

**ICTE TLR 5 Investigation Report
Flowgate 16272
(Nelson AT1 500/230 kV for the loss of Hartburg - Cypress 500 kV)
TLR Level 5: April 30, 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 April 30, 2010. Flowgate 16272 is an Entergy flowgate. The TLR 5 was in effect from 12:30 PM on April 30, 2010 until 12:30 AM on May 1, 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 445 MVA. Flow on the Contingent Element was 533 MVA. The LODF was approximately 28%. Post-contingent flow on the Limiting Element was approximately 594 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. Nelson 6 was offline.

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 Sabine, Lewis Creek, and Nelson 4.

Event History									
Issuing RC:		ICTE							
Flowgate:		16272 - Nelson AT1 500/230 (ftlo) Hartburg 500kv - Cypress							
Event Begin:		2010-04-30 10:30							
Event End:		2010-05-01 01:40							
Event Duration:		15 Hours							
TLR Level	TLR Date	TLR Confirm Time	Run Time	Requested Relief	Remaining Relief	Relief Provided	Total Cuts		
							Tags	MW	
TLR Level 4	04/30/2010 10:30	04/30/2010 10:20	04/30/2010 10:19:16	0.0	0.0	0.0	1	50	
TLR Level 4	04/30/2010 11:40	04/30/2010 11:29	04/30/2010 11:28:45	0.0	0.0	0.0	1	50	
TLR Level 5A	04/30/2010 13:00	04/30/2010 12:35	04/30/2010 12:33:03	56.0	0.0	56.6	21	133	
TLR Level 5A	04/30/2010 14:00	04/30/2010 13:28	04/30/2010 13:26:56	5.0	0.0	54.7	6	21	
TLR Level 5A	04/30/2010 15:00	04/30/2010 14:29	04/30/2010 14:26:36	0.0	0.0	49.8	6	53	
TLR Level 5A	04/30/2010 16:00	04/30/2010 15:29	04/30/2010 15:26:10	16.0	0.0	63.3	6	24	
TLR Level 5B	04/30/2010 16:35	04/30/2010 16:27	04/30/2010 16:26:05	190.0	0.0	190.8	26	468	
TLR Level 5A	04/30/2010 18:00	04/30/2010 17:28	04/30/2010 17:26:23	6.0	0.0	230.8	28	530	
TLR Level 5A	04/30/2010 19:00	04/30/2010 18:35	04/30/2010 18:33:56	15.0	0.0	213.1	28	495	
TLR Level 5A	04/30/2010 20:00	04/30/2010 19:29	04/30/2010 19:28:22	28.0	0.0	209.7	29	468	
TLR Level 5A	04/30/2010 21:00	04/30/2010 20:31	04/30/2010 20:26:22	23.0	0.0	202.1	30	449	
TLR Level 5A	04/30/2010 22:00	04/30/2010 21:32	04/30/2010 21:30:05	13.0	0.0	186.0	31	624	
TLR Level 5A	04/30/2010 23:00	04/30/2010 22:28	04/30/2010 22:26:38	0.0	0.0	115.0	23	416	
TLR Level 5A	05/01/2010 00:00	04/30/2010 23:33	04/30/2010 23:29:30	0.0	0.0	90.8	23	491	
TLR Level 5A	05/01/2010 01:00	05/01/2010 00:37	05/01/2010 00:35:36	0.0	0.0	54.6	19	68	
TLR Level 0	05/01/2010 01:40	05/01/2010 01:28	05/01/2010 01:27:38	0.0	0.0	0.0	0	0	

Event Summary

FILE SAVED AS: ICTE_16272_20100430_0930.htm

Incident: ICTE_16272_20100430_0930	Date: 04/30/2010	Reliability Coordinator: ICTE
Initial Conditions: N/A		
Flowgate: 16272 - Nelson AT1 500/230 (ftlo) Hart...	Rating: 560	LODF: 27.64%
TLR Direction: Normal		
Effective StartTime: 04/30/2010 10:30	Effective EndTime: 05/01/2010 01:40	TLR Duration: 15 Hours and 10 Minutes

TLR Actions

Confirm Time	Level	Effective Hour	Priority	Schedule						NINL Relief			Market Relief				Flow			TLR Action Comments	
				Total Tags Cut / Hold	IDC Cut MW	Relief MW	RC Cut Acknowledge MW	Relief MW	Hold MW	CA	IDC MW	RC Ackn MW	Type	Mkt	IDC MW	RC Ackn MW	Current	Post Cont.	Cont. Flow		
Apr 30 10:20	TLR 4	CURRENT	6-NN	1 / 0	50	2.6	50	2.6	0	0.0	NONE			NONE				431	573	517	N/A
		TOTAL	1 / 0	100	2.6	50	2.6	0	0.0	NONE			NONE								
		NEXT	6-NN	1 / 0	50	2.6	50	2.6	0	0.0	NONE			NONE							
		TOTAL	1 / 0	100	2.6	50	2.6	0	0.0	NONE			NONE								
Apr 30 11:29	TLR 4	CURRENT	6-NN	1 / 0	50	2.9	50	2.9	0	0.0	NONE			NONE				465	619	560	N/A
		TOTAL	1 / 0	50	2.9	50	2.9	0	0.0	NONE			NONE								
		NEXT	NONE						NONE			NONE									
		TOTAL	NONE						NONE			NONE									
Apr 30 12:55	TLR 5A	NEXT	7-F	21 / 0	133	7.1	133	7.1	0	0.0	CLEC	1.0	1.0	NONE		445	592	533	N/A		
			TOTAL	21 / 0	133	7.1	133	7.1	0	0.0	EES	43.0	43.0								
											LAGN	6.0	6.0								
											TOTAL	50.0	50.0								
Apr 30 13:28	TLR 5A	NEXT	7-F	6 / 0	21	1.1	21	1.1	0	0.0	CLEC	1.0	1.0	NONE		392	534	514	N/A		
			TOTAL	6 / 0	21	1.1	21	1.1	0	0.0	EES	46.0	46.0								
											LAGN	7.0	7.0								
											TOTAL	54.0	54.0								
Apr 30 14:29	TLR 5A	NEXT	7-F	6 / 0	53	2.7	53	2.7	0	0.0	CLEC	1.0	1.0	NONE		365	497	478	N/A		
			TOTAL	6 / 0	53	2.7	53	2.7	0	0.0	EES	41.0	41.0								
											LAGN	6.0	6.0								
											TOTAL	48.0	48.0								
Apr 30 15:29	TLR 5A	NEXT	7-F	6 / 0	24	1.2	24	1.2	0	0.0	CLEC	1.0	1.0	NONE		416	559	519	N/A		
			TOTAL	6 / 0	24	1.2	24	1.2	0	0.0	EES	54.0	54.0								
											LAGN	7.0	8.0								
											TOTAL	62.0	63.0								
Apr 30 16:27	TLR 5B	CURRENT	6-NN	1 / 0	50	2.6	50	2.6	0	0.0	CLEC	3.0	3.0	NONE		550	667	424	N/A		
		7-F	25 / 0	418	28.1	418	28.1	0	0.0	EES	194.0	194.0									
			TOTAL	26 / 0	468	28.7	468	28.7	0	0.0	LAGN	27.0	27.0								
											TOTAL	224.0	224.0								
		NEXT	6-NN	1 / 0	50	2.6	50	2.6	0	0.0	NONE			NONE							
		7-F	24 / 1	442	27.6	442	27.6	100	5.7												
			TOTAL	25 / 1	468	30.2	492	30.2	100	5.7											
Apr 30 17:28	TLR 5A	NEXT	7-F	28 / 0	530	33.4	530	33.4	0	0.0	EES	172.0	172.0	NONE		423	499	277	N/A		
			TOTAL	28 / 0	530	33.4	530	33.4	0	0.0	LAGN	25.0	25.0								
											TOTAL	197.0	197.0								
Apr 30 18:35	TLR 5A	NEXT	7-F	28 / 0	495	32.4	495	32.4	0	0.0	EES	157.0	157.0	NONE		413	484	258	N/A		
			TOTAL	28 / 0	495	32.4	495	32.4	0	0.0	LAGN	23.0	23.0								
											TOTAL	180.0	180.0								
Apr 30 19:29	TLR 5A	NEXT	7-F	29 / 0	468	31.4	468	31.4	0	0.0	EES	166.0	166.0	NONE		420	500	291	N/A		
			TOTAL	29 / 0	468	31.4	468	31.4	0	0.0	LAGN	23.0	23.0								
											TOTAL	179.0	179.0								
Apr 30 20:31	TLR 5A	NEXT	7-F	30 / 0	449	30.2	449	30.2	0	0.0	EES	149.0	149.0	NONE		452	539	316	N/A		
			TOTAL	30 / 0	449	30.2	449	30.2	0	0.0	LAGN	23.0	23.0								
											TOTAL	172.0	172.0								
Apr 30 21:32	TLR 5A	NEXT	6-NN	2 / 0	300	18.0	300	18.0	0	0.0	EES	126.0	126.0	NONE		432	516	304	N/A		
			7-F	29 / 0	324	21.7	324	21.7	0	0.0	LAGN	20.0	20.0								
			TOTAL	31 / 0	624	39.7	624	39.7	0	0.0	TOTAL	146.0	146.0								
Apr 30 22:35	TLR 5A	NEXT	6-NN	2 / 0	300	17.3	300	17.3	0	0.0	EES	76.0	76.0	NONE		424	506	297	N/A		
			7-F	21 / 0	116	7.4	116	7.4	0	0.0	LAGN	14.0	14.0								
			TOTAL	23 / 0	416	24.7	416	24.7	0	0.0	TOTAL	90.0	90.0								
Apr 30 23:33	TLR 5A	NEXT	6-NN	3 / 0	400	22.0	400	22.0	0	0.0	EES	53.0	53.0	NONE		418	490	261	N/A		
			7-F	20 / 0	91	5.8	91	5.8	0	0.0	LAGN	10.0	10.0								
			TOTAL	23 / 0	491	27.8	491	27.8	0	0.0	TOTAL	63.0	63.0								
May 01 00:37	TLR 5A	NEXT	7-F	19 / 0	68	4.1	68	4.1	0	0.0	EES	42.0	42.0	NONE		396	471	274	N/A		
			TOTAL	19 / 0	68	4.1	68	4.1	0	0.0	LAGN	8.0	8.0								
											TOTAL	50.0	50.0								
May 01 01:28	TLR 0	CURRENT	NONE						NONE			NONE				366	466	264	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	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	12	1260	1260	0
7	292	3632	3632	100
Total	304	4882	4882	100

TLR NNL Totals

CA	NNL Relief	
	IDC MV	RC Ackn MW
CLEC	7.0	7.0
EES	1309.0	1309.0
LAGN	199.0	200.0
Total	1515.0	1516.0