

ICTE TLR 5 Investigation Report
Flowgate 1324
(Whitebluff - Sheridan 500 kV for the loss of Mabelvale - Sheridan 500 kV)
TLR Level 5: May 18, 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 1324 on May 18, 2010. Flowgate 1324 is an Entergy flowgate. The TLR 5 was in effect from 12:54 AM until 6:28 AM on May 18, 2010. Projected post-contingent flows on the Whitebluff - Sheridan 500 kV line for the loss of the Mabelvale - Sheridan 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 1145 MVA. Flow on the Contingent Element was 888 MVA. The LODF was approximately 80%. Post-contingent flow on the Limiting Element was approximately 1855 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.

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 Independence.

Event History									
Issuing RC:		ICTE							
Flowgate:		1324 - WhiteBluff-Sheridan for loss of Mabelvale-Sheridan							
Event Begin:		2010-05-18 00:00							
Event End:		2010-05-18 07:40							
Event Duration:		7 Hours							
TLR Level	TLR Date	TLR Confirm Time	Run Time	Requested Relief	Remaining Relief	Relief Provided	Total Cuts		
							Tags	MW	
TLR Level 3A	05/18/2010 00:00	05/17/2010 23:39	05/17/2010 23:37:13	95.0	0.0	95.2	13	622	
TLR Level 3B	05/18/2010 00:25	05/18/2010 00:15	05/18/2010 00:14:41	150.0	4.2	145.8	4	398	
TLR Level 5A	05/18/2010 01:10	05/18/2010 00:54	05/18/2010 00:52:44	220.0	0.0	223.5	45	536	
TLR Level 5A	05/18/2010 02:00	05/18/2010 01:37	05/18/2010 01:36:42	171.0	0.0	213.5	43	429	
TLR Level 5A	05/18/2010 03:00	05/18/2010 02:27	05/18/2010 02:26:23	166.0	0.0	211.3	43	430	
TLR Level 5A	05/18/2010 04:00	05/18/2010 03:35	05/18/2010 03:32:08	153.0	0.0	198.1	42	414	
TLR Level 5A	05/18/2010 05:00	05/18/2010 04:37	05/18/2010 04:31:47	145.0	0.0	178.5	36	402	
TLR Level 5A	05/18/2010 06:00	05/18/2010 05:35	05/18/2010 05:29:46	58.0	0.0	76.1	34	141	
TLR Level 5A	05/18/2010 07:00	05/18/2010 06:28	05/18/2010 06:27:25	0.0	0.0	29.6	3	164	
TLR Level 0	05/18/2010 07:40	05/18/2010 07:27	05/18/2010 07:27:15	0.0	0.0	0.0	0	0	

Event Summary

FILE SAVED AS: ICTE_1324_20100517_2300.htm

Incident: ICTE_1324_20100517_2300	Date: 05/17/2010	Reliability Coordinator: ICTE
Initial Conditions: N/A		
Flowgate: 1324 - WhiteBluff-Sheridan for loss o...	Rating: 1732	LODF: 79.93%
TLR Direction: Normal		
Effective StartTime: 05/17/2010 23:00	Effective EndTime: 05/18/2010 06:40	TLR Duration: 7 Hours and 40 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	Relief	RC Cut Acknowledge MW	Relief	Hold MW	Relief	CA	IDC MW	RC Ackn MW	Type	Mkt	IDC MW	RC Ackn MW	Current	Post Cont.	Cont. Flow	
May 17 22:39	TLR 3A	NEXT	1-NS 2-NH 6-NN Total	4 / 0 8 / 0 4 / 0 13 / 0	93 497 32 622	23.7 83.5 8.9 94.1	93 497 32 622	23.7 83.5 8.9 94.1	0 0 0 0	0.0 0.0 0.0 0.0	NONE	ED-2 ED-5 FIRM-7 Total	SWPP SWPP SWPP 1.1 1.1 1.1 1.1	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	1117	1783	809	N/A		
May 17 23:15	TLR 3B	CURRENT	6-NN Total	4 / 0 4 / 0	398 398	83.8 83.8	398 398	83.8 83.8	0 0	0.0 0.0	NONE	ED-2 ED-5 FIRM-7 Total	SWPP SWPP SWPP 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	1173	1919	934	N/A		
		NEXT	1-NS 6-NN Total	3 / 0 3 / 0 6 / 0	67 126 398	19.1 27.1 46.2	67 126 193	19.1 27.1 46.2	0 0 0	0.0 0.0 0.0	NONE	ED-2 ED-5 FIRM-7 Total	SWPP SWPP SWPP 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0						
May 17 23:54	TLR 5A	NEXT	1-NS 6-NN 7-F Total	3 / 0 2 / 0 39 / 0 44 / 0	67 300 69 436	19.1 57.9 14.9 91.8	67 300 69 436	19.1 57.9 14.9 91.8	0 0 0 0	0.0 0.0 0.0 0.0	AECI EES SMEE TVA Total	1.0 33.0 1.0 4.0 39.0	1.0 33.0 1.0 4.0 39.0	ED-2 ED-5 FIRM-7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP 0.0 0.0 0.0 0.0 66.6 66.6	0.0 0.0 0.0 0.0 0.0 0.0	1145	1854	888	N/A	
May 18 00:37	TLR 5A	NEXT	1-NS 6-NN 7-F Total	3 / 0 2 / 0 39 / 0 43 / 0	67 300 72 429	15.7 57.9 15.4 89.0	67 300 72 429	15.7 57.9 15.4 89.0	0 0 0 0	0.0 0.0 0.0 0.0	AECI EES SMEE TVA Total	1.0 35.0 2.0 4.0 42.0	1.0 35.0 2.0 5.0 43.0	ED-2 ED-5 FIRM-7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP 0.0 0.0 0.0 0.0 82.7 82.7	0.0 0.0 0.0 0.0 0.0 0.0	1052	1784	904	N/A	
May 18 01:27	TLR 5A	NEXT	1-NS 6-NN 7-F Total	3 / 0 2 / 0 38 / 0 43 / 0	67 300 73 430	15.7 57.5 15.5 88.7	67 300 73 430	15.7 57.5 15.5 88.7	0 0 0 0	0.0 0.0 0.0 0.0	AECI EES SMEE TVA Total	1.0 35.0 2.0 4.0 42.0	1.0 35.0 2.0 5.0 43.0	ED-2 ED-5 FIRM-7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP 0.0 0.0 0.0 0.0 80.8 80.8	0.0 0.0 0.0 0.0 0.0 0.0	1018	1897	850	N/A	
May 18 02:35	TLR 5A	NEXT	1-NS 6-NN 7-F Total	3 / 0 2 / 0 37 / 0 42 / 0	66 300 78 414	15.4 57.2 11.9 84.5	66 300 78 414	15.4 57.2 11.9 84.5	0 0 0 0	0.0 0.0 0.0 0.0	AECI EES SMEE TVA Total	1.0 25.0 1.0 3.0 30.0	1.0 26.0 1.0 3.0 31.0	ED-2 ED-5 FIRM-7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP 0.0 0.0 0.0 0.0 82.9 82.9	0.0 0.0 0.0 0.0 0.0 0.0	1005	1695	864	N/A	
May 18 03:37	TLR 5A	NEXT	1-NS 6-NN 7-F Total	3 / 0 2 / 0 31 / 0 36 / 0	66 300 37 402	18.4 57.3 7.0 82.7	66 300 37 402	18.4 57.3 7.0 82.7	0 0 0 0	0.0 0.0 0.0 0.0	EES SMEE TVA Total	13.0 1.0 2.0 16.0	13.0 1.0 2.0 16.0	ED-2 ED-5 FIRM-7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP 0.0 0.0 0.0 0.0 80.4 80.4	0.0 0.0 0.0 0.0 0.0 0.0	930	1605	845	N/A	
May 18 04:35	TLR 5A	NEXT	7-F Total	33 / 0 33 / 0	37 37	6.6 6.6	37 37	6.6 6.6	0 0	0.0 0.0	EES SMEE TVA Total	13.0 1.0 2.0 16.0	13.0 1.0 2.0 16.0	ED-2 ED-5 FIRM-7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP 0.0 0.0 0.0 0.0 36.9 36.9	0.0 0.0 0.0 0.0 0.0 0.0	1005	1641	796	N/A	
May 18 05:28	TLR 5A	NEXT	2-NH 6-NN 7-F Total	1 / 0 2 / 0 0 / 1 3 / 1	104 60 0 164	16.9 4.8 0.0 21.6	104 60 0 164	16.9 4.8 0.0 21.6	0 0 0 100	0.0 0.0 0.0 11.6	NONE	ED-2 ED-5 FIRM-7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP 0.0 0.0 0.0 0.0 8.0 8.0	0.0 0.0 0.0 0.0 0.0 0.0	928	1510	729	N/A			
May 18 06:27	TLR 0	CURRENT				NONE					NONE						889	1375	596	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	22	462	462	0
2	6	601	601	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	23	2115	2115	0
7	216	348	348	100
Total	267	3525	3525	100

TLR NNL Totals

CA	NNL Relief	
	IDC MW	RC Ackn MW
AECI	4.0	4.0
EES	154.0	155.0
SMEE	8.0	8.0
TVA	19.0	21.0
Total	185.0	188.0

TLR Market Flow Totals

Market	Type	Market Relief	
		IDC MW	RC Ackn MW
SWPP	ED-2	0.0	0.0
	ED-0	490.4	490.4
	FIRM-7	5.0	5.0
Total for SWPP		501.4	501.4
Total		501.4	501.4

Date	Time	Category	Operator Name	Issue
05/17/10	2303	ICP/LAP Assessment	Monte/Scott	Assessed FG as ICP PC 105%, notified EES (Bellot)
05/17/10	2335	TLR - 3a	Monte Grist	Emailed GSF's to EES SOC supervisor (Walter) to curtail internal nonfirm schedules. Called Walter to inform: The ICT RC has issued a TLR level 3A on FG 1324 an email with the GSF's showing decrement generators with a 5% or greater shift factor have been provided to Walter (EES Supervisor). The TLR-3A curtailed non-firm up to and including priority level NN-6. Consistent with the Supplemental Curtailment Procedure, internal non-firm up to and including priority level NN-6 should be curtailed and remain curtailed until the TLR level is reduced below a TLR level 3. Please respond with any action taken identifying and/or curtailing internal non-firm schedules.
05/17/10	2339	TLR - 3a	Monte/Scott	Issued TLR 3a PC 103% EES notified REF# 258351
05/17/10	2348	TLR - 3a	Monte/Scott	Walter EES SOC supervisor called back to inform that the decrement GSF's provided per email did not produce any internal non-firm curtailments.
05/18/10	0016	TLR - 3b	Monte Grist	Issued TLR 3b PC 111% EES notified FG 1324 ran up to PC 112% due to Sabine, Nelson units, and PPG units coming down, with WOTAB generation dropping quickly with peak loads dropping. Also, PUPP units coming offline. In addition to the curtailments issued, the PLUM POINT unit was over generating by 250+ mws. It took the PIUM unit 2 hours to follow deployment schedules. After many calls to the BA, the unit still would not ramp off in a sufficient timely manner. By the top of next hour the FG was still at PC 110% , made decision to move to TLR 5a.

05/18/10	0054	TLR - 5a	Monte Grist	<p>Issued TLR 5a effective at 01:10 PC 107% EES notified EES NNL: 33.1 , SMEE NNL:1.3, AECI NNL: 0.8, TVA NNL:3.7.</p> <p>Called Walter EES SOC supervisor to ask him to identify any known redispatch options that are available to the transmission customer that will mitigate the loading on the Constrained Facilities which is FG 1324 WhiteBluff-Sheridan 500kv Mabelvale-Sheridan 500kv. Walter stated "that there are none at this time".</p>
05/18/10	0059	TLR - 5a	Monte/Scott	<p>Matthew called to inform that EES was providing their NNL by capping Whitebluff output to 1523mws total, and Ises to 1633mws total.</p>
05/18/10	0151	TLR - 5a	Monte/Scott	<p>EES (Bellot) reported that NNL obligations for FG1324 will be met by capping White Bluff at 1500 max.</p>
05/18/10	0227	TLR - 5a	Monte/Scott	<p>Reissued TLR- 5A on fg 1324 PC 98%, EES notified. EES NNL: 34.6, SMEE NNL: 1.7, AECI NNL: 1.0, TVA NNL: 4.5. EES SOC inform that they have reduce ISES generation. TVA inform that they have reduced their South Haven unit and Allen unit generation.</p>
05/18/10	0332	TLR - 5a	Monte/Scott	<p>Reissued TLR 5A on FG 1324 PC 97%, EES notified. EES NNL 25.5, SMEE NNL 1.2, AECI NNL 0.7, TVA NNL 3.3</p>
05/18/10	0437	TLR - 5a	Monte/Scott	<p>Re-issued TLR 5a PC 93% EES notified. EES NNL: 12.8, SMEE NNL 0.6, AECI NNL 0.4, TVA NNL 1.7.</p>
05/18/10	0529	TLR - 5a	Monte/Scott	<p>Re-issued TLR 5a PC 93% EES notified. EES NNL: 13.1, SMEE NNL 0.6, AECI NNL 0.3, TVA NNL 1.8.</p>
05/18/10	0628	TLR - 5a	Wayne Johnson	<p>Re-issued TLR 5a PC 87% EES notified. EES NNL: 0, SMEE NNL 0, AECI NNL 0, TVA NNL 0.</p>
05/18/10	0727	TLR - 0	Wayne Johnson	<p>Issued TLR 0, PC 79%</p>