

**ICTE TLR 5 Investigation Report**  
**Flowgate 16272**  
**(Nelson AT1 500/230 kV for the loss of Hartburg - Cypress 500 kV)**  
**TLR Level 5: March 23, 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 16272 on March 23, 2010. Flowgate 16272 is an Entergy flowgate. The TLR 5 was in effect from 8:00 AM until 9:38 AM on March 23, 2010. Projected post-contingent flows on the Nelson AT1 500/230 kV line for the loss of the Hartburg - Cypress 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 560 MVA. Flow on the Limiting Element was 456 MVA. Flow on the Contingent Element was 704 MVA. The LODF was approximately 27%. 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 and 3.

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

Nelson 6 was in a planned maintenance outage.

**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 Nelson 4.

Event History									
Issuing RC:		ICTE							
Flowgate:		16272 - Nelson AT1 500/230 (ftlo) Hartburg 500kv - Cypress							
Event Begin:		2010-03-23 08:00							
Event End:		2010-03-23 16:00							
Event Duration:		8 Hours							
TLR Level	TLR Date	TLR Confirm Time	Run Time	Requested Relief	Remaining Relief	Relief Provided	Total Cuts		
							Tags	MW	
<a href="#">TLR Level 5A</a>	03/23/2010 08:00	03/23/2010 07:41	03/23/2010 07:39:57	50.0	0.0	50.8	20	70	
<a href="#">TLR Level 5A</a>	03/23/2010 09:00	03/23/2010 08:34	03/23/2010 08:28:26	1.0	0.0	47.7	26	76	
<a href="#">TLR Level 5A</a>	03/23/2010 10:00	03/23/2010 09:38	03/23/2010 09:28:25	0.0	0.0	26.5	23	49	
<a href="#">TLR Level 4</a>	03/23/2010 10:55	03/23/2010 10:42	03/23/2010 10:41:35	0.0	0.0	0.0	0	0	
<a href="#">TLR Level 1</a>	03/23/2010 11:40	03/23/2010 11:29	03/23/2010 11:28:45	0.0	0.0	0.0	0	0	
<a href="#">TLR Level 0</a>	03/23/2010 16:00	03/23/2010 15:58	03/23/2010 15:58:15	0.0	0.0	0.0	0	0	

### Event Summary

FILE SAVED AS: ICTE\_16272\_20100323\_0700.htm

<b>Incident:</b> ICTE_16272_20100323_0700	<b>Date:</b> 03/23/2010	<b>Reliability Coordinator:</b> ICTE
<b>Initial Conditions:</b> N/A		
<b>Flowgate:</b> 16272 - Nelson AT1 500/230 (fHo) Hart...	<b>Rating:</b> 560	<b>LODF:</b> 26.97%
<b>TLR Direction:</b> Normal		
<b>Effective StartTime:</b> 03/23/2010 08:00	<b>Effective EndTime:</b> 03/23/2010 16:00	<b>TLR Duration:</b> 8 Hours and 0 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	RC Cut Acknowledge MW		Hold MW		CA	IDC MW	RC Ackn MW	Type	Mkt	IDC MW	RC Ackn MW	Current		Post Cont.
Mar 23 07:41	TLR 5A	NEXT	7-F	20 / 0	70	4.9	70	4.9	0	0.0	CLEC	1.0	1.0	NONE		456	646	704	N/A
			<b>Total</b>	<b>20 / 0</b>	<b>70</b>	<b>4.9</b>	<b>70</b>	<b>4.9</b>	<b>0</b>	<b>0.0</b>	EES	39.0	39.0						
											LAGN	6.0	6.0						
											<b>Total</b>	<b>46.0</b>	<b>46.0</b>						
Mar 23 08:34	TLR 5A	NEXT	7-F	26 / 0	76	5.1	76	5.1	0	0.0	CLEC	1.0	1.0	NONE		380	553	644	N/A
			<b>Total</b>	<b>26 / 0</b>	<b>76</b>	<b>5.1</b>	<b>76</b>	<b>5.1</b>	<b>0</b>	<b>0.0</b>	EES	36.0	36.0						
											LAGN	6.0	6.0						
											<b>Total</b>	<b>43.0</b>	<b>43.0</b>						
Mar 23 09:38	TLR 5A	NEXT	7-F	23 / 0	49	3.1	49	3.1	0	0.0	CLEC	1.0	1.0	NONE		318	469	561	N/A
			<b>Total</b>	<b>23 / 0</b>	<b>49</b>	<b>3.1</b>	<b>49</b>	<b>3.1</b>	<b>0</b>	<b>0.0</b>	EES	20.0	20.0						
											LAGN	3.0	3.0						
											<b>Total</b>	<b>24.0</b>	<b>24.0</b>						
Mar 23 10:42	TLR 4	CURRENT			NONE						NONE			NONE		312	447	501	N/A
		NEXT			NONE						NONE			NONE					
Mar 23 11:29	TLR 1	CURRENT			NONE						NONE			NONE		311	439	477	N/A
Mar 23 15:58	TLR 0	CURRENT			NONE						NONE			NONE		309	425	432	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	0
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	0	0	0	0
5	0	0	0	0	0
6	0	0	0	0	0
7	69	195	195	0	0
<b>Total</b>	<b>69</b>	<b>195</b>	<b>195</b>	<b>0</b>	<b>0</b>

### TLR NNL Totals

CA	NNL Relief	
	IDC MW	RC Ackn MW
CLEC	3.0	3.0
EES	95.0	95.0
LAGN	15.0	15.0
<b>Total</b>	<b>113.0</b>	<b>113.0</b>