordinators through the IDC and the RCIS. Also the ICTE Reliability Coordinators logged information describing the actions taken at each issuance of the TLR, included in this document.

9. Flowgate limitations as identified by security analysis processes conducted by the Reliability Authority for the day prior to the TLR event.

In the next day process, we did see an issue with this flowgate based off of the peak study. Mitigation plan was to use the congestion management process.

10. State Estimator snapshots and security analysis, including any contingency analysis or stability analysis, along with any other recorded data indicating need for TLR.

The ICTE Reliability Coordinator was monitoring their state estimator for potential issues during this time. Screen shots were taken during each issuance of the TLR level 5.

11. ATC limitations before, during, and after the TLR event.

ICT Tariff Administration grants transmission service using an AFC process. This process evaluates each transmission request on a case by case basis. There are no ATC values for individual corridors to or from the Entergy system. ICT Tariff Administration was not granting any transmission requests that impacted the congested flowgate by 3 % or greater at the time of the TLR 5.

12. Description of actions taken to avoid future hold/curtailments.

This TLR was caused by a combination of generation patterns, load, and system flows. Due to this situation, no actions were taken to avoid future hold/curtailments.

13. Provide IDC generated Congestion Management Reports showing transaction curtailment list and Control Area NNL (network and native load) curtailment responsibility.

Congestion Management Reports for each issuance of the TLR have been reviewed and kept on file. These screen shots are not being provided to reduce the size of this report.

14. Re-dispatch actions taken.

Entergy achieved their NNL obligation by moving generation on White Bluff, Lynch 3, and Mablevale.

Event History								
Issuing RC:		ICTE						
Flowgate:		1966 - Sheridan - Mabelvale 500kv ftlo White Bluff - Keo 500kv						
Event Begin:		2010-07-29 09:45						
Event End:		2010-07-29 22:30						
Event Duration:		13 Hours						
TLR Level	TLR Date	TLR Confirm Time	Run Time	Requested Relief	Remaining Relief	Relief Provided	Total Cuts	
							Tags	MW
TLR Level 1	07/29/2010 09:45	07/29/2010 09:32	07/29/2010 09:31:50	0.0	0.0	0.0	0	0
TLR Level 3A	07/29/2010 11:00	07/29/2010 10:29	07/29/2010 10:27:08	172.0	51.3	120.7	4	333
TLR Level 5A	07/29/2010 12:00	07/29/2010 11:34	07/29/2010 11:32:22	235.0	0.0	240.6	55	451
TLR Level 5A	07/29/2010 13:00	07/29/2010 12:31	07/29/2010 12:28:10	206.0	0.0	274.2	58	392
TLR Level 5A	07/29/2010 14:00	07/29/2010 13:29	07/29/2010 13:27:01	186.0	0.0	272.6	51	375
TLR Level 5A	07/29/2010 15:00	07/29/2010 14:32	07/29/2010 14:29:57	183.0	0.0	269.9	53	375
TLR Level 5A	07/29/2010 16:00	07/29/2010 15:34	07/29/2010 15:29:54	214.0	0.0	301.0	53	411
TLR Level 5A	07/29/2010 17:00	07/29/2010 16:31	07/29/2010 16:28:15	200.0	0.0	303.2	53	410
TLR Level 5A	07/29/2010 18:00	07/29/2010 17:30	07/29/2010 17:26:37	197.0	0.0	300.9	52	411
TLR Level 5A	07/29/2010 19:00	07/29/2010 18:33	07/29/2010 18:28:12	215.0	0.0	318.0	48	460
TLR Level 5A	07/29/2010 20:00	07/29/2010 19:31	07/29/2010 19:29:17	252.0	0.0	356.0	50	515
TLR Level 5A	07/29/2010 21:00	07/29/2010 20:31	07/29/2010 20:29:10	153.0	0.0	273.0	55	429
TLR Level 3A	07/29/2010 22:00	07/29/2010 21:30	07/29/2010 21:28:16	0.0	0.0	0.0	0	0
TLR Level 0	07/29/2010 22:30	07/29/2010 22:13	07/29/2010 22:12:21	0.0	0.0	0.0	0	0

Event Summary

FILE SAVED AS: ICTE_1966_20100729_0845.htm

Incident: ICTE_1966_20100729_0845 Date: 07/29/2010 Reliability Coordinator: ICTE
 Initial Conditions: N/A
 Flowgate: 1966 - Sheridan - Mabevale 500kv ftl... Rating: 1732 LODF: 76.37%
 TLR Direction: Normal
 Effective StartTime: 07/29/2010 09:45 Effective EndTime: 07/29/2010 22:30 TLR Duration: 12 Hours and 45 Minutes

TLR Actions

Confirm Time	Level	Effective Hour	Priority	Schedule								NNL Relief			Market Relief				Flow			TLR Action	Comments
				Total Tags Cut / Hold	IDC Cut		RC Cut Acknowledge		Hold		CA	IDC MW	RC Actn MW	Type	Mkt	IDC MW	RC Actn MW	Current	Post Cont.	Cont. Flow			
					MW	Relief	MW	Relief	MW	Relief											MW		
Jul 29 09:32	TLR 1	CURRENT		NONE								NONE			NONE				561	1574	1327	N/A	
Jul 29 10:29	TLR 3A	NEXT	1-NS 6-NN 7-F Total	1 / 0 3 / 1 0 / 2 4 / 3	52 281 0 333	13.9 40.8 0 57.7	52 281 0 333	13.9 40.8 0 57.7	0 5 0 70	0.0 0.3 0 11.9								695	1800	1447	N/A		
Jul 29 11:34	TLR 5A	NEXT	1-NS 6-NN 7-F Total	1 / 0 2 / 1 52 / 1 55 / 2	98 205 148 451	5.1 34.1 42.1 81.3	98 205 148 451	5.1 34.1 42.1 81.3	0 20 98 118	0.0 3.3 26.7 30.0	EES TVA Total	66.0 5.0 61.0	66.0 5.0 61.0	ED-2 ED-6 FIRM7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP	0.0 94.0 3.3 97.3	0.0 94.0 3.3 97.3	770	1863	1402	N/A		
Jul 29 12:31	TLR 5A	NEXT	6-NN 7-F Total	2 / 0 58 / 0 58 / 0	205 187 392	34.5 53.7 88.2	205 187 392	34.5 53.7 88.2	0 0 0	0.0 0.0 0.0	EES SPA TVA Total	74.0 1.0 7.0 82.0	74.0 1.0 7.0 82.0	ED-2 ED-6 FIRM7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP	0.0 94.0 10.8 104.8	0.0 94.0 10.8 104.8	730	1757	1346	N/A		
Jul 29 13:29	TLR 5A	NEXT	6-NN 7-F Total	2 / 0 48 / 1 51 / 1	205 170 375	34.3 50.6 85.0	205 170 375	34.3 50.6 85.0	0 62 92	0.0 14.5 14.5	EES SPA TVA Total	74.0 1.0 7.0 82.0	74.0 1.0 7.0 82.0	ED-2 ED-6 FIRM7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP	0.0 94.0 12.3 106.3	0.0 94.0 12.3 106.3	720	1720	1310	N/A		
Jul 29 14:32	TLR 5A	NEXT	6-NN 7-F Total	2 / 0 51 / 0 53 / 0	205 170 375	34.8 50.2 85.1	205 170 375	34.8 50.2 85.1	0 0 0	0.0 0.0 0.0	EES SPA TVA Total	74.0 1.0 7.0 82.0	74.0 1.0 7.0 82.0	ED-2 ED-6 FIRM7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP	0.0 94.0 9.4 103.4	0.0 94.0 9.4 103.4	724	1716	1300	N/A		
Jul 29 15:34	TLR 5A	NEXT	6-NN 7-F Total	2 / 0 51 / 1 53 / 1	205 170 411	34.7 50.9 85.6	205 170 411	34.7 50.9 85.6	0 1 1	0.0 0.1 0.1	EES SPA TVA Total	88.0 1.0 9.0 98.0	88.0 1.0 9.0 98.0	ED-2 ED-6 FIRM7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP	0.0 94.0 13.6 107.6	0.0 94.0 13.6 107.6	782	1798	1331	N/A		
Jul 29 16:31	TLR 5A	NEXT	6-NN 7-F Total	2 / 0 51 / 1 53 / 1	205 205 410	35.4 60.2 95.6	205 205 410	35.4 60.2 95.6	0 25 25	0.0 7.6 7.6	EES SPA TVA Total	88.0 1.0 9.0 98.0	88.0 1.0 9.0 98.0	ED-2 ED-6 FIRM7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP	0.0 94.0 15.6 109.6	0.0 94.0 15.6 109.6	762	1755	1301	N/A		
Jul 29 17:30	TLR 5A	NEXT	6-NN 7-F Total	2 / 0 50 / 1 52 / 1	205 170 411	35.3 61.1 96.5	205 170 411	35.3 61.1 96.5	0 60 50	0.0 7.5 7.5	EES SPA TVA Total	88.0 1.0 9.0 98.0	88.0 1.0 9.0 98.0	ED-2 ED-6 FIRM7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP	0.0 94.0 12.9 106.9	0.0 94.0 12.9 106.9	761	1758	1306	N/A		
Jul 29 18:33	TLR 5A	NEXT	6-NN 7-F Total	2 / 0 46 / 1 48 / 1	255 205 460	44.0 62.0 106.0	255 205 460	44.0 62.0 106.0	0 41 41	0.0 10.7 10.7	EES SPA TVA Total	89.0 1.0 9.0 99.0	89.0 1.0 9.0 99.0	ED-2 ED-6 FIRM7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP	0.0 94.0 19.5 113.5	0.0 94.0 19.5 113.5	720	1686	1266	N/A		
Jul 29 19:31	TLR 5A	NEXT	6-NN 7-F Total	3 / 0 47 / 0 50 / 0	280 235 515	46.8 71.3 118.1	280 235 515	46.8 71.3 118.1	0 0 0	0.0 0.0 0.0	EES SPA TVA Total	103.0 1.0 10.0 114.0	103.0 1.0 10.0 114.0	ED-2 ED-6 FIRM7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP	0.0 94.0 29.7 123.7	0.0 94.0 29.7 123.7	708	1695	1293	N/A		
Jul 29 20:31	TLR 5A	NEXT	6-NN 7-F Total	2 / 0 53 / 0 55 / 0	254 175 429	44.4 50.5 94.9	254 175 429	44.4 50.5 94.9	0 0 0	0.0 0.0 0.0	EES SPA TVA Total	66.0 1.0 7.0 74.0	66.0 1.0 7.0 74.0	ED-2 ED-6 FIRM7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP	0.0 94.0 10.8 104.8	0.0 94.0 10.8 104.8	700	1645	1238	N/A		
Jul 29 21:30	TLR 3A	NEXT		NONE								NONE			NONE				717	1651	1224	N/A	
Jul 29 22:13	TLR 0	CURRENT		NONE								NONE			NONE				515	1409	1171	N/A	

TLR Schedule Totals

Priority	Schedule			
	Total Tags Cut / Hold	IDC Cut MW	RC Cut Acknowledge MW	Hold MW
0	0	0	0	0
1	2	150	150	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	24	2505	2505	25
7	506	1907	1907	372
Total	532	4562	4562	397

TLR NNL Totals

CA	NNL Relief	
	IDC MW	RC Actn MW
EES	800.0	800.0
SPA	9.0	9.0
TVA	79.0	79.0
Total	888.0	888.0

7/29/10	0924	Assessed FG as ICP. PC 88%. EES (John) notified.	ICP/LAP Assessment
7/29/10	0932	ICT RC issued TLR-1 on FG. PC 91%. OASIS posting # 275742 opened. EES (Rigo) notified.	TLR - 1
7/29/10	1029	ICT RC issued TLR-3A on FG. PC 103%. OASIS posting # 275742 updated. EES SS (Cox) notified.	TLR - 3a
7/29/10	1033	Contacted EES SS (Cox) to curtail internal non-firm tag # 7569.	Internal Non-Firm
7/29/10	1033	Contacted ICT TA (Parker) to zero non-firm AFCs on FG.	TA Notification
7/29/10	1134	ICT RC issued TLR-5A on FG. PC 108%. OASIS posting # 275742 updated. NNL responsibility notified: EES (Cox) NNL - 56.2, SPA (SPP RC) NNL .4 (negligible), ICT RC notified SPP north RC to hold off SPA redispatch, TVA (Belano) NNL - 5.4. SOCO is excluded on this FG.	TLR - 5a
7/29/10	1213	EES RTA (Chavez) notified ICT RC dec WB total 100MW, inc Mabelvale GT 55 MW.	NNL
7/29/10	1231	ICT RC reissued TLR-5A on FG. PC 101%. NNL responsibility notified: EES (Rigo) NNL - 73.6, SPA (SPP RC) NNL .5 (negligible), ICT RC notified SPP north RC to hold off SPA redispatch, TVA (Dan) NNL - 7.1 SOCO is excluded on this FG.	TLR - 5a
7/29/10	1242	TVA RC (Julio) notified ICT that Suez Choctaw would be reduced 18 MW (1.8 MW NNL), Gallatin CTs 5,6,7 & 8 were brought online to give 3.6 MW NNL and Allen CTs 17 & 19 were brought online to give 8.4 MW NNL for a total of 13.8 MW NNL (surplus of 6.7 MW)	NNL
7/29/10	1329	ICT RC reissued TLR-5A on FG. PC 99%. NNL responsibility notified: EES (Rigo) NNL - 73.5, SPA (SPP RC) NNL .7 (negligible), ICT RC notified SPP north RC to hold off SPA redispatch, TVA (Belano) NNL - 7.1 SOCO is excluded on this FG.	TLR - 5a
7/29/10	1419	TVA (Julio) notified that Allen CTs would increase by 68 MW and provide 5.7 MW additional NNL on FG.	NNL
7/29/10	1432	ICT RC reissued TLR-5A on FG. PC 99%. NNL responsibility notified: EES (Cox) NNL - 73.6, SPA (SPP RC) NNL .7 (negligible), ICT RC notified SPP north RC to hold off SPA redispatch, TVA (Julio) NNL - 7.1 SOCO is excluded on this FG.	TLR - 5a
7/29/10	1441	TVA (Julio) notified that no changes to dispatch would be made and that TVA has a surplus of 12.4 of NNL.	NNL
7/29/10	1534	ICT RC reissued TLR-5A on FG. PC 104%. NNL responsibility notified: EES (Rigo) NNL - 88.1, SPA (SPP RC) NNL .8 SPA redispatch is Bull Shoals inc 5 MW and dec Broken Bow by 5 MW, TVA (Julio) NNL - 8.9 (TVA informed that dispatch would remain the same - currently in surplus). SOCO is excluded on this FG.	TLR - 5a
7/29/10	1615	Contacted ICT TA (parker) to extend the zero of non-firm AFCs on FG.	TA Notification
7/29/10	1631	ICT RC reissued TLR-5A on FG. PC 101%. NNL responsibility notified: EES (Rigo) NNL - 88.4, SPA (SPP RC) NNL .8, TVA (Kevin) NNL - 8.8. SOCO is excluded on this FG.	TLR - 5a
7/29/10	1730	ICT RC reissued TLR-5A on FG. PC 101%. NNL responsibility notified: EES (Jeremy) NNL - 87.9, SPA (SPP RC) NNL .8, TVA (Kevin) NNL - 8.8. SOCO is excluded on this FG.	TLR - 5a
7/29/10	1833	ICT RC reissued TLR-5A on FG. PC 96%. NNL responsibility notified: EES (Alan) NNL - 88.6, SPA NNL .8, TVA NNL - 9. SOCO is excluded on this FG.	TLR - 5a

7/29/10	1910	TEC starting at 2000 SOC notified.	TEC
7/29/10	2031	ICT RC reissued TLR-5A on FG. PC 95%. NNL responsibility notified: EES (Alan) NNL - 66.1, SPA NNL .6, TVA NNL - 6.6. SOCO is excluded on this FG.	TLR - 5a
7/29/10	2130	Moved to TLR 3a PC 95%	TLR - 3a
7/29/10	2230	Released TLR	TLR - 0