

**ICTE TLR 5 Investigation Report
Flowgate 1330
(McAdams AT1 500/230 kV for the loss of McAdams - Lakeover 500 kV)
TLR Level 5: May 11, 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 1330 on May 11, 2010. Flowgate 1330 is an Entergy flowgate. The TLR 5 was in effect from 10:20 AM on May 11, 2010 until 12:25 AM on May 12, 2010. Projected post-contingent flows on the McAdams AT1 500/230 kV line for the loss of the McAdams - Lakeover 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 615 MVA. Flow on the Limiting Element was 250 MVA. Flow on the Contingent Element was 965 MVA. The LODF was approximately 41%. Post-contingent flow on the Limiting Element was approximately 646 MVA.

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

TLRs levels, timing and relief requested amounts are shown on pages 2, 3, and 4.

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

There were no unplanned outages. Grand Gulf and Nelson 6 were in planned 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.

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 not see an issue with this flowgate, based off of the peak study.

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 Andrus 1, Rex Brown 4, and Attala 1.

Event History									
Issuing RC:		ICTE							
Flowgate:		1330 - McAdams500-230 for loss of McAdams-Lakeover							
Event Begin:		2010-05-11 08:30							
Event End:		2010-05-12 00:40							
Event Duration:		16 Hours							
TLR Level	TLR Date	TLR Confirm Time	Run Time	Requested Relief	Remaining Relief	Relief Provided	Total Cuts		
							Tags	MW	
TLR Level 3B	05/11/2010 08:30	05/11/2010 08:13	05/11/2010 08:12:13	30.0	4.8	25.2	9	360	
TLR Level 5B	05/11/2010 09:45	05/11/2010 09:20	05/11/2010 09:19:38	60.0	0.0	61.0	26	333	
TLR Level 5A	05/11/2010 11:00	05/11/2010 10:28	05/11/2010 10:26:56	31.0	0.0	67.9	30	478	
TLR Level 5A	05/11/2010 12:00	05/11/2010 11:30	05/11/2010 11:26:37	82.0	0.0	115.4	33	608	
TLR Level 5A	05/11/2010 13:00	05/11/2010 12:29	05/11/2010 12:28:08	49.0	0.0	119.9	32	632	
TLR Level 5A	05/11/2010 14:00	05/11/2010 13:34	05/11/2010 13:28:23	58.0	0.0	130.2	35	689	
TLR Level 5A	05/11/2010 15:00	05/11/2010 14:32	05/11/2010 14:29:52	58.0	0.0	136.0	40	760	
TLR Level 5A	05/11/2010 16:00	05/11/2010 15:30	05/11/2010 15:29:45	61.0	0.0	137.6	39	763	
TLR Level 5A	05/11/2010 17:00	05/11/2010 16:26	05/11/2010 16:25:33	63.0	0.0	141.6	39	789	
TLR Level 5A	05/11/2010 18:00	05/11/2010 17:26	05/11/2010 17:26:10	44.0	0.0	123.7	36	669	
TLR Level 5A	05/11/2010 19:00	05/11/2010 18:33	05/11/2010 18:32:26	25.0	0.0	97.3	29	547	
TLR Level 5A	05/11/2010 20:00	05/11/2010 19:32	05/11/2010 19:31:15	24.0	0.0	79.9	29	453	
TLR Level 5A	05/11/2010 21:00	05/11/2010 20:30	05/11/2010 20:29:05	44.0	0.0	89.9	26	538	
TLR Level 5A	05/11/2010 22:00	05/11/2010 21:29	05/11/2010 21:29:21	33.0	0.0	80.8	25	533	
TLR Level 5A	05/11/2010 23:00	05/11/2010 22:27	05/11/2010 22:27:17	48.0	0.0	88.0	25	595	
TLR Level 5A	05/12/2010 00:00	05/11/2010 23:29	05/11/2010 23:25:40	0.0	0.0	24.3	3	325	
TLR Level 0	05/12/2010 00:40	05/12/2010 00:30	05/12/2010 00:29:36	0.0	0.0	0.0	0	0	

Event Summary

FILE SAVED AS: ICTE_1330_20100511_0830.htm

Incident: ICTE_1330_20100511_0830 **Date:** 05/11/2010 **Reliability Coordinator:** ICTE
Initial Conditions: N/A
Flowgate: 1330 - McAdams500-230 for loss of McA... **Rating:** 615 **LODF:** 42.22%
TLR Direction: Normal
Effective StartTime: 05/11/2010 08:30 **Effective EndTime:** 05/12/2010 00:40 **TLR Duration:** 16 Hours and 10 Minutes

TLR Actions

Confirm Time	Level	Effective Hour	Priority	Schedule								NHL Relief			Market Relief				Flow			TLR Action Comments															
				Total Tags		IDC Cut		RC Cut Acknowledge		Hold		CA	IDC MW	RC Ackn MW	Type	Mkt	IDC MW	RC Ackn MW	Current	Post Cont.	Cont. Flow																
				Cut	Hold	MW	Relief	MW	Relief	MW	Relief																										
May 11 08:13	TLR 3B	CURRENT	1-NS	2 / 0	47	2.7	47	2.7	0	0.0	NONE	NONE	NONE	NONE	NONE	NONE	247	616	875	N/A																	
			2-NH	2 / 0	53	4.1	53	4.1	0	0.0											6-NN	5 / 0	280	18.4	280	18.4	0	0.0	Total	9 / 0	406	25.2	300	25.2	0	0.0	
	NEXT		1-NS	2 / 0	64	4.1	64	4.1	0	0.0	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE																	
			7-F	0 / 1	0	0.0	0	0.0	3	0.2											Total	2 / 1	406	4.1	64	4.1	3	0.2									
May 11 09:20	TLR 5B	CURRENT	1-NS	2 / 0	21	1.2	21	1.2	0	0.0	EES	21.0	21.0	NONE	NONE	NONE	250	657	965	N/A																	
			2-NH	2 / 0	100	6.9	100	6.9	0	0.0											SMEE	3.0	3.0	6-NN	1 / 0	100	7.9	100	7.9	0	0.0	TVA	12.0	13.0	7-F	21 / 0	112
	NEXT		1-NS	3 / 0	185	13.2	185	13.2	0	0.0	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE																	
			2-NH	3 / 0	150	11.1	150	11.1	0	0.0											6-NN	1 / 0	10	0.7	10	0.7	0	0.0	7-F	17 / 3	117	9.1	117	9.1	57	2.9	Total
May 11 10:28	TLR 5A	NEXT	1-NS	2 / 0	85	5.3	85	5.3	0	0.0	EES	19.0	19.0	NONE	NONE	NONE	222	609	918	N/A																	
			2-NH	2 / 0	100	6.8	100	6.8	0	0.0											SMEE	2.0	2.0	6-NN	4 / 0	185	14.8	185	14.8	0	0.0	TVA	11.0	11.0	7-F	22 / 0	108
May 11 11:30	TLR 5A	NEXT	1-NS	2 / 0	85	5.3	85	5.3	0	0.0	EES	42.0	42.0	NONE	NONE	NONE	214	645	1023	N/A																	
			2-NH	2 / 0	100	6.8	100	6.8	0	0.0											SMEE	5.0	5.0	6-NN	4 / 0	185	14.7	185	14.7	0	0.0	TVA	23.0	23.0	7-F	25 / 0	238
May 11 12:29	TLR 5A	NEXT	1-NS	2 / 0	85	5.3	85	5.3	0	0.0	EES	43.0	43.0	NONE	NONE	NONE	190	579	923	N/A																	
			2-NH	2 / 0	100	6.8	100	6.8	0	0.0											SMEE	5.0	5.0	6-NN	4 / 0	185	14.7	185	14.7	0	0.0	TVA	24.0	24.0	7-F	24 / 0	262
May 11 13:24	TLR 5A	NEXT	1-NS	2 / 0	85	5.3	85	5.3	0	0.0	EES	46.0	46.0	NONE	NONE	NONE	193	603	972	N/A																	
			2-NH	2 / 0	100	6.8	100	6.8	0	0.0											SMEE	5.0	5.0	6-NN	4 / 0	185	14.7	185	14.7	0	0.0	TVA	25.0	25.0	7-F	27 / 2	319
May 11 14:32	TLR 5A	NEXT	1-NS	2 / 0	85	5.3	85	5.3	0	0.0	EES	46.0	46.0	NONE	NONE	NONE	221	639	992	N/A																	
			2-NH	2 / 0	100	6.8	100	6.8	0	0.0											SMEE	5.0	5.0	6-NN	4 / 0	185	14.7	185	14.7	0	0.0	TVA	25.0	25.0	7-F	32 / 0	390
May 11 15:30	TLR 5A	NEXT	1-NS	2 / 0	85	5.3	85	5.3	0	0.0	EES	46.0	46.0	NONE	NONE	NONE	208	606	944	N/A																	
			2-NH	2 / 0	100	6.8	100	6.8	0	0.0											SMEE	5.0	5.0	6-NN	4 / 0	185	14.6	185	14.6	0	0.0	TVA	26.0	26.0	7-F	31 / 0	393
May 11 16:26	TLR 5A	NEXT	1-NS	2 / 0	85	5.2	85	5.2	0	0.0	EES	46.0	46.0	NONE	NONE	NONE	209	607	944	N/A																	
			2-NH	2 / 0	100	6.7	100	6.7	0	0.0											SMEE	5.0	5.0	6-NN	4 / 0	185	14.9	185	14.9	0	0.0	TVA	27.0	27.0	7-F	31 / 0	419
May 11 17:29	TLR 5A	NEXT	1-NS	2 / 0	85	5.2	85	5.2	0	0.0	EES	42.0	42.0	NONE	NONE	NONE	214	595	904	N/A																	
			2-NH	1 / 0	50	2.8	50	2.8	0	0.0											SMEE	5.0	5.0	6-NN	4 / 0	185	14.9	185	14.9	0	0.0	TVA	25.0	25.0	7-F	29 / 0	349
May 11 18:33	TLR 5A	NEXT	1-NS	2 / 0	85	5.2	85	5.2	0	0.0	EES	33.0	33.0	NONE	NONE	NONE	204	547	814	N/A																	
			2-NH	1 / 0	50	2.8	50	2.8	0	0.0											SMEE	4.0	4.0	6-NN	4 / 0	185	14.9	185	14.9	0	0.0	TVA	19.0	19.0	7-F	22 / 0	227
May 11 19:32	TLR 5A	NEXT	1-NS	2 / 0	85	5.2	85	5.2	0	0.0	EES	26.0	26.0	NONE	NONE	NONE	221	570	828	N/A																	
			2-NH	1 / 0	50	2.8	50	2.8	0	0.0											SMEE	3.0	3.0	6-NN	3 / 0	135	10.6	135	10.6	0	0.0	TVA	16.0	16.0	7-F	23 / 0	183
May 11 20:30	TLR 5A	NEXT	1-NS	1 / 0	50	3.3	50	3.3	0	0.0	EES	27.0	27.0	NONE	NONE	NONE	227	577	830	N/A																	
			2-NH	1 / 0	10	0.6	10	0.6	0	0.0											SMEE	3.0	3.0	6-NN	2 / 0	300	23.5	300	23.5	0	0.0	TVA	17.0	17.0	7-F	22 / 0	178
May 11 21:29	TLR 5A	NEXT	6-NN	1 / 0	200	15.6	200	15.6	0	0.0	EES	25.0	25.0	NONE	NONE	NONE	262	592	783	N/A																	
			7-F	21 / 0	133	11.6	133	11.6	0	0.0											SMEE	3.0	3.0	TVA	12.0	12.0	Total	22 / 0	333	27.2	333	27.2	0	0.0			
May 11 22:27	TLR 5A	NEXT	1-NS	1 / 0	25	1.3	25	1.3	0	0.0	EES	23.0	23.0	NONE	NONE	NONE	243	558	748	N/A																	
			6-NN	3 / 0	400	30.7	400	30.7	0	0.0											SMEE	3.0	3.0	7-F	21 / 0	170	14.9	170	14.9	0	0.0	TVA	15.0	15.0	Total	25 / 0	595

May 11 22:27	TLR 5A	NEXT	1-NS 6-NN 7-F Total	1 / 0 3 / 0 21 / 0 25 / 0	25 400 170 595	1.3 30.7 14.9 46.9	25 400 170 595	1.3 30.7 14.9 46.9	0 0 0 0	0.0 0.0 0.0 0.0	EES SMEE TVA Total	23.0 3.0 15.0 41.0	23.0 3.0 15.0 41.0	NONE	243	558	748	N/A
May 11 23:29	TLR 5A	NEXT	1-NS 6-NN Total	1 / 0 2 / 0 3 / 0	25 300 325	1.3 23.0 24.3	25 300 325	1.3 23.0 24.3	0 0 0	0.0 0.0 0.0	NONE			NONE	204	486	689	N/A
May 12 00:30	TLR 0	CURRENT				NONE								NONE	198	516	754	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	32	1267	1267	0
2	25	1163	1163	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	54	3390	3390	0
7	368	3598	3598	210
Total	479	9418	9418	210

TLR>NNL Totals

CA	NNL Relief	
	IDC MW	RC Ackn MW
EES	485.0	485.0
SMEE	56.0	56.0
TVA	277.0	278.0
Total	818.0	819.0