

ICTE TLR 5 Investigation Report
Flowgate 1938
(Sheridan - El Dorado 500 kV for the loss of Etta - McNeil 500 kV)
TLR Level 5: May 10, 2009
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 1938 on May 10, 2009. Flowgate 1938 is an Entergy flowgate. The TLR 5 was in effect from 2:39 PM until 7:29 PM on May 10, 2009. Projected post-contingent flows on the Sheridan - El Dorado 500 kV line for the loss of the Etta - McNeil 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 1315 MVA. Flow on the Contingent Element was 796 MVA. The LODF was approximately 71%. Post-contingent flow on the Limiting Element was approximately 1879 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.

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 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 Sabine and Independence units.

Event History								
Issuing RC:		ICTE						
Flowgate:		1938 - Sheridan-El Dorado 500 kV for the loss of Etta-McNeil 500 kV						
Event Begin:		2009-05-10 09:35						
Event End:		2009-05-11 00:40						
Event Duration:		15 Hours						
TLR Level	TLR Date (CST)	TLR Confirm Time (CST)	Run Time (CST)	Requested Relief	Remaining Relief	Relief Provided	Total Cuts	
							Tags	MW
TLR Level 1	05/10/2009 09:35	05/10/2009 09:22	05/10/2009 09:22:20	0.0	0.0	0.0	0	0
TLR Level 3A	05/10/2009 11:00	05/10/2009 10:30	05/10/2009 10:28:50	78.0	0.0	78.2	15	507
TLR Level 3A	05/10/2009 12:00	05/10/2009 11:27	05/10/2009 11:26:39	165.0	46.0	119.0	22	928
TLR Level 3A	05/10/2009 13:00	05/10/2009 12:36	05/10/2009 12:31:13	250.0	156.1	93.9	19	569
TLR Level 5A	05/10/2009 14:15	05/10/2009 13:40	05/10/2009 13:39:15	161.0	0.0	166.1	84	656
TLR Level 5A	05/10/2009 15:00	05/10/2009 14:30	05/10/2009 14:30:10	136.0	0.0	182.7	85	674
TLR Level 5A	05/10/2009 16:00	05/10/2009 15:31	05/10/2009 15:30:49	171.0	0.0	230.3	87	738
TLR Level 5A	05/10/2009 17:00	05/10/2009 16:29	05/10/2009 16:28:51	146.0	0.0	232.4	81	680
TLR Level 5A	05/10/2009 18:00	05/10/2009 17:32	05/10/2009 17:32:11	92.0	0.0	181.2	78	611
TLR Level 5A	05/10/2009 19:00	05/10/2009 18:30	05/10/2009 18:29:42	68.0	0.0	126.0	70	562
TLR Level 4	05/10/2009 19:40	05/10/2009 19:30	05/10/2009 19:29:10	0.0	0.0	0.0	1	39
TLR Level 4	05/10/2009 20:40	05/10/2009 20:28	05/10/2009 20:28:29	0.0	0.0	0.0	0	0
TLR Level 4	05/10/2009 21:40	05/10/2009 21:28	05/10/2009 21:27:50	0.0	0.0	0.0	3	49
TLR Level 4	05/10/2009 22:40	05/10/2009 22:26	05/10/2009 22:26:41	0.0	0.0	0.0	0	0
TLR Level 4	05/10/2009 23:35	05/10/2009 23:26	05/10/2009 23:25:47	0.0	0.0	0.0	0	0
TLR Level 0	05/11/2009 00:40	05/11/2009 00:31	05/11/2009 00:30:34	0.0	0.0	0.0	0	0

06/12/2009 08:07:30 (CST)
 OATI IDC Support Phone: 763-201-2010 Fax: 763-553-2813
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Event Summary

FILE SAVED AS: ICTE_1938_20090510_0935.htm

Incident: ICTE_1938_20090510_0935	Date: 05/10/2009	Reliability Coordinator: ICTE
Initial Conditions: N/A		
Flowgate: 1938 - Sheridan-EI Dorado 500 kV for ...	Rating: 1732	LODF: 70.88%
TLR Direction: Normal		
Effective StartTime: 05/10/2009 09:35	Effective EndTime: 05/11/2009 00:40	TLR Duration: 15 Hours and 5 Minutes

TLR Actions

Confirm Time	Level	Effective Hour	Priority	Schedule							NIL Relief			Market Relief			Flow			TLR Action Comments	
				Total Tags Cut / Hold	IDC Cut		RC Cut Acknowledge		Hold		CA	IDC MW	RC Ackn MW	Type	Mkt	IDC MW	RC Ackn MW	Current	Post Cont.		Cont. Flow
					MW	Relief	MW	Relief	MW	Relief											
May_10 09:32	TLR 1	CURRENT		NONE							NONE			NONE			1203	1731	745	N/A	
May_10 10:30	TLR 3A	NEXT	2-NH 5-NM 6-NN Total	9 / 0 247 22.3	247 22.3	247 22.3	247 22.3	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	1249	1792	707	N/A	
May_10 11:27	TLR 3A	NEXT	2-NH 5-NM 6-NN Total	7 / 0 108 4.0	108 4.0	108 4.0	108 4.0	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	1283	1836	781	N/A	
May_10 12:38	TLR 3A	NEXT	2-NH 5-NM 6-NN Total	6 / 0 109 4.0	109 4.0	109 4.0	109 4.0	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	1318	1882	796	N/A	
May_10 13:40	TLR 5A	NEXT	2-NH 5-NM 6-NN 7-F Total	6 / 0 109 2 / 0 85 / 0 76 / 0	8.4 40 34 133 316	109 40 47 23.9 316	8.4 40 34 23.9 39.3	0 0.0 0.0 0.0 0.0	0 0.0 0.0 0.0 0.0	EES TVA Total	41.0 1.0 42.0	41.0 2.0 43.0	ED-2 ED-5 FIRM-7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP 0.0 0.0 11.9 0.0 11.9	0.0 0.0 11.9 0.0 11.9	0.0 0.0 11.9 0.0 11.9	1315	1879	796	N/A	
May_10 14:30	TLR 5A	NEXT	2-NH 5-NM 6-NN 7-F Total	6 / 0 108 1 / 0 85 / 0 79 / 0	8.4 39 112 158 415	108 39 20.2 27.8 415	8.4 2.1 112 27.8 58.3	0 0.0 0.0 0.0 0.0	0 0.0 0.0 0.0 0.0	EES TVA Total	52.0 2.0 54.0	52.0 2.0 54.0	ED-2 ED-5 FIRM-7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP 0.0 0.0 14.7 0.0 14.7	0.0 0.0 14.7 0.0 14.7	0.0 0.0 14.7 0.0 14.7	1301	1861	791	N/A	
May_10 15:31	TLR 5A	NEXT	2-NH 5-NM 6-NN 7-F Total	5 / 0 108 1 / 0 81 / 0 81 / 0	8.3 39 2.1 224 478	108 39 2.1 40.2 478	8.3 2.1 19.8 40.2 70.4	0 0.0 0.0 0.0 0.0	0 0.0 0.0 0.0 0.0	EES SPA TVA Total	78.0 1.0 3.0 82.0	78.0 1.0 3.0 82.0	ED-2 ED-5 FIRM-7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP 0.0 0.0 22.4 0.0 22.4	0.0 0.0 22.4 0.0 22.4	0.0 0.0 22.4 0.0 22.4	1252	1792	782	N/A	
May_10 16:29	TLR 5A	NEXT	2-NH 5-NM 6-NN 7-F Total	4 / 0 108 4 / 0 85 / 0 76 / 0	8.3 39 20.2 41.2 68.7	108 39 20.2 41.2 423	8.3 2.1 19.8 41.2 68.7	0 0.0 0.0 0.0 0.0	0 0.0 0.0 0.0 0.0	EES SPA TVA Total	80.0 1.0 3.0 84.0	80.0 1.0 3.0 84.0	ED-2 ED-5 FIRM-7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP 0.0 0.0 23.6 0.0 23.6	0.0 0.0 23.6 0.0 23.6	0.0 0.0 23.6 0.0 23.6	1231	1764	763	N/A	
May_10 17:32	TLR 5A	NEXT	2-NH 5-NM 6-NN 7-F Total	4 / 0 107 4 / 0 85 / 0 73 / 0	7.4 39 12.5 28.6 55.9	107 39 20.2 28.6 355	7.4 2.1 15.9 28.6 55.9	0 0.0 0.0 0.0 0.0	0 0.0 0.0 0.0 0.0	EES SPA TVA Total	51.0 0.0 2.0 53.0	51.0 1.0 2.0 54.0	ED-2 ED-5 FIRM-7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP 0.0 0.0 15.4 0.0 15.4	0.0 0.0 15.4 0.0 15.4	0.0 0.0 15.4 0.0 15.4	1214	1744	748	N/A	
May_10 18:30	TLR 5A	NEXT	2-NH 5-NM 6-NN 7-F Total	7 / 0 290 1 / 0 7 / 0 70 / 0	50.3 39 157 96.5 562	290 39 157 96.5 562	50.3 2.0 31.8 96.5 96.5	0 0.0 0.0 0.0 0.0	0 0.0 0.0 0.0 0.0	EES TVA Total	23.0 1.0 24.0	23.0 1.0 24.0	ED-2 ED-5 FIRM-7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP 0.0 0.0 5.7 0.0 5.7	0.0 0.0 5.7 0.0 5.7	0.0 0.0 5.7 0.0 5.7	1159	1667	718	N/A	
May_10 19:30	TLR 4	CURRENT	5-NM Total	1 / 0 39 630	2.0 39 2.0	39 2.0 39	2.0 0.0 2.0	0 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	1080	1567	674	N/A	
		NEXT	2-NH 5-NM 6-NN Total	7 / 0 290 8 / 0 16 / 0	50.3 39 262 89.9	290 39 262 591	50.3 2.0 37.8 89.9	0 0.0 0.0 0.0	0 0.0 0.0 0.0	NONE			NONE								
May_10 20:28	TLR 4	CURRENT		NONE							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	1152	1653	707	N/A
		NEXT	2-NH 5-NM 6-NN Total	4 / 0 268 4 / 0 8 / 0	43.7 27.0 268 489	203 268 489	43.7 27.0 70.7	0 0.0 0.0 0.0	0 0.0 0.0 0.0	NONE			NONE								
May_10 21:28	TLR 4	CURRENT	2-NH 5-NM Total	2 / 0 10 3 / 0	0.5 39 303	10 39 2.5	0.5 2.0 4.9	0 0.0 2.5	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	1151	1655	712	N/A	
		NEXT	2-NH 5-NM 6-NN Total	6 / 0 214 2 / 0 8 / 1	44.2 40 0 46.3	214 40 0 254	44.2 2.1 0 46.3	0 0.0 0.0 8.2	0 0.0 0.0 8.2	NONE			NONE								
May_10 22:28	TLR 4	CURRENT		NONE							NONE			ED-2 ED-5 FIRM-7 Total	SWPP SWPP SWPP 0.0 0.0 27.0 27.0	0.0 0.0 27.0 27.0	0.0 0.0 27.0 27.0	1259	1801	786	N/A
		NEXT	2-NH 5-NM 6-NN Total	6 / 0 1 / 0 2 / 0 9 / 0	535 0.1 59 595	114.6 0.1 4.7 119.3	535 0.1 59 595	114.6 0.1 4.7 119.3	0 0.0 0.0 0.0	NONE			NONE								
May_10 23:28	TLR 4	CURRENT		NONE							NONE			ED-2 ED-5 FIRM-7 Total	SWPP SWPP SWPP 0.0 29.0 0.0 29.0	0.0 29.0 0.0 29.0	0.0 29.0 0.0 29.0	1151	1652	707	N/A
		NEXT	2-NH 5-NM Total	6 / 1 1 / 0 7 / 1	538 0.1 539	114.6 0.1 114.7	538 0.1 539	114.6 0.1 114.7	27 0.0 27	3.0 0.0 3.0	NONE			NONE							
May_11 00:31	TLR 0	CURRENT		NONE							NONE			NONE			1018	1479	654	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	85	3101	3101	27
3	0	0	0	0
4	0	0	0	0
5	10	395	395	0
6	49	1764	1764	150
7	393	975	975	0
Total	543	6236	6236	177

TLR>NNL Totals

CA	NNL Relief	
	IDC MV	RC Ackn MV
EES	325.0	325.0
SPA	2.0	3.0
TVA	12.0	13.0
Total	339.0	341.0

TLR Market Flow Totals

Market	Type	Market Relief	
		IDC MV	RC Ackn MV
SWPP	ED-2	0.0	0.0
	ED-5	56.0	56.0
	FIRM-7	93.7	93.7
Total for SWPP		149.7	149.7
Total		149.7	149.7