

**ICTE TLR 5 Investigation Report  
Flowgate 15451  
(ANO 500/161 Xfmr for loss of ANO-Mabelvale 500 kV)  
TLR Level 5: November 21, 2008  
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 15451 on November 21, 2008. Flowgate 15451 is an Entergy flowgate. The TLR 5 was in effect from 1:37 PM until 3:33 PM CST on November 21, 2008. Projected post-contingent flows on the ANO 500/161 Xfmr line for the loss of the ANO-Mabelvale 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 739 MVA. Flow on the Limiting Element was 340 MVA. Flow on the Contingent Element was 995 MVA. The LODF was approximately 53%. Post-contingent flow on the Limiting Element was approximately 864 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. The planned outage of ANO – Pleasant Hill 500 kV affected this flowgate.

**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 during this TLR Level 5 by moving generation on White Bluff 1 and Arkansas Nuclear 1.

Event History									
<b>Issuing RC:</b>		ICTE							
<b>Flowgate:</b>		15451 - ANO 500/161 Xfmr for loss of ANO-Mablevale 500Kv							
<b>Event Begin:</b>		2008-11-21 13:00							
<b>Event End:</b>		2008-11-21 16:45							
<b>Event Duration:</b>		3 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>	11/21/2008 13:00	11/21/2008 12:29	11/21/2008 12:27:53	205.0	127.4	77.6	11	775	
<a href="#">TLR Level 5A</a>	11/21/2008 14:00	11/21/2008 13:39	11/21/2008 13:37:14	112.0	0.0	112.0	42	814	
<a href="#">TLR Level 5A</a>	11/21/2008 15:00	11/21/2008 14:32	11/21/2008 14:32:07	75.0	0.0	120.1	39	811	
<a href="#">TLR Level 5A</a>	11/21/2008 16:00	11/21/2008 15:35	11/21/2008 15:33:07	0.0	0.0	46.1	11	725	
<a href="#">TLR Level 0</a>	11/21/2008 16:45	11/21/2008 16:36	11/21/2008 16:35:17	0.0	0.0	0.0	0	0	

12/03/2008 16:32:35 (CST)  
 OATI IDC Support Phone: 763-201-2010 Fax: 763-553-2813  
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## Event Summary

FILE SAVED AS: ICTE\_15451\_20081121\_1300.htm

Incident: ICTE_15451_20081121_1300	Date: 11/21/2008	Reliability Coordinator: ICTE
Initial Conditions: N/A		
Flowgate: 15451 - ANO 500/161 Xfmr for loss of ...	Rating: 806	LODF: 40.18%
TLR Direction: Normal		
Effective StartTime: 11/21/2008 13:00	Effective EndTime: 11/21/2008 16:45	TLR Duration: 3 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		RC Cut Acknowledge		Hold		CA	IDC MW	RC Actn MW	Type	Mkt	IDC MW	RC Actn MW	Current	Post Cont.		Cont. Flow
				MW	Relief	MW	Relief	MW	Relief	MW	Relief											
Nov 21 12:28	TLR 3A	NEXT	2-NH 3-ND 6-NN <b>Total</b>	7 / 0 1 / 0 3 / 0 <b>11 / 0</b>	637 52 82 <b>771</b>	36.0 3.4 6.8 <b>46.3</b>	637 52 82 <b>771</b>	36.0 3.4 6.8 <b>46.3</b>	0 0 0 <b>0</b>	0 0 0 <b>0</b>	NONE	ED-2 ED-6 FIRM-7 <b>Total</b>	SWPP SWPP SWPP <b>31.0</b>	0.0 10.0 21.0 <b>31.0</b>	0.0 10.0 21.0 <b>31.0</b>	331	705	931	LODF calculated to be 52.7%			
Nov 21 13:39	TLR 5A	NEXT	2-NH 3-ND 6-NN 7-F <b>Total</b>	4 / 0 1 / 0 3 / 0 34 / 0 <b>42 / 0</b>	512 53 82 167 <b>814</b>	29.8 3.5 6.9 11.8 <b>52.1</b>	512 53 82 167 <b>814</b>	29.8 3.5 6.9 11.8 <b>52.1</b>	0 0 0 0 <b>0</b>	0 1.7 0 0 <b>1.7</b>	AECI EES SPA <b>Total</b>	4.0 30.0 12.0 <b>46.0</b>	4.0 30.0 12.0 <b>46.0</b>	ED-2 ED-6 FIRM-7 FIRM-CREDIT <b>Total</b>	SWPP SWPP SWPP SWPP <b>15.3</b>	0.0 0.0 15.3 0.0 <b>15.3</b>	340	739	995	LODF calculated to be 52.7%		
Nov 21 14:52	TLR 5A	NEXT	2-NH 3-ND 6-NN 7-F <b>Total</b>	4 / 0 1 / 1 3 / 0 31 / 0 <b>39 / 1</b>	512 52 82 165 <b>811</b>	30.2 3.4 6.9 11.8 <b>52.3</b>	512 52 82 165 <b>811</b>	30.2 3.4 6.9 11.8 <b>52.3</b>	0 25 0 0 <b>25</b>	0 1.7 0 0 <b>1.7</b>	AECI EES SPA <b>Total</b>	4.0 30.0 12.0 <b>46.0</b>	4.0 30.0 12.0 <b>46.0</b>	ED-2 ED-6 FIRM-7 FIRM-CREDIT <b>Total</b>	SWPP SWPP SWPP SWPP <b>21.4</b>	0.0 0.0 21.4 0.0 <b>21.4</b>	293	652	894	LODF calculated to be 52.7%		
Nov 21 15:35	TLR 5A	NEXT	2-NH 3-ND 6-NN <b>Total</b>	4 / 1 1 / 0 5 / 0 <b>10 / 1</b>	512 53 156 <b>721</b>	29.2 3.5 13.0 <b>45.8</b>	512 53 156 <b>721</b>	29.2 3.5 13.0 <b>45.8</b>	50 0 0 <b>50</b>	2.5 0 0 <b>2.5</b>	NONE	ED-2 ED-6 FIRM-7 FIRM-CREDIT <b>Total</b>	SWPP SWPP SWPP SWPP <b>0.0</b>	0.0 0.0 0.0 0.0 <b>0.0</b>	285	653	916	LODF calculated to be 52.7%				
Nov 21 16:36	TLR 0	CURRENT	NONE								NONE			NONE			168	346	441	LODF calculated to be 52.7%		

## 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	19	2173	2173	50	
3	4	210	210	25	
4	0	0	0	0	
5	0	0	0	0	
6	14	402	402	0	
7	65	332	332	0	
<b>Total</b>	<b>102</b>	<b>3117</b>	<b>3117</b>	<b>75</b>	

## TLR NNL Totals

	NNL Relief	
	IDC MW	RC Actn MW
CA		
AECI	8.0	8.0
EES	60.0	60.0
SPA	24.0	24.0
<b>Total</b>	<b>92.0</b>	<b>92.0</b>

## TLR Market Flow Totals

Market	Type	Market Relief	
		IDC MW	RC Actn MW
SWPP	ED-2	0.0	0.0
	ED-6	10.0	10.0
	FIRM-7	57.8	57.7
<b>Total for SWPP</b>		<b>67.8</b>	<b>67.7</b>
<b>Total</b>		<b>67.8</b>	<b>67.7</b>