

**ICTE TLR 5 Investigation Report**  
**Flowgate 1966**  
**(Sheridan - Mabelvale 500 kV for the loss of White Bluff - Keo 500 kV)**  
**TLR Level 5: August 31, 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 1966 on August 31, 2010. Flowgate 1966 is an Entergy flowgate. The TLR 5 was in effect from 11:38 AM until 8:39 PM on August 31, 2010. Projected post-contingent flows on the Sheridan - Mabelvale 500 kV line for the loss of the White Bluff - Keo 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 1732 MVA. Flow on the Limiting Element was 924 MVA. Flow on the Contingent Element was 1271 MVA. The LODF was approximately 77%. Post-contingent flow on the Limiting Element was approximately 1903 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. ANO, Unit 2, was offline in a planned 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 White Bluff and Amite South.

Event History								
Issuing RC:		ICTE						
Flowgate:		1966 - Sheridan - Mabelvale 500kv ftlo White Bluff - Keo 500kv						
Event Begin:		2010-08-31 10:48						
Event End:		2010-08-31 22:25						
Event Duration:		12 Hours						
TLR Level	TLR Date	TLR Confirm Time	Run Time	Requested Relief	Remaining Relief	Relief Provided	Total Cuts	
							Tags	MW
<a href="#">TLR Level 1</a>	08/31/2010 11:00	08/31/2010 10:48	08/31/2010 10:47:45	0.0	0.0	0.0	0	0
<a href="#">TLR Level 5A</a>	08/31/2010 12:00	08/31/2010 11:38	08/31/2010 11:33:46	355.0	0.0	361.0	52	1388
<a href="#">TLR Level 5A</a>	08/31/2010 13:00	08/31/2010 12:36	08/31/2010 12:34:51	292.0	0.0	348.9	55	430
<a href="#">TLR Level 5A</a>	08/31/2010 14:00	08/31/2010 13:36	08/31/2010 13:31:50	288.0	0.0	365.1	58	420
<a href="#">TLR Level 5A</a>	08/31/2010 15:00	08/31/2010 14:31	08/31/2010 14:28:30	278.0	0.0	364.6	59	421
<a href="#">TLR Level 5A</a>	08/31/2010 16:00	08/31/2010 15:33	08/31/2010 15:29:27	277.0	0.0	363.8	59	420
<a href="#">TLR Level 5A</a>	08/31/2010 17:00	08/31/2010 16:32	08/31/2010 16:29:04	278.0	0.0	365.3	55	377
<a href="#">TLR Level 5A</a>	08/31/2010 18:00	08/31/2010 17:32	08/31/2010 17:29:41	275.0	0.0	362.6	54	374
<a href="#">TLR Level 5A</a>	08/31/2010 19:00	08/31/2010 18:35	08/31/2010 18:31:34	309.0	0.0	371.2	57	426
<a href="#">TLR Level 5A</a>	08/31/2010 20:00	08/31/2010 19:28	08/31/2010 19:25:54	292.0	0.0	353.3	59	451
<a href="#">TLR Level 5A</a>	08/31/2010 21:00	08/31/2010 20:39	08/31/2010 20:33:28	276.0	0.0	322.5	50	505
<a href="#">TLR Level 4</a>	08/31/2010 21:45	08/31/2010 21:30	08/31/2010 21:29:27	0.0	0.0	0.0	0	0
<a href="#">TLR Level 0</a>	08/31/2010 22:30	08/31/2010 22:25	08/31/2010 22:25:17	0.0	0.0	0.0	0	0

### Event Summary

FILE SAVED AS: ICTE\_1966\_20100831\_1000.htm

**Incident:** ICTE\_1966\_20100831\_1000      **Date:** 08/31/2010      **Reliability Coordinator:** ICTE  
**Initial Conditions:** N/A  
**Flowgate:** 1966 - Sheridan - Mabelvale 500kv ftd...      **Rating:** 1732      **LODF:** 76.42%  
**TLR Direction:** Normal  
**Effective StartTime:** 08/31/2010 11:00      **Effective EndTime:** 08/31/2010 22:30      **TLR Duration:** 11 Hours and 30 Minutes

### TLR Actions

Confirm Time	Level	Effective Hour	Priority	Schedule								NNL Relief			Market Relief			Flow			TLR Action Comments	
				Total Tags Cut / Hold	IDC Cut		RC Cut Acknowledge		Hold		CA	IDC MW	RC Actn MW	Type	Mkt	IDC MW	RC Actn MW	Current	Post Cont.	Cont. Flow		
Aug 31 10:48	TLR 1	CURRENT		NONE								NONE			NONE			888	1515	1085	N/A	
Aug 31 11:38	TLR 5A	NEXT	1-NS 2-NH 6-NN 7-F <b>Total</b>	1 / 0 1 / 0 13 / 0 37 / 2 <b>52 / 2</b>	100 25 1220 43 <b>1388</b>	5.7 1.8 126.7 12.0 <b>145.1</b>	100 25 1220 43 <b>1388</b>	5.7 1.8 126.7 12.0 <b>145.1</b>	0 0 0 0 <b>0</b>	0.0 0.0 0.0 0.0 <b>0.0</b>	0.0 0.0 0.0 0.0 <b>0.0</b>	EES SOCC TVA <b>Total</b>	11.0 4.0 1.0 <b>16.0</b>	11.0 4.0 1.0 <b>16.0</b>	ED-2 ED-5 FIRM-7 FIRM-CREDIT <b>Total</b>	SWPP SWPP SWPP SWPP <b>199.7</b>	0.0 194.0 5.7 0.0 <b>199.7</b>	0.0 194.0 5.7 0.0 <b>199.7</b>	924	1895	1271	N/A
Aug 31 12:38	TLR 5A	NEXT	6-NN 7-F <b>Total</b>	7 / 0 48 / 0 <b>55 / 0</b>	348 34 <b>430</b>	50.8 22.2 <b>73.0</b>	348 34 <b>430</b>	50.8 22.2 <b>73.0</b>	0 0 <b>0</b>	0.0 0.0 <b>0.0</b>	0.0 0.0 <b>0.0</b>	EES SOCC TVA <b>Total</b>	31.0 12.0 2.0 <b>45.0</b>	31.0 19.0 3.0 <b>53.0</b>	ED-2 ED-5 FIRM-7 FIRM-CREDIT <b>Total</b>	SWPP SWPP SWPP SWPP <b>231.2</b>	0.0 231.2 0.0 0.0 <b>231.2</b>	0.0 231.2 0.0 0.0 <b>231.2</b>	869	1756	1161	N/A
Aug 31 13:38	TLR 5A	NEXT	6-NN 7-F <b>Total</b>	8 / 0 52 / 1 <b>58 / 1</b>	311 109 <b>420</b>	46.5 28.6 <b>75.0</b>	311 109 <b>420</b>	46.5 28.6 <b>75.0</b>	0 5 <b>5</b>	0.0 0.4 <b>0.4</b>	0.0 0.0 <b>0.0</b>	EES SOCC TVA <b>Total</b>	40.0 13.0 3.0 <b>56.0</b>	40.0 19.0 3.0 <b>62.0</b>	ED-2 ED-5 FIRM-7 FIRM-CREDIT <b>Total</b>	SWPP SWPP SWPP SWPP <b>234.0</b>	0.0 225.0 9.0 0.0 <b>234.0</b>	0.0 225.0 9.0 0.0 <b>234.0</b>	866	1734	1138	N/A
Aug 31 14:31	TLR 5A	NEXT	6-NN 7-F <b>Total</b>	8 / 0 53 / 1 <b>59 / 1</b>	311 110 <b>421</b>	46.5 28.9 <b>75.4</b>	311 110 <b>421</b>	46.5 28.9 <b>75.4</b>	0 20 <b>20</b>	0.0 8.4 <b>8.4</b>	0.0 0.0 <b>0.0</b>	EES SOCC TVA <b>Total</b>	40.0 13.0 3.0 <b>56.0</b>	40.0 19.0 3.0 <b>62.0</b>	ED-2 ED-5 FIRM-7 FIRM-CREDIT <b>Total</b>	SWPP SWPP SWPP SWPP <b>233.3</b>	0.0 225.0 8.3 0.0 <b>233.3</b>	0.0 225.0 8.3 0.0 <b>233.3</b>	846	1705	1125	N/A
Aug 31 15:33	TLR 5A	NEXT	6-NN 7-F <b>Total</b>	8 / 0 53 / 1 <b>59 / 1</b>	310 110 <b>420</b>	46.4 28.1 <b>75.4</b>	310 110 <b>420</b>	46.4 28.1 <b>75.4</b>	0 20 <b>20</b>	0.0 8.4 <b>8.4</b>	0.0 0.0 <b>0.0</b>	EES SOCC TVA <b>Total</b>	40.0 13.0 3.0 <b>56.0</b>	40.0 19.0 3.0 <b>62.0</b>	ED-2 ED-5 FIRM-7 FIRM-CREDIT <b>Total</b>	SWPP SWPP SWPP SWPP <b>232.8</b>	0.0 225.0 7.8 0.0 <b>232.8</b>	0.0 225.0 7.8 0.0 <b>232.8</b>	894	1765	1140	N/A
Aug 31 16:32	TLR 5A	NEXT	6-NN 7-F <b>Total</b>	8 / 0 50 / 1 <b>55 / 1</b>	280 117 <b>377</b>	44.2 31.5 <b>75.9</b>	280 117 <b>377</b>	44.2 31.5 <b>75.9</b>	0 20 <b>20</b>	0.0 6.4 <b>6.4</b>	0.0 0.0 <b>0.0</b>	EES SOCC TVA <b>Total</b>	40.0 14.0 3.0 <b>57.0</b>	40.0 19.0 3.0 <b>62.0</b>	ED-2 ED-5 FIRM-7 FIRM-CREDIT <b>Total</b>	SWPP SWPP SWPP SWPP <b>232.6</b>	0.0 225.0 7.6 0.0 <b>232.6</b>	0.0 225.0 7.6 0.0 <b>232.6</b>	908	1749	1101	N/A
Aug 31 17:32	TLR 5A	NEXT	6-NN 7-F <b>Total</b>	8 / 0 49 / 0 <b>54 / 0</b>	281 113 <b>374</b>	43.4 30.9 <b>74.3</b>	281 113 <b>374</b>	43.4 30.9 <b>74.3</b>	0 0 <b>0</b>	0.0 0.0 <b>0.0</b>	0.0 0.0 <b>0.0</b>	EES SOCC TVA <b>Total</b>	40.0 12.0 3.0 <b>55.0</b>	40.0 12.0 3.0 <b>55.0</b>	ED-2 ED-5 FIRM-7 FIRM-CREDIT <b>Total</b>	SWPP SWPP SWPP SWPP <b>232.9</b>	0.0 225.0 7.9 0.0 <b>232.9</b>	0.0 225.0 7.9 0.0 <b>232.9</b>	878	1707	1088	N/A
Aug 31 18:35	TLR 5A	NEXT	6-NN 7-F <b>Total</b>	7 / 0 50 / 0 <b>57 / 0</b>	309 117 <b>426</b>	50.8 31.4 <b>82.3</b>	309 117 <b>426</b>	50.8 31.4 <b>82.3</b>	0 0 <b>0</b>	0.0 0.0 <b>0.0</b>	0.0 0.0 <b>0.0</b>	EES SOCC TVA <b>Total</b>	40.0 13.0 3.0 <b>56.0</b>	40.0 13.0 3.0 <b>56.0</b>	ED-2 ED-5 FIRM-7 FIRM-CREDIT <b>Total</b>	SWPP SWPP SWPP SWPP <b>233.3</b>	0.0 225.0 8.3 0.0 <b>233.3</b>	0.0 225.0 8.3 0.0 <b>233.3</b>	873	1676	1052	N/A
Aug 31 19:23	TLR 5A	NEXT	6-NN 7-F <b>Total</b>	7 / 0 52 / 1 <b>59 / 1</b>	380 91 <b>451</b>	58.9 23.8 <b>82.7</b>	380 91 <b>451</b>	58.9 23.8 <b>82.7</b>	0 10 <b>10</b>	0.0 0.5 <b>0.5</b>	0.0 0.0 <b>0.0</b>	EES SOCC TVA <b>Total</b>	29.0 9.0 2.0 <b>40.0</b>	29.0 9.0 2.0 <b>40.0</b>	ED-2 ED-5 FIRM-7 FIRM-CREDIT <b>Total</b>	SWPP SWPP SWPP SWPP <b>229.7</b>	0.0 225.0 4.7 0.0 <b>229.7</b>	0.0 225.0 4.7 0.0 <b>229.7</b>	835	1635	1048	N/A
Aug 31 20:39	TLR 5A	NEXT	6-NN 7-F <b>Total</b>	7 / 0 49 / 0 <b>50 / 0</b>	459 48 <b>505</b>	71.5 10.7 <b>82.4</b>	459 48 <b>505</b>	71.5 10.7 <b>82.4</b>	0 0 <b>0</b>	0.0 0.0 <b>0.0</b>	0.0 0.0 <b>0.0</b>	EES SOCC TVA <b>Total</b>	12.0 4.0 1.0 <b>17.0</b>	12.0 4.0 1.0 <b>17.0</b>	ED-2 ED-5 FIRM-7 FIRM-CREDIT <b>Total</b>	SWPP SWPP SWPP SWPP <b>223.8</b>	0.0 223.8 0.0 0.0 <b>223.8</b>	0.0 223.8 0.0 0.0 <b>223.8</b>	887	1703	1065	N/A
Aug 31 21:30	TLR 4	CURRENT		NONE								NONE			NONE			855	1343	901	N/A	
		NEXT	2-NH 6-NN <b>Total</b>	1 / 0 4 / 0 <b>5 / 0</b>	1 202 <b>203</b>	0.2 43.9 <b>44.0</b>	1 202 <b>203</b>	0.2 43.9 <b>44.0</b>	0 0 <b>0</b>	0.0 0.0 <b>0.0</b>	0.0 0.0 <b>0.0</b>	NONE			NONE							
Aug 31 22:25	TLR 0	CURRENT		NONE								NONE			NONE			377	927	720	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	1	100	100	0
2	2	26	26	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	73	4349	4349	0
7	487	840	840	172
<b>Total</b>	<b>563</b>	<b>5415</b>	<b>5415</b>	<b>172</b>

**TLR NNL Totals**

CA	NNL Relief	
	IDC MW	RC Askn MVV
EES	323.0	323.0
SOCO	107.0	137.0
TVA	24.0	25.0
<b>Total</b>	<b>454.0</b>	<b>485.0</b>

**TLR Market Flow Totals**

Market	Type	Market Relief	
		IDC MW	RC Askn MVV
SWPP	ED-2	0.0	0.0
	ED-6	2444.1	2444.0
	FIRM-7	59.2	59.3
<b>Total for SWPP</b>		<b>2503.3</b>	<b>2503.3</b>
<b>Total</b>		<b>2503.3</b>	<b>2503.3</b>

Date	Time	Description	Category
8/31/10	1043	Assessed FG as ICP. PC 85%. EES (Jeremy) notified.	ICP/LAP Assessment
8/31/10	1048	ICT issued TLR-1. PC 87%. OASIS posting # 286817 opened. EES (Jeremy) notified.	TLR - 1
8/31/10	1123	ICT RC contacted EES SS (Fairchild) to question if there are any redispatch options available to the transmission customer to mitigate the loading on the constrained facilities.	TLR - Redispatch Question
8/31/10	1138	ICT RC issued TLR-5A. PC 110%. NNL responsibility notified: EES (Fairchild) NNL - 10.9, SOCO (Jim) NNL - 4.3, TVA (Dan) NNL - .9. LAGN NNL - 0.0 and SPA NNL - 0.0 (no redispatch). OASIS posting # 286817 updated.	TLR - 5a Initial
8/31/10	1141	Contacted ICT TA (Parker) to zero AFCs on FG.	TA Notification
8/31/10	1157	EES (Jeremy) notified that WhiteBluff will drop and Amite South will inc. SOCO (Jim) notified that Carter will increase by 140 MW and Daniel 3 will decrease by 140 MW to give 19.3 NNL (15 MW surplus). TVA (Julio) notified that Southaven will increase and provide 21.8 MW NNL (20.9 surplus).	NNL

8/31/10	1236	ICT RC reissued TLR-5A. PC 102%. NNL responsibility notified. EES (Jeremy) NNL - 30.5, SOCO (Jim) NNL - 11.7 (currently providing 19.3 and holding), TVA (Belano) NNL - 2.5 (currently providing 21.8 and holding).	TLR - 5a Reissue
8/31/10	1336	ICT RC reissued TLR-5A. PC 100%. NNL responsibility notified. EES (Jeremy) NNL - 39.6, SOCO (Jim) NNL - 13.2 (currently providing 19.3 and holding), TVA (Belano) NNL - 3.3 (currently providing 21.8 and holding).	TLR - 5a Reissue
8/31/10	1431	ICT RC reissued TLR-5A. PC 98%. NNL responsibility notified. EES (Jeremy) NNL - 39.7, SOCO (Jim) NNL - 12.9 (currently providing 19.3 and holding), TVA (Belano) NNL - 3.4 (currently providing 21.8 and holding).	TLR - 5a Reissue
8/31/10	1533	ICT RC reissued TLR-5A. PC 102%. NNL responsibility notified. EES (Beckham) NNL - 39.6, SOCO (Jim) NNL - 12.7 (currently providing 19.3 and holding), TVA (Belano) NNL - 3.3 (currently providing 21.8 and holding).	TLR - 5a Reissue
8/31/10	1632	ICT RC reissued TLR-5A. PC 101%. NNL responsibility notified. EES (Jeremy) NNL - 39.7, SOCO (Jim) NNL - 13.8 (currently providing 19.3 and holding), TVA (Fuller) NNL - 3.4 (currently providing 69.9 from Southaven running at 673).	TLR - 5a Reissue
8/31/10	1723	Contacted ICT TA (Peterson) to extend zero of non-firm AFCs on FG. Extended until 00:00.	TA Notification
8/31/10	1732	ICT RC reissued TLR-5A. PC 98%. NNL responsibility notified. EES NNL = 39.7, SOCO NNL = 12.3 (currently providing 19.8 and holding), TVA NNL = 3.4 (currently providing 47.2 from Southaven running at 454).	TLR - 5a Reissue

8/31/10	1836	ICT RC reissued TLR-5A. PC 97%. NNL responsibility notified. EES NNL = 39.6, SOCO NNL = 12.8 ( holding), TVA NNL = 3.3 (currently providing 23.2 from Southaven running at 224).	TLR - 5a Reissue
8/31/10	1928	ICT RC reissued TLR-5A. PC 95%. NNL responsibility notified. EES NNL = 29.6, SOCO NNL = 9.2 ( holding), TVA NNL = 2.4 (currently providing 23.2 from Southaven running at 202).	TLR - 5a Reissue
8/31/10	2039	reissued tlr 5a pc 99% ees nnl=11.7 soco=3.6 tva=1.0	TLR - 5a Reissue
8/31/10	2145	ended TLR 5a issued tlr 4 pc 78%	TLR - 4 Initial
8/31/10	2230	ended tlr 4 issued tlr updated oasis ref 286817 pc 54%	TLR - 0