

ICTE TLR 5 Investigation Report
Flowgate 1966
(Sheridan - Mabelvale 500 kV for the loss of White Bluff - Keo 500 kV)
TLR Level 5: August 14, 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 August 12, 2010. Flowgate 1966 is an Entergy flowgate. The TLR 5 was in effect from 2:15 PM until 8:31 PM on August 14, 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 5b was issued, the Limiting Element was rated at 1732 MVA. Flow on the Limiting Element was 902 MVA. Flow on the Contingent Element was 1304 MVA. The LODF was approximately 76%. Post-contingent flow on the Limiting Element was approximately 1893 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.

Event History									
Issuing RC:		ICTE							
Flowgate:		1966 - Sheridan - Mabelvale 500kv ftto White Bluff - Keo 500kv							
Event Begin:		2010-08-14 12:30							
Event End:		2010-08-14 22:00							
Event Duration:		10 Hours							
TLR Level	TLR Date	TLR Confirm Time	Run Time	Requested Relief	Remaining Relief	Relief Provided	Total Cuts		
							Tags	MW	
TLR Level 3B	08/14/2010 12:30	08/14/2010 12:14	08/14/2010 12:13:48	150.0	103.7	46.3	8	205	
TLR Level 3A	08/14/2010 14:00	08/14/2010 13:30	08/14/2010 13:29:28	264.0	216.9	47.1	4	35	
TLR Level 5B	08/14/2010 14:30	08/14/2010 14:15	08/14/2010 14:14:43	200.0	0.0	205.6	48	207	
TLR Level 5A	08/14/2010 16:00	08/14/2010 15:29	08/14/2010 15:26:15	161.0	0.0	279.2	54	288	
TLR Level 5A	08/14/2010 17:00	08/14/2010 16:28	08/14/2010 16:27:04	124.0	0.0	273.8	53	293	
TLR Level 5A	08/14/2010 18:00	08/14/2010 17:28	08/14/2010 17:26:46	123.0	0.0	275.6	54	300	
TLR Level 5A	08/14/2010 19:00	08/14/2010 18:37	08/14/2010 18:35:27	140.0	0.0	292.2	52	317	
TLR Level 5A	08/14/2010 20:00	08/14/2010 19:28	08/14/2010 19:26:29	113.0	0.0	288.8	51	307	
TLR Level 5A	08/14/2010 21:00	08/14/2010 20:31	08/14/2010 20:27:58	107.0	0.0	282.0	49	287	
TLR Level 0	08/14/2010 22:00	08/14/2010 21:27	08/14/2010 21:26:48	0.0	0.0	0.0	0	0	

Event Summary

FILE SAVED AS: ICTE_1966_20100814_1130.htm

Incident: ICTE_1966_20100814_1130	Date: 08/14/2010	Reliability Coordinator: ICTE
Initial Conditions: N/A		
Flowgate: 1966 - Sheridan - Mabelvale 500kvftl..	Rating: 1732	LODF: 76.42%
TLR Direction: Normal		
Effective StartTime: 08/14/2010 12:30	Effective EndTime: 08/14/2010 22:00	TLR Duration: 9 Hours and 30 Minutes

TLR Actions

Confirm Time	Level	Effective Hour	Priority	Schedule								NNL Relief			Market Relief				Flow			TLR Action Comments	
				Total Tags Cut / Hold	MW	Relief	RC Cut Acknowledge	MW	Relief	MW	Relief	CA	IDC MW	RC Ackn MW	Type	Mkt	IDC MW	RC Ackn MW	Current	Post Core	Cont. Flow		
Aug 14 12:14	TLR 3B	CURRENT	1-NS	2 / 0	62	4.6	62	4.6	0	0.0	NONE			ED-2	SWPP	0.0	0.0	768	1687	1203	N/A		
			2-NH	3 / 0	123	24.3	123	24.3	0	0.0	ED-6	SWPP	5.0	5.0									
			6-NN	3 / 0	20	3.3	20	3.3	0	0.0				FIRM7	SWPP	9.0	9.0						
			Total	8 / 0	272	32.3	295	32.3	0	0.0				Total		14.0	14.0						
		NEXT	1-NS	1 / 2	62	3.6	52	3.6	70	4.1	NONE			ED-2	SWPP	0.0	0.0	836	1809	1274	N/A		
			2-NH	2 / 0	163	9.7	163	9.7	0	0.0	ED-6	SWPP	69.0	69.0									
			6-NN	3 / 0	26	4.3	26	4.3	0	0.0				FIRM7	SWPP	0.0	0.0						
			7-F	0 / 1	0	0.0	0	0.0	11	2.9				Total		69.0	69.0						
			Total	6 / 3	272	17.5	231	17.5	81	6.9													
Aug 14 13:30	TLR 3A	NEXT	1-NS	1 / 0	9	0.9	9	0.9	0	0.0	NONE			ED-2	SWPP	0.0	0.0	902	1898	1304	N/A		
			6-NN	3 / 0	26	4.2	26	4.2	0	0.0				ED-6	SWPP	42.0	42.0						
			7-F	0 / 1	0	0.0	0	0.0	6	2.0				FIRM7	SWPP	0.0	0.0						
			Total	4 / 1	35	5.1	35	5.1	6	2.0				Total		42.0	42.0						
Aug 14 14:15	TLR 5B	CURRENT	7-F	48 / 0	207	58.5	207	58.5	0	0.0	EES	75.0	75.0	ED-2	SWPP	0.0	0.0	902	1898	1304	N/A		
			Total	48 / 0	207	58.5	207	58.5	0	0.0	SOCO	29.0	29.0	ED-6	SWPP	0.0	0.0						
			6-NN	2 / 0	15	2.8	15	2.8	0	0.0	SPA	1.0	1.0	FIRM7	SWPP	35.2	35.2						
			7-F	46 / 3	205	57.9	205	57.9	45	6.1	TVA	6.0	6.0	Total		35.2	35.2						
			Total	50 / 3	207	61.6	230	61.6	45	6.1	Total			113.0	113.0								
	TLR 5A	NEXT	1-NS	1 / 0	9	0.9	9	0.9	0	0.0	NONE			NONE				881	1814	1208	N/A		
			2-NH	1 / 0	1	0.3	1	0.3	0	0.0													
			6-NN	2 / 0	15	2.8	15	2.8	0	0.0													
			7-F	46 / 3	205	57.9	205	57.9	45	6.1													
			Total	50 / 3	207	61.6	230	61.6	45	6.1													
Aug 14 15:29	TLR 5A	NEXT	1-NS	1 / 0	9	0.9	9	0.9	0	0.0	EES	97.0	97.0	ED-2	SWPP	0.0	0.0	895	1786	1167	N/A		
			6-NN	2 / 0	15	2.8	15	2.8	0	0.0	SOCO	36.0	36.0	ED-6	SWPP	16.0	16.0						
			7-F	51 / 0	264	74.5	264	74.5	0	0.0	SPA	1.0	1.0	FIRM7	SWPP	41.6	41.6						
			Total	54 / 0	288	78.0	288	78.0	0	0.0	Total	144.0	144.0	Total		57.6	57.6						
Aug 14 16:28	TLR 5A	NEXT	1-NS	1 / 0	9	0.9	9	0.9	0	0.0	EES	99.0	99.0	ED-2	SWPP	0.0	0.0	895	1786	1167	N/A		
			6-NN	2 / 0	15	2.8	15	2.8	0	0.0	SOCO	36.0	36.0	ED-6	SWPP	6.0	6.0						
			7-F	50 / 0	269	75.9	269	75.9	0	0.0	SPA	1.0	1.0	FIRM7	SWPP	42.5	42.5						
			Total	53 / 0	293	79.4	293	79.4	0	0.0	Total	146.0	147.0	Total		48.5	48.5						
Aug 14 17:28	TLR 5A	NEXT	1-NS	1 / 0	9	0.9	9	0.9	0	0.0	EES	99.0	99.0	ED-2	SWPP	0.0	0.0	851	1681	1087	N/A		
			6-NN	2 / 0	15	2.8	15	2.8	0	0.0	SOCO	37.0	37.0	ED-6	SWPP	9.0	9.0						
			7-F	51 / 0	276	77.6	276	77.6	0	0.0	SPA	1.0	1.0	FIRM7	SWPP	39.3	39.3						
			Total	54 / 0	300	81.1	300	81.1	0	0.0	Total	146.0	146.0	Total		48.3	48.3						
Aug 14 18:37	TLR 5A	NEXT	1-NS	1 / 0	9	0.9	9	0.9	0	0.0	EES	106.0	106.0	ED-2	SWPP	0.0	0.0	911	1780	1138	N/A		
			6-NN	2 / 0	15	2.8	15	2.8	0	0.0	SOCO	39.0	39.0	ED-6	SWPP	0.0	0.0						
			7-F	49 / 1	293	82.4	293	82.4	40	6.4	SPA	1.0	1.0	FIRM7	SWPP	50.6	50.6						
			Total	52 / 1	317	85.9	317	85.9	40	6.4	Total	156.0	170.0	Total		50.6	50.6						
Aug 14 19:28	TLR 5A	NEXT	1-NS	1 / 0	9	0.9	9	0.9	0	0.0	EES	105.0	105.0	ED-2	SWPP	0.0	0.0	746	1530	1027	N/A		
			6-NN	1 / 0	4	0.6	4	0.6	0	0.0	SOCO	37.0	37.0	ED-6	SWPP	0.0	0.0						
			7-F	49 / 0	294	82.7	294	82.7	0	0.0	SPA	1.0	1.0	FIRM7	SWPP	50.6	50.6						
			Total	51 / 0	307	84.2	307	84.2	0	0.0	Total	154.0	169.0	Total		50.6	50.6						
Aug 14 20:31	TLR 5A	NEXT	1-NS	1 / 0	9	0.9	9	0.9	0	0.0	EES	103.0	103.0	ED-2	SWPP	0.0	0.0	735	1509	1013	N/A		
			6-NN	1 / 0	4	0.6	4	0.6	0	0.0	SOCO	35.0	35.0	ED-6	SWPP	0.0	0.0						
			7-F	47 / 0	274	79.0	274	79.0	0	0.0	SPA	1.0	1.0	FIRM7	SWPP	51.1	51.1						
			Total	49 / 0	287	80.5	287	80.5	0	0.0	Total	150.0	150.0	Total		51.1	51.1						
Aug 14 21:27	TLR 0	CURRENT			NONE								NONE			NONE				589	1335	977	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	11	188	186	70
2	6	277	277	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	21	155	155	0
7	391	2082	2082	102
Total	429	2700	2700	172

TLR NNL Totals

CA	NNL Relief	
	IDC MW	RC Ackn MW
EES	683.0	683.0
SOCO	248.0	277.0
SPA	7.0	7.0
TVA	71.0	72.0
Total	1009.0	1039.0

8/14/10	1206	assessed as ICP PC 95%	Flow Gate Assessment
8/14/10	1213	PC 98% Issued TLR 3B Ref 278644 No internal NF identified	TLR - 3b Initial
8/14/10	1215		TA Notification
8/14/10	1330		TLR - 3a Reissue
8/14/10	1415	Issued TLR 5B PC 110% NNL EES-74.8, SOCO-28.5, TVA-8. No Internal 6-NN schedules. AFC zeroed until HE 1800 REF 278645	TLR - 5b Initial
8/14/10	1529	Issued TLR 5a PC 110% NNL EES-96.7, SOCO-35.7, TVA-10.3. No Internal 6-NN schedules. AFC zeroed until HE 1800 REF 278645	TLR - 5a Initial
8/14/10	1628	Issued TLR 5a PC 110% NNL EES-98.8, SOCO-35.8, TVA-10.5. No Internal 6-NN schedules. AFC zeroed until HE 1800 REF 278645	TLR - 5a Reissue
8/14/10	1734	Issued TLR 5a PC 97% NNL EES-97.8, SOCO-37.1, TVA-10.2. No Internal 6-NN schedules. AFC zeroed until HE 2400 REF 278645	TLR - 5a Reissue
8/14/10	1835	Reissued TLR 5a PC 103% NNL EES-106.2, SOCO-37.5, TVA-10.9.	TLR - 5a Reissue
8/14/10	1926	Reissued TLR 5a PC 88% NNL EES-105.3, SOCO-36.9, TVA-10.7.	TLR - 5a Reissue
8/14/10	2027	Reissued TLR 5a PC 87% NNL EES-103.2, SOCO-35.4, TVA-10.7.	TLR - 5a Reissue
8/14/10	2126	Issued TLR 0 to be effective at 22:00, PC 77%	TLR - 0