

ICTE TLR 5 Investigation Report
Flowgate 1324
(Whitebluff - Sheridan 500 kV for the loss of Mabelvale - Sheridan 500 kV)
TLR Level 5: May 22, 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 22, 2010. Flowgate 1324 is an Entergy flowgate. The TLR 5 was in effect from 12:13 AM until 9:29 AM on May 22, 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 5b was issued, the Limiting Element was rated at 1732 MVA. Flow on the Limiting Element was 1220 MVA. Flow on the Contingent Element was 923 MVA. The LODF was approximately 80%. Post-contingent flow on the Limiting Element was approximately 1958 MVA.

3. TLR levels, timing, and relief requested amounts.

TLRs levels, timing and relief requested amounts are shown on pages 3 and 4.

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, included below.

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 1 and 2.

Event History									
Issuing RC:		ICTE							
Flowgate:		1324 - WhiteBluff-Sheridan for loss of Mabelvale-Sheridan							
Event Begin:		2010-05-21 22:20							
Event End:		2010-05-22 10:25							
Event Duration:		12 Hours							
TLR Level	TLR Date	TLR Confirm Time	Run Time	Requested Relief	Remaining Relief	Relief Provided	Total Cuts		
							Tags	MW	
TLR Level 4	05/21/2010 22:20	05/21/2010 22:10	05/21/2010 22:07:23	0.0	0.0	0.0	11	521	
TLR Level 5B	05/21/2010 23:25	05/21/2010 23:13	05/21/2010 23:11:51	250.0	0.0	255.1	50	206	
TLR Level 5A	05/22/2010 01:00	05/22/2010 00:29	05/22/2010 00:26:54	154.0	0.0	317.8	53	554	
TLR Level 5A	05/22/2010 02:00	05/22/2010 01:29	05/22/2010 01:27:16	173.0	0.0	321.1	55	551	
TLR Level 5A	05/22/2010 03:00	05/22/2010 02:33	05/22/2010 02:31:24	214.0	0.0	355.3	51	589	
TLR Level 5A	05/22/2010 04:00	05/22/2010 03:38	05/22/2010 03:36:26	189.0	0.0	330.2	51	561	
TLR Level 5A	05/22/2010 05:00	05/22/2010 04:31	05/22/2010 04:29:03	146.0	0.0	286.0	54	477	
TLR Level 5A	05/22/2010 06:00	05/22/2010 05:35	05/22/2010 05:31:14	24.0	0.0	163.4	48	381	
TLR Level 5A	05/22/2010 07:00	05/22/2010 06:30	05/22/2010 06:28:30	106.0	0.0	162.8	53	410	
TLR Level 5A	05/22/2010 08:00	05/22/2010 07:30	05/22/2010 07:29:33	58.0	0.0	131.2	54	406	
TLR Level 5A	05/22/2010 09:00	05/22/2010 08:29	05/22/2010 08:28:27	0.0	0.0	42.8	6	282	
TLR Level 4	05/22/2010 09:40	05/22/2010 09:29	05/22/2010 09:28:01	0.0	0.0	0.0	0	0	
TLR Level 0	05/22/2010 10:25	05/22/2010 10:11	05/22/2010 10:11:20	0.0	0.0	0.0	0	0	

Event Summary

FILE SAVED AS: ICTE_1324_20100521_2220.htm

Incident: ICTE_1324_20100521_2220	Date: 05/21/2010 (CDT)	Reliability Coordinator: ICTE
Initial Conditions: N/A		
Flowgate: 1324 - WhiteBluff-Sheridan for loss o...	Rating: 1732	LODF: 79.73%
TLR Direction: Normal		
Effective StartTime: 05/21/2010 23:20 (CDT)	Effective EndTime: 05/22/2010 11:25 (CDT)	TLR Duration: 12 Hours and 5 Minutes

TLR Actions

Confirm Time	Level	Effective Hour	Priority	Schedule						NHL Relief			Market Relief				Flow			TLR Action Comments			
				Total Tags Cut / Hold	IDC Cut MVV	RC Cut Acknowledge MVV	Relief	Hold	Relief	CA	IDC MVV	RC Ackn MVV	Type	Mkt	IDC MVV	RC Ackn MVV	Current	Post Cont.	Cont. Flow				
May 21 23:10 (CDT)	TLR 4	CURRENT	1-NS	1 / 0	16	1.0	16	1.0	0	0.0	NONE			ED-2	SWPP	0.0	0.0	1168	1952	858	N/A		
			2-NH	4 / 0	148	13.4	148	13.4	0	0.0	ED-6	SWPP	55.0	55.0									
			6-NN	6 / 0	357	71.5	357	71.5	0	0.0	FIRM-7	SWPP	0.0	0.0									
			Total	11 / 0	1155	85.8	521	85.8	0	0.0				Total	55.0	55.0							
		NEXT	1-NS	0 / 1	0	0.0	0	0.0	6	0.3	NONE			NONE									
			2-NH	6 / 0	241	34.7	241	34.7	0	0.0													
			6-NN	3 / 0	353	65.1	353	65.1	0	0.0													
			Total	9 / 1	1155	99.7	634	99.7	6	0.3													
May 22 00:13 (CDT)	TLR 5B	CURRENT	7-F	50 / 0	206	50.7	206	50.7	0	0.0	EES	144.0	144.0	ED-2	SWPP	0.0	0.0	1220	1955	923	N/A		
			6-NN	1 / 0	28	19.5	28	19.5	0	0.0	SMEE	0.0	0.0	ED-6	SWPP	81.0	81.0						
			7-F	50 / 0	206	50.7	206	50.7	0	0.0	TVA	0.0	0.0	FIRM-7	SWPP	13.3	13.3						
			Total	50 / 0	206	50.7	206	50.7	0	0.0	Total	159.0	159.0	Total	94.3	94.3							
		NEXT	1-NS	1 / 0	112	24.9	112	24.9	0	0.0	NONE			NONE									
			2-NH	3 / 0	152	28.0	152	28.0	0	0.0													
			6-NN	1 / 0	35	19.5	35	19.5	0	0.0													
			7-F	44 / 3	220	51.3	220	51.3	101	13.3													
			Total	49 / 3	206	123.6	572	123.6	101	13.3													
May 22 01:29 (CDT)	TLR 5A	NEXT	2-NH	3 / 0	152	28.0	152	28.0	0	0.0	EES	129.0	129.0	ED-2	SWPP	0.0	0.0	917	1602	860	N/A		
			6-NN	1 / 0	200	44.3	200	44.3	0	0.0	SMEE	0.0	0.0	ED-6	SWPP	29.0	29.0						
			7-F	49 / 0	202	48.8	202	48.8	0	0.0	TVA	8.0	8.0	FIRM-7	SWPP	25.1	25.1						
			Total	53 / 0	554	121.0	554	121.0	0	0.0	Total	142.0	142.0	Total	54.1	54.1							
May 22 02:29 (CDT)	TLR 5A	NEXT	2-NH	3 / 0	152	28.0	152	28.0	0	0.0	EES	124.0	124.0	ED-2	SWPP	0.0	0.0	889	1648	853	N/A		
			6-NN	1 / 0	200	44.7	200	44.7	0	0.0	SMEE	0.0	0.0	ED-6	SWPP	45.0	45.0						
			7-F	51 / 0	199	47.8	199	47.8	0	0.0	TVA	8.0	8.0	FIRM-7	SWPP	19.2	19.2						
			Total	55 / 0	551	120.4	551	120.4	0	0.0	Total	137.0	137.0	Total	64.2	64.2							
May 22 03:33 (CDT)	TLR 5A	NEXT	2-NH	2 / 0	100	19.6	100	19.6	0	0.0	EES	124.0	124.0	ED-2	SWPP	0.0	0.0	872	1647	873	N/A		
			7-F	47 / 0	237	53.5	237	53.5	0	0.0	SMEE	0.0	0.0	ED-6	SWPP	73.0	73.0						
			Total	49 / 0	337	73.2	337	73.2	0	0.0	Total	137.0	137.0	Total	93.1	93.1							
May 22 04:38 (CDT)	TLR 5A	NEXT	2-NH	2 / 0	100	19.7	100	19.7	0	0.0	EES	124.0	124.0	ED-2	SWPP	0.0	0.0	912	1651	866	N/A		
			6-NN	1 / 0	200	43.8	200	43.8	0	0.0	SMEE	0.0	0.0	ED-6	SWPP	51.0	51.0						
			7-F	47 / 2	209	53.3	209	53.3	25	10.2	TVA	8.0	8.0	FIRM-7	SWPP	18.4	18.4						
			Total	50 / 2	509	116.6	509	116.6	25	10.2	Total	137.0	137.0	Total	69.4	69.4							
May 22 05:31 (CDT)	TLR 5A	NEXT	2-NH	2 / 0	100	19.7	100	19.7	0	0.0	EES	123.0	123.0	ED-2	SWPP	0.0	0.0	862	1599	825	N/A		
			7-F	50 / 1	173	37.1	173	37.1	103	11.2	SMEE	0.0	0.0	ED-6	SWPP	40.0	40.0						
			Total	52 / 1	273	56.9	273	56.9	103	11.2	Total	136.0	136.0	Total	61.1	61.1							
May 22 06:35 (CDT)	TLR 5A	NEXT	1-NS	1 / 0	100	15.8	100	15.8	0	0.0	EES	49.0	49.0	ED-2	SWPP	0.0	0.0	938	1622	858	N/A		
			2-NH	3 / 0	204	38.2	204	38.2	0	0.0	SMEE	2.0	2.0	ED-6	SWPP	38.0	38.0						
			7-F	44 / 0	77	15.3	77	15.3	0	0.0	TVA	3.0	3.0	FIRM-7	SWPP	4.8	4.8						
			Total	48 / 0	381	67.3	381	67.3	0	0.0	Total	53.0	53.0	Total	42.8	42.8							
May 22 07:30 (CDT)	TLR 5A	NEXT	2-NH	2 / 0	100	20.0	100	20.0	0	0.0	EES	62.0	62.0	ED-2	SWPP	0.0	0.0	974	1650	881	N/A		
			7-F	49 / 2	108	22.5	108	22.5	103	9.0	SMEE	2.0	2.0	ED-6	SWPP	8.0	8.0						
			Total	51 / 2	206	42.5	206	42.5	103	9.0	Total	68.0	68.0	Total	20.7	20.7							
May 22 08:30 (CDT)	TLR 5A	NEXT	1-NS	1 / 0	50	2.5	50	2.5	0	0.0	EES	53.0	53.0	ED-2	SWPP	0.0	0.0	967	1616	814	N/A		
			2-NH	1 / 0	50	5.9	50	5.9	0	0.0	SMEE	2.0	2.0	ED-6	SWPP	0.0	0.0						
			7-F	50 / 1	102	21.6	102	21.6	50	4.5	TVA	4.0	4.0	FIRM-7	SWPP	11.6	11.6						
			Total	52 / 1	202	30.0	202	30.0	50	4.5	Total	59.0	59.0	Total	11.6	11.6							
May 22 09:29 (CDT)	TLR 5A	NEXT	2-NH	2 / 0	51	5.9	51	5.9	0	0.0	NONE			ED-2	SWPP	0.0	0.0	883	1446	707	N/A		
			6-NN	2 / 0	27	5.7	27	5.7	0	0.0	ED-6	SWPP	0.0	0.0									
			7-F	0 / 3	0	0.0	0	0.0	211	25.5	TVA	4.0	4.0	FIRM-7	SWPP	0.0	0.0						
			Total	4 / 3	78	11.6	78	11.6	211	25.5	Total	0.0	0.0	Total	0.0	0.0							
May 22 10:25 (CDT)	TLR 4	CURRENT	NONE						NONE			NONE				967	1546	739	N/A				
		NEXT	1-NS	1 / 0	100	15.3	100	15.3	0	0.0	NONE			NONE									
			2-NH	2 / 0	154	21.8	154	21.8	0	0.0													
			Total	3 / 0	254	37.0	254	37.0	0	0.0													
May 22 11:11 (CDT)	TLR 0	CURRENT	NONE						NONE			NONE				847	1299	568	N/A				

TLR Schedule Totals

Priority	Schedule			
	Total Tags Cut / Hold	IDC Cut MVV	RC Cut Acknowledge MVV	Hold MVV
0	0	0	0	0
1	5	378	378	6
2	35	1704	1704	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	15	1465	1465	0
7	481	1731	1731	593
Total	536	5278	5278	599

TLR NNL Totals

CA	NNL Relief	
	IDC MVV	RC Ackn MVV
EES	931.0	931.0
SMEE	38.0	38.0
TVA	61.0	61.0
Total	1028.0	1028.0

TLR Market Flow Totals

Market	Type	Market Relief	
		IDC MVV	RC Ackn MVV
SWPP	ED-2	0.0	0.0
	ED-5	420.0	420.0
	FIRM-7	146.3	146.3
Total for SWPP		566.3	566.3
Total		566.3	566.3

Date	Time	Category	Operator Name	Issue
05/21/10	2302	Flow Gate Assessment	Wayne/Chad	Assessed FG as ICP PC 102%
05/21/10	2307	TLR - 4	Wayne/Chad	Issued TLR 4 PC 107% Ref # 259670, no internal nonfirm tags available
05/22/10	0011	TLR - 5b	Wayne Johnson	Issued TLR 5B PC 113% Ref # 259670, no internal nonfirm tags available. NNL: EES 144.1, SMEE 5.1, SPA .2, TVA 9.7. TVA dropping Allen units 105mws. Informed SWPP RC that SPA could hold generation at present levels.
05/22/10	0126	TLR - 5a	Wayne Johnson	Issued TLR 5A PC 93%, no internal nonfirm tags available. NNL: EES 129.3, SMEE 4.9, SPA .2, TVA 8.3. TVA raising Allen units 14mws.
05/22/10	0227	TLR - 5a	Wayne Johnson	Reissued TLR 5A PC 95%, no internal nonfirm tags available. NNL: EES 124, SMEE 4.6, SPA .2, TVA 7.7. TVA setting Allen units at 84mws.
05/22/10	0331	TLR - 5a	Wayne Johnson	Reissued TLR 5A PC 95%, no internal nonfirm tags available. NNL: EES 124.3, SMEE 4.7, SPA .2, TVA 7.8.
05/22/10	0436	TLR - 5a	Wayne Johnson	Reissued TLR 5A PC 97%, no internal nonfirm tags available. NNL: EES 123.6, SMEE 4.6, SPA .2, TVA 7.7.
05/22/10	0529	TLR - 5a	Wayne Johnson	Reissued TLR 5A PC 92%, no internal nonfirm tags available. NNL: EES 123.3, SMEE 4.6, SPA .2, TVA 7.7.

05/22/10	0630	TLR - 5a	Heath Martin	Re-issued TLR 5a, PC 94% EES NNL 48.4, SMEE 1.8, SPA 0.1, TVA 3.1, no internal non-firm identified
05/22/10	0730	TLR - 5a	Heath Martin	Re-issued TLR 5a, PC 96% EES NNL 62.3, SMEE 2.1, SPA 0.1, TVA 3.9, no internal non-firm identified
05/22/10	0830	TLR - 5a	Heath Martin	Re-issued TLR 5a, PC 93% EES NNL 53.1, SMEE 1.7, SPA 0.1, TVA 3.5, no internal non-firm identified
05/22/10	0930	TLR - 5a	Heath Martin	Re-issued TLR 5a, PC 84%, NO NNL, JEFF026 Internal Non-firm tag identified As provided in the email to the Shift Supervisor, the ICT RC has issued a TLR Level 5a on Flowgate 1324 WhiteBluff-Sheridan for loss of Mabelvale-Sheridan . At this time Entergy is instructed to curtail the non-firm portion of the following Schedules JEFF026. These curtailments should remain in place until the TLR level is reduced below a TLR Level 3.
05/22/10	1030	TLR - 4	Heath Martin	Issued TLR 4, PC 89%, 0045131 Internal non-firm tag identified For 1030 TLR 4 issue As provided in the email to the Shift Supervisor, the ICT RC has issued a TLR Level 4 on Flowgate 1324 WhiteBluff-Sheridan for loss of Mabelvale-Sheridan . At this time Entergy is instructed to curtail the non-firm portion of the following Schedules 0045131. These curtailments should remain in place until the TLR level is reduced below a TLR Level 3.
05/22/10	1115	TLR - 0	Heath Martin	Issued TLR 0, PC 75%