

**ICTE TLR 5 Investigation Report  
Flowgate 1330  
(McAdams 500-230 for the loss of McAdams -Lakeover 500 kV)  
TLR Level 5: July 20, 2009  
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 July 20, 2009. Flowgate 1330 is an Entergy flowgate. The TLR 5 was in effect from 1:32 PM until 8:31 PM on July 20, 2009. Projected post-contingent flows on the McAdams 500-230 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 5a was issued, the Limiting Element was rated at 615 MVA. Flow on the Limiting Element was 418 MVA. Flow on the Contingent Element was 561 MVA. The LODF was approximately 43%. Post-contingent flow on the Limiting Element was approximately 659 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.

**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.

**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 Rex Brown 4, Michod 1, Michod 2, Attala 1, and Baxter Wilson1.

Event History									
Issuing RC:		ICTE							
Flowgate:		1330 - McAdams500-230 for loss of McAdams-Lakeover							
Event Begin:		2009-07-20 12:00							
Event End:		2009-07-20 20:45							
Event Duration:		8 Hours							
TLR Level	TLR Date (CST)	TLR Confirm Time (CST)	Run Time (CST)	Requested Relief	Remaining Relief	Relief Provided	Total Cuts		
							Tags	MW	
<a href="#">TLR Level 3A</a>	07/20/2009 12:00	07/20/2009 11:32	07/20/2009 11:31:16	62.0	55.8	6.2	4	83	
<a href="#">TLR Level 5A</a>	07/20/2009 13:00	07/20/2009 12:33	07/20/2009 12:32:12	56.0	0.0	57.0	32	217	
<a href="#">TLR Level 5A</a>	07/20/2009 14:00	07/20/2009 13:30	07/20/2009 13:29:26	32.0	0.0	71.3	30	221	
<a href="#">TLR Level 5A</a>	07/20/2009 15:00	07/20/2009 14:31	07/20/2009 14:30:53	64.0	0.0	116.6	31	355	
<a href="#">TLR Level 5A</a>	07/20/2009 16:00	07/20/2009 15:37	07/20/2009 15:31:46	30.0	0.0	115.2	27	253	
<a href="#">TLR Level 5A</a>	07/20/2009 17:00	07/20/2009 16:32	07/20/2009 16:32:05	15.0	0.0	109.2	27	206	
<a href="#">TLR Level 5A</a>	07/20/2009 18:00	07/20/2009 17:29	07/20/2009 17:29:00	10.0	0.0	101.0	26	199	
<a href="#">TLR Level 5A</a>	07/20/2009 19:00	07/20/2009 18:29	07/20/2009 18:27:49	0.0	0.0	29.2	20	63	
<a href="#">TLR Level 5A</a>	07/20/2009 20:00	07/20/2009 19:33	07/20/2009 19:31:46	0.0	0.0	1.0	2	13	
<a href="#">TLR Level 0</a>	07/20/2009 20:45	07/20/2009 20:35	07/20/2009 20:34:56	0.0	0.0	0.0	0	0	

07/27/2009 08:41:54 (CST)  
 OATI IDC Support Phone: 763-201-2010 Fax: 763-553-2813  
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### Event Summary

FILE SAVED AS: ICTE\_1330\_20090720\_1200.htm

<b>Incident:</b>	ICTE_1330_20090720_1200	<b>Date:</b> 07/20/2009	<b>Reliability Coordinator:</b> ICTE
<b>Initial Conditions:</b>	N/A		
<b>Flowgate:</b>	1330 - McAdams500-230 for loss of McA...	<b>Rating:</b> 615	<b>LODF:</b> 43.15%
<b>TLR Direction:</b>	Normal		
<b>Effective StartTime:</b>	07/20/2009 12:00	<b>Effective EndTime:</b> 07/20/2009 20:45	<b>TLR Duration:</b> 8 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 MW	Relief MW	RC Cut Acknowledge MW	Relief MW	Hold MW	Relief MW	CA	IDC MW	RC Ackn MW	Type	Mkt	IDC MW	RC Ackn MW	Current	Post Cont.		Cont. Flow
Jul 20 11:32	TLR 3A	NEIT	2-NH 6-NN <b>Total</b>	1 / 0 3 / 0 <b>4 / 0</b>	52 31 <b>83</b>	3.9 2.3 <b>6.2</b>	52 31 <b>83</b>	3.9 2.3 <b>6.2</b>	0 0 <b>0</b>	0 0 <b>0</b>	NONE			NONE				384	809	523	N/A
Jul 20 12:33	TLR 5A	NEIT	2-NH 6-NN 7-F <b>Total</b>	1 / 0 3 / 0 28 / 0 <b>32 / 0</b>	52 33 132 <b>217</b>	3.9 2.4 12.4 <b>18.8</b>	52 33 132 <b>217</b>	3.9 2.4 12.4 <b>18.8</b>	0 0 0 <b>0</b>	0 0 0 <b>0</b>	EES TVA <b>Total</b>	27.0 11.0 <b>38.0</b>	27.0 11.0 <b>38.0</b>	NONE				418	660	561	N/A
Jul 20 13:30	TLR 5A	NEIT	2-NH 6-NN 7-F <b>Total</b>	1 / 0 3 / 0 26 / 0 <b>30 / 0</b>	52 34 135 <b>221</b>	3.9 2.5 13.4 <b>19.8</b>	52 34 135 <b>221</b>	3.9 2.5 13.4 <b>19.8</b>	0 0 0 <b>0</b>	0 0 0 <b>0</b>	EES TVA <b>Total</b>	37.0 15.0 <b>52.0</b>	37.0 15.0 <b>52.0</b>	NONE				428	663	546	N/A
Jul 20 14:31	TLR 5A	NEIT	2-NH 6-NN 7-F <b>Total</b>	1 / 0 3 / 0 27 / 0 <b>31 / 0</b>	52 34 269 <b>355</b>	3.9 2.5 25.8 <b>32.2</b>	52 34 269 <b>355</b>	3.9 2.5 25.8 <b>32.2</b>	0 0 0 <b>0</b>	0 0 0 <b>0</b>	EES TVA <b>Total</b>	59.0 25.0 <b>84.0</b>	59.0 25.0 <b>84.0</b>	NONE				431	644	495	N/A
Jul 20 15:37	TLR 5A	NEIT	2-NH 6-NN 7-F <b>Total</b>	1 / 0 2 / 0 24 / 0 <b>27 / 0</b>	52 13 188 <b>253</b>	3.9 1.0 17.0 <b>22.0</b>	52 13 188 <b>253</b>	3.9 1.0 17.0 <b>22.0</b>	0 0 0 <b>0</b>	0 0 0 <b>0</b>	EES TVA <b>Total</b>	66.0 28.0 <b>94.0</b>	66.0 28.0 <b>94.0</b>	NONE				437	679	563	N/A
Jul 20 16:32	TLR 5A	NEIT	6-NN 7-F <b>Total</b>	2 / 0 25 / 0 <b>27 / 0</b>	13 193 <b>206</b>	1.0 18.2 <b>19.3</b>	13 193 <b>206</b>	1.0 18.2 <b>19.3</b>	0 0 <b>0</b>	0 0 <b>0</b>	EES TVA <b>Total</b>	63.0 27.0 <b>90.0</b>	63.0 27.0 <b>90.0</b>	NONE				415	626	489	N/A
Jul 20 17:29	TLR 5A	NEIT	6-NN 7-F <b>Total</b>	2 / 0 24 / 0 <b>26 / 0</b>	13 188 <b>199</b>	1.0 17.6 <b>18.6</b>	13 188 <b>199</b>	1.0 17.6 <b>18.6</b>	0 0 <b>0</b>	0 0 <b>0</b>	EES TVA <b>Total</b>	57.0 25.0 <b>82.0</b>	57.0 25.0 <b>82.0</b>	NONE				407	605	459	N/A
Jul 20 18:29	TLR 5A	NEIT	6-NN 7-F <b>Total</b>	2 / 0 18 / 0 <b>20 / 0</b>	13 50 <b>63</b>	1.0 4.7 <b>5.7</b>	13 50 <b>63</b>	1.0 4.7 <b>5.7</b>	0 0 <b>0</b>	0 0 <b>0</b>	EES TVA <b>Total</b>	17.0 7.0 <b>24.0</b>	17.0 7.0 <b>24.0</b>	NONE				373	508	314	N/A
Jul 20 19:33	TLR 5A	NEIT	6-NN <b>Total</b>	2 / 0 <b>2 / 0</b>	13 <b>13</b>	1.0 <b>1.0</b>	13 <b>13</b>	1.0 <b>1.0</b>	0 <b>0</b>	0 <b>0</b>	NONE			NONE				365	514	347	N/A
Jul 20 20:36	TLR 0	CURRENT					NONE				NONE			NONE				355	488	309	N/A

### TLR Schedule Totals

Priority	Schedule				
	Total Tags Cut / Hold	IDC Cut MW	RC Cut Acknowledge MW	Relief MW	Hold MW
0	0	0	0	0	0
1	0	0	0	0	0
2	5	260	260	0	0
3	0	0	0	0	0
4	0	0	0	0	0
5	0	0	0	0	0
6	22	197	197	0	0
7	172	1153	1153	0	0
<b>Total</b>	<b>199</b>	<b>1610</b>	<b>1610</b>	<b>0</b>	<b>0</b>

### TLR NNL Totals

NNL Relief		
CA	IDC MW	RC Ackn MW
EES	326.0	326.0
TVA	138.0	138.0
<b>Total</b>	<b>464.0</b>	<b>464.0</b>