

**ICTE TLR 5 Investigation Report
Flowgate 16487
(Nelson AT1 500/230 for the loss of Hartburg - Cypress 500 kV)
TLR Level 5: September 19, 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 16487 on September 19, 2010. Flowgate 16487 is an Entergy flowgate. The TLR 5 was in effect from 10:30 AM until 9:28 PM on September 19, 2010. Projected post-contingent flows on the Nelson AT1 500/230 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 387 MVA. Flow on the Contingent Element was 531 MVA. The LODF was approximately 28%. Post-contingent flow on the Limiting Element was approximately 536 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 offline in an unplanned 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 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, Sabine 1, 2,3 and 5, and Lewis Creek.

Event History								
Issuing RC:		ICTE						
Flowgate:		16272 - Nelson AT1 500/230 (ftlo) Hartburg 500kv - Cypress						
Event Begin:		2010-09-19 09:45						
Event End:		2010-09-20 00:40						
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	09/19/2010 09:45	09/19/2010 09:25	09/19/2010 09:24:43	0.0	0.0	0.0	0	0
TLR Level 5A	09/19/2010 11:00	09/19/2010 10:30	09/19/2010 10:28:03	0.0	0.0	83.8	25	179
TLR Level 5A	09/19/2010 12:00	09/19/2010 11:35	09/19/2010 11:27:01	51.0	0.0	123.4	25	246
TLR Level 5A	09/19/2010 13:00	09/19/2010 12:28	09/19/2010 12:25:56	22.0	0.0	129.2	25	247
TLR Level 5A	09/19/2010 14:00	09/19/2010 13:30	09/19/2010 13:26:12	19.0	0.0	132.1	25	248
TLR Level 5A	09/19/2010 15:00	09/19/2010 14:29	09/19/2010 14:26:43	0.0	0.0	78.1	25	151
TLR Level 5A	09/19/2010 16:00	09/19/2010 15:30	09/19/2010 15:26:45	0.0	0.0	17.3	17	37
TLR Level 5A	09/19/2010 17:00	09/19/2010 16:31	09/19/2010 16:26:22	0.0	0.0	13.9	0	0
TLR Level 5A	09/19/2010 18:00	09/19/2010 17:27	09/19/2010 17:26:00	0.0	0.0	14.4	14	34
TLR Level 5A	09/19/2010 19:00	09/19/2010 18:31	09/19/2010 18:28:19	0.0	0.0	12.9	13	30
TLR Level 5A	09/19/2010 20:00	09/19/2010 19:28	09/19/2010 19:26:04	2.0	0.0	13.7	14	33
TLR Level 5A	09/19/2010 21:00	09/19/2010 20:30	09/19/2010 20:28:17	1.0	0.0	13.2	13	27
TLR Level 5A	09/19/2010 22:00	09/19/2010 21:28	09/19/2010 21:26:24	11.0	0.0	22.7	11	328
TLR Level 1	09/19/2010 22:30	09/19/2010 22:14	09/19/2010 22:13:45	0.0	0.0	0.0	0	0
TLR Level 0	09/20/2010 00:40	09/20/2010 00:28	09/20/2010 00:28:32	0.0	0.0	0.0	0	0

Event Summary

FILE SAVED AS: ICTE_16272_20100919_0845.htm

Incident: ICTE_16272_20100919_0845 Date: 09/19/2010 Reliability Coordinator: ICTE
 Initial Conditions: N/A
 Flowgate: 16272 - Nelson AT1 500/230 (ftlo) Hart... Rating: 560 LODF: 27.90%
 TLR Direction: Normal
 Effective StartTime: 09/19/2010 09:45 Effective EndTime: 09/20/2010 00:40 TLR Duration: 14 Hours and 55 Minutes

TLR Actions

Confirm Time	Level	Effective Hour	Priority	Schedule						NNL Relief			Market Relief			Flow			TLR Action Comments	
				Total Tags Cut / Hold	IDC Cut MV	Relief	RC Cut Acknowledge MV	Relief	Hold MV	Relief	CA	IDC MV	RC Ackn MV	Type	Mkt	IDC MV	RC Ackn MV	Current		Post Cont.
Sep 19 09:25	TLR 4	CURRENT		NONE						NONE			NONE			449	555	524	N/A	
		NEXT		NONE						NONE			NONE							
Sep 19 10:30	TLR 5A	NEXT	7-F	25 / 0	179	12.1	179	12.1	0	0.0	EES LAGN	84.0 / 9.0	84.0 / 9.0	NONE			387	535	531	N/A
		Total		25 / 0	179	12.1	179	12.1	0	0.0	Total	72.0	72.0							
Sep 19 11:35	TLR 5A	NEXT	7-F	25 / 0	246	16.9	246	16.9	0	0.0	EES LAGN	90.0 / 11.0	90.0 / 11.0	NONE			441	609	604	N/A
		Total		25 / 0	246	16.9	246	16.9	0	0.0	Total	107.0	107.0							
Sep 19 12:28	TLR 5A	NEXT	7-F	25 / 0	247	17.0	247	17.0	0	0.0	EES LAGN	101.0 / 11.0	101.0 / 11.0	NONE			415	577	583	N/A
		Total		25 / 0	247	17.0	247	17.0	0	0.0	Total	112.0	112.0							
Sep 19 13:30	TLR 5A	NEXT	7-F	25 / 0	248	17.0	248	17.0	0	0.0	EES LAGN	104.0 / 11.0	104.0 / 11.0	NONE			406	553	556	N/A
		Total		25 / 0	248	17.0	248	17.0	0	0.0	Total	115.0	115.0							
Sep 19 14:29	TLR 5A	NEXT	7-F	25 / 0	151	10.3	151	10.3	0	0.0	EES LAGN	62.0 / 8.0	62.0 / 8.0	NONE			350	492	510	N/A
		Total		25 / 0	151	10.3	151	10.3	0	0.0	Total	68.0	68.0							
Sep 19 15:30	TLR 5A	NEXT	7-F	17 / 0	37	2.5	37	2.5	0	0.0	EES LAGN	13.0 / 1.0	14.0 / 1.0	NONE			390	502	512	N/A
		Total		17 / 0	37	2.5	37	2.5	0	0.0	Total	14.0	15.0							
Sep 19 16:31	TLR 5A	NEXT		NONE						EES LAGN			NONE			384	525	508	N/A	
										13.0 / 1.0										
										Total										
										14.0										
Sep 19 17:27	TLR 5A	NEXT	7-F	14 / 0	34	1.9	34	1.9	0	0.0	EES LAGN	11.0 / 1.0	11.0 / 1.0	NONE			372	509	492	N/A
		Total		14 / 0	34	1.9	34	1.9	0	0.0	Total	12.0	12.0							
Sep 19 18:31	TLR 5A	NEXT	7-F	13 / 0	30	1.7	30	1.7	0	0.0	EES LAGN	10.0 / 1.0	10.0 / 1.0	NONE			343	456	443	N/A
		Total		13 / 0	30	1.7	30	1.7	0	0.0	Total	11.0	11.0							
Sep 19 19:23	TLR 5A	NEXT	7-F	14 / 0	33	1.8	33	1.8	0	0.0	EES LAGN	11.0 / 1.0	11.0 / 1.0	NONE			359	490	470	N/A
		Total		14 / 0	33	1.8	33	1.8	0	0.0	Total	12.0	12.0							
Sep 19 20:30	TLR 5A	NEXT	7-F	13 / 0	27	1.7	27	1.7	0	0.0	EES LAGN	10.0 / 1.0	10.0 / 1.0	NONE			381	503	512	N/A
		Total		13 / 0	27	1.7	27	1.7	0	0.0	Total	11.0	11.0							
Sep 19 21:28	TLR 5A	NEXT	6-NN 7-F	3 / 0 7 / 0	220 8	13.4 0.5	220 8	13.4 0.5	0 0	0.0 0.0	EES	3.0	3.0	NONE			322	451	455	N/A
		Total		10 / 0	228	13.9	228	13.9	0	0.0	Total	3.0	3.0							
Sep 19 22:14	TLR 1	CURRENT		NONE						NONE			NONE			236	412	454	N/A	
Sep 20 00:28	TLR 0	CURRENT		NONE						NONE			NONE			344	451	387	N/A	

TLR Schedule Totals

Priority	Schedule			
	Total Tags Cut / Hold	IDC Cut MV	RC Cut Acknowledge MV	Hold MV
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	3	220	220	0
7	203	1240	1240	0
Total	206	1460	1460	0

TLR NNL Totals

NNL Relief		
CA	IDC MV	RC Ackn MV
EES	458.0	459.0
LAGN	53.0	53.0
Total	551.0	552.0

9/19/10	0945	issued TLR 4 pc 108% ref 300119, lagn, ees notified, contacted glen ict tariff to 0 out atc's, they do not have the flowgate.	TLR - 4 Initial
9/19/10	1000	jermey (soc) asked if we would give him credit for TLR 5a that we will be heading into. He has started to redispach sabine and nelson for upcoming tlr. I said it was ok and will get credit numbers at issue time	TLR - 4 Reissue
9/19/10	1030	ended tlr 4 issued tlr 5a . Talked to jermey and got his dispatch credit of 89, placed credit into tlr 5a issue.>NNL EES=63.8, lagan=7.8. entergy moved sabine and nelson. No internal non-firm and no redispach options from ees (kelly ss). Contacted glen ICT Tariff to 0 out afc's, they do not have the flowgate. Lagn moved carol street up 27 mw gsf 29% cottonwood dec 12 mw 6.4 % dec. updated oasis ref 300119	TLR - 5a Initial
9/19/10	1135	ICT RC reissued TLR 5A PC 108%. EES>NNL 95.5, LAGN 10.9.	TLR - 5a Reissue
9/19/10	1228	ICT RC reissued TLR 5A PC 103%. EES>NNL 101.3, LAGN 10.9.	TLR - 5a Reissue
9/19/10	1330	ICT RC reissued TLR 5A PC 100%. EES>NNL 104.2 LAGN 10.9.	TLR - 5a Reissue
9/19/10	1429	ICT RC reissued TLR 5A PC 88%. EES>NNL 61.5 LAGN 6.3.	TLR - 5a Reissue
9/19/10	1530	reissue tlr 5a pc 90% nnl ees=13.5, lagn=1.4 PC 90%	TLR - 5a Reissue
9/19/10	1631	reissue tlr 5a pc 90% nnl ees=12.6, lagn=1.3 PC 90%	TLR - 5a Reissue
9/19/10	1727	reissue tlr 5a pc 90% nnl ees=11.3, lagn=1.2 PC 90%	TLR - 5a Reissue
9/19/10	1831	reissue tlr 5a nnl ees=10.1, lagn=1.3 PC 83% Keith	TLR - 5a Reissue
9/19/10	1928	reissue tlr 5a nnl ees=10.6, lagn=1.2 PC 86% Keith	TLR - 5a Reissue
9/19/10	1957	Called Corley EES SOC supervisor to request curtailment of TAG #0047497 of DowChem generation unit per internal non-firm procedure for HE 21	Internal Non-Firm
9/19/10	2014	issued TLR 1, PC 74% Keith	TLR - 1
9/19/10	2030	reissue tlr 5a nnl ees=10.2, lagn=1.2 PC 90% Keith	TLR - 5a Reissue
9/19/10	2043	Called Corley EES SOC supervisor to request curtailment of TAG #0047497 of DowChem generation unit per internal non-firm procedure for HE 22	Internal Non-Firm
9/20/10	0819	Assessed as ICP, PC 90%	Flow Gate Assessment
9/20/10	1720	Issued TLR- 1 PC 101% EES notified REF# 301412	TLR - 1
9/20/10	2103	Issued TLR 1 PC 82%,notified EES,REF #301412	TLR - 0