

ICTE TLR 5 Investigation Report
Flowgate 1913
(Keo - West Memphis 500 kV for the loss of Independence - Dell 500 kV)
TLR Level 5: July 23, 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 1913 on July 23, 2010. Flowgate 1913 is an Entergy flowgate. The TLR 5 was in effect from 8:27 AM until 9:30 PM on July 23, 2010. Projected post-contingent flows on the Keo - West Memphis 500 kV line for the loss of the Independence - Dell 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 1740 MVA. Flow on the Limiting Element was 1433 MVA. Flow on the Contingent Element was 1246 MVA. The LODF was approximately 36%. Post-contingent flow on the Limiting Element was approximately 1880 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 see an issue with this flowgate, however it was below 100% therefore no mitigation plan was enacted 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.

Event History									
Issuing RC:		ICTE							
Flowgate:		1913 - Keo-West Memphis 500 kV for the loss of Independence-Dell 500 kV							
Event Begin:		2010-07-23 06:20							
Event End:		2010-07-23 22:35							
Event Duration:		16 Hours							
TLR Level	TLR Date	TLR Confirm Time	Run Time	Requested Relief	Remaining Relief	Relief Provided	Total Cuts		
							Tags	MW	
TLR Level 4	07/23/2010 06:20	07/23/2010 06:11	07/23/2010 06:10:51	0.0	0.0	0.0	13	615	
TLR Level 5A	07/23/2010 08:00	07/23/2010 07:29	07/23/2010 07:26:49	375.0	0.0	380.4	82	840	
TLR Level 5A	07/23/2010 09:00	07/23/2010 08:26	07/23/2010 08:25:31	165.0	0.0	354.9	86	775	
TLR Level 5A	07/23/2010 10:00	07/23/2010 09:28	07/23/2010 09:27:18	125.0	0.0	300.3	84	599	
TLR Level 5A	07/23/2010 11:00	07/23/2010 10:31	07/23/2010 10:30:34	84.0	0.0	211.6	84	529	
TLR Level 5A	07/23/2010 12:00	07/23/2010 11:27	07/23/2010 11:26:29	76.0	0.0	184.8	86	472	
TLR Level 5A	07/23/2010 13:00	07/23/2010 12:29	07/23/2010 12:28:20	54.0	0.0	147.5	82	369	
TLR Level 5A	07/23/2010 14:00	07/23/2010 13:32	07/23/2010 13:31:22	112.0	0.0	184.1	84	391	
TLR Level 5A	07/23/2010 15:00	07/23/2010 14:32	07/23/2010 14:31:40	64.0	0.0	136.5	83	343	
TLR Level 5A	07/23/2010 16:00	07/23/2010 15:28	07/23/2010 15:28:05	23.0	0.0	82.5	76	244	
TLR Level 5A	07/23/2010 17:00	07/23/2010 16:32	07/23/2010 16:29:40	47.0	0.0	84.2	75	250	
TLR Level 5A	07/23/2010 18:00	07/23/2010 17:32	07/23/2010 17:28:32	47.0	0.0	84.1	76	251	
TLR Level 5A	07/23/2010 19:00	07/23/2010 18:35	07/23/2010 18:32:54	58.0	0.0	95.3	75	315	
TLR Level 5A	07/23/2010 20:00	07/23/2010 19:36	07/23/2010 19:31:03	79.0	0.0	114.2	78	354	
TLR Level 5A	07/23/2010 21:00	07/23/2010 20:37	07/23/2010 20:33:09	59.0	0.0	103.4	49	219	
TLR Level 1	07/23/2010 22:00	07/23/2010 21:29	07/23/2010 21:28:41	0.0	0.0	0.0	0	0	
TLR Level 0	07/23/2010 22:35	07/23/2010 22:23	07/23/2010 22:22:44	0.0	0.0	0.0	0	0	

Event Summary

FILE SAVED AS: ICTE_1913_20100723_0620.htm

Incident: ICTE_1913_20100723_0620	Date: 07/23/2010	Reliability Coordinator: ICTE
Initial Conditions: N/A		
Flowgate: 1913 - Keo-West Memphis 500 kV for th...	Rating: 1740	LODF: 35.63%
TLR Direction: Normal		
Effective StartTime: 07/23/2010 06:20	Effective EndTime: 07/23/2010 22:35	TLR Duration: 16 Hours and 15 Minutes

TLR Actions

Confirm Time	Level	Effective Hour	Priority	Schedule						NNL Relief			Market Relief				Flow		Cont. Flow	TLR Action Comments	
				Total Tags Cut	Hold	RC Cut Acknowledge	CA	IDC MW	RC Askn MW	Type	Mkt	IDC MW	RC Askn MW	Current	Post Cont.						
Jul 23 05:11	TLR 4	CURRENT	1-NS	2 / 0	42	8.1	42	8.1	0	0.0	NONE	NONE	ED-2	SWPP	0.0	0.0	1385	1845	1291	N/A	
			2-NH	6 / 0	320	52.4	320	52.4	0	0.0			ED-5	SWPP	0.0	0.0					
			6-NN	6 / 0	263	32.7	263	32.7	0	0.0			FIRM-7	SWPP	8.0	8.0					
			Total	14 / 0	1057	91.2	615	91.2	0	0.0			Total	8.0	8.0						
Jul 23 07:29	TLR 5A	NEXT	1-NS	1 / 1	2	0.2	2	0.2	37	7.4	NONE	NONE	ED-2	SWPP	0.0	0.0	1433	1875	1245	N/A	
			2-NH	3 / 1	180	27.6	180	27.6	128	21.2			ED-5	SWPP	32.0	32.0					
			6-NN	6 / 2	260	37.3	260	37.3	77	5.0			FIRM-7	SWPP	2.0	2.0					
			Total	10 / 4	1057	65.1	442	65.1	242	33.6			Total	34.0	34.0						
Jul 23 08:26	TLR 5A	NEXT	1-NS	1 / 0	2	0.2	2	0.2	0	0.0	AECI	5.0	5.0	ED-2	SWPP	0.0	0.0	1364	1778	1163	N/A
			6-NN	5 / 0	149	27.3	149	27.0	0	0.0	EES	96.0	96.0	ED-5	SWPP	17.0	17.0				
			7-F	80 / 0	524	121.1	524	121.1	0	0.0	SOCCO	50.0	50.0	FIRM-7	SWPP	18.9	18.9				
			Total	86 / 0	775	148.3	775	148.3	0	0.0	Total	7.0	7.0	Total	35.9	35.9					
Jul 23 09:28	TLR 5A	NEXT	1-NS	1 / 0	2	0.2	2	0.2	0	0.0	AECI	3.0	3.0	ED-2	SWPP	0.0	0.0	1348	1739	1100	N/A
			6-NN	6 / 0	105	21.9	105	21.9	0	0.0	EES	66.0	66.0	ED-5	SWPP	43.0	43.0				
			7-F	77 / 0	491	91.5	491	91.5	0	0.0	SOCCO	35.0	35.0	FIRM-7	SWPP	22.0	22.0				
			Total	84 / 0	599	113.6	599	113.6	0	0.0	Total	9.0	9.0	Total	65.0	65.0					
Jul 23 10:31	TLR 5A	NEXT	1-NS	1 / 0	2	0.2	2	0.2	0	0.0	AECI	3.0	3.0	ED-2	SWPP	0.0	0.0	1329	1709	1059	N/A
			6-NN	1 / 0	15	4.6	15	4.6	0	0.0	EES	56.0	56.0	ED-5	SWPP	11.6	11.6				
			7-F	78 / 0	432	78.6	432	78.6	0	0.0	SOCCO	29.0	29.0	FIRM-7	SWPP	0.0	0.0				
			Total	80 / 0	449	83.4	449	83.4	0	0.0	Total	5.0	5.0	Total	11.6	11.6					
Jul 23 11:27	TLR 5A	NEXT	1-NS	1 / 0	2	0.2	2	0.2	0	0.0	AECI	2.0	2.0	ED-2	SWPP	0.0	0.0	1377	1755	1061	N/A
			6-NN	5 / 0	97	15.6	97	15.5	0	0.0	EES	51.0	51.0	ED-5	SWPP	11.2	11.2				
			7-F	80 / 0	373	67.4	373	67.4	0	0.0	SOCCO	23.0	23.0	FIRM-7	SWPP	0.0	0.0				
			Total	86 / 0	472	86.1	472	86.1	0	0.0	Total	4.0	4.0	Total	11.2	11.2					
Jul 23 12:29	TLR 5A	NEXT	1-NS	1 / 0	2	0.2	2	0.2	0	0.0	AECI	2.0	2.0	ED-2	SWPP	0.0	0.0	1363	1745	1074	N/A
			6-NN	4 / 0	82	13.7	82	13.7	0	0.0	EES	39.0	39.0	ED-5	SWPP	14.0	14.0				
			7-F	77 / 0	254	51.7	254	51.7	0	0.0	SOCCO	17.0	17.0	FIRM-7	SWPP	1.7	1.7				
			Total	82 / 0	369	65.6	369	65.6	0	0.0	Total	3.0	3.0	Total	15.7	15.7					
Jul 23 13:32	TLR 5A	NEXT	1-NS	1 / 0	2	0.2	2	0.2	0	0.0	AECI	2.0	2.0	ED-2	SWPP	0.0	0.0	1298	1653	999	N/A
			6-NN	1 / 0	16	4.9	16	4.9	0	0.0	EES	40.0	40.0	ED-5	SWPP	14.0	14.0				
			7-F	78 / 0	293	52.5	293	52.5	0	0.0	SOCCO	17.0	17.0	FIRM-7	SWPP	32.2	32.2				
			Total	80 / 0	311	57.6	311	57.6	0	0.0	Total	4.0	4.0	Total	46.2	46.2					
Jul 23 14:32	TLR 5A	NEXT	1-NS	1 / 0	2	0.2	2	0.2	0	0.0	AECI	2.0	2.0	ED-2	SWPP	0.0	0.0	1376	1774	1119	N/A
			6-NN	1 / 0	15	4.6	15	4.6	0	0.0	EES	32.0	32.0	ED-5	SWPP	14.0	14.0				
			7-F	77 / 0	245	43.4	245	43.4	0	0.0	SOCCO	13.0	13.0	FIRM-7	SWPP	6.8	6.8				
			Total	79 / 0	262	48.2	262	48.2	0	0.0	Total	3.0	3.0	Total	20.8	20.8					
Jul 23 15:28	TLR 5A	NEXT	1-NS	1 / 0	2	0.2	2	0.2	0	0.0	AECI	1.0	1.0	ED-2	SWPP	0.0	0.0	1354	1745	1099	N/A
			6-NN	1 / 0	1	0.3	1	0.3	0	0.0	EES	18.0	18.0	ED-5	SWPP	9.3	9.3				
			7-F	71 / 0	162	28.4	162	28.4	0	0.0	SOCCO	8.0	8.0	FIRM-7	SWPP	0.0	0.0				
			Total	72 / 0	164	28.5	164	28.5	0	0.0	Total	2.0	2.0	Total	9.3	9.3					
Jul 23 16:32	TLR 5A	NEXT	1-NS	1 / 0	2	0.2	2	0.2	0	0.0	AECI	1.0	1.0	ED-2	SWPP	0.0	0.0	1372	1757	1082	N/A
			6-NN	1 / 0	1	0.3	1	0.3	0	0.0	EES	18.0	18.0	ED-5	SWPP	9.4	9.4				
			7-F	70 / 0	166	29.4	166	29.4	0	0.0	SOCCO	8.0	8.0	FIRM-7	SWPP	0.0	0.0				
			Total	71 / 0	168	29.6	168	29.6	0	0.0	Total	2.0	2.0	Total	9.4	9.4					
Jul 23 17:32	TLR 5A	NEXT	1-NS	1 / 0	2	0.2	2	0.2	0	0.0	AECI	1.0	1.0	ED-2	SWPP	0.0	0.0	1314	1689	1054	N/A
			6-NN	1 / 0	1	0.3	1	0.3	0	0.0	EES	18.0	18.0	ED-5	SWPP	9.4	9.4				
			7-F	70 / 0	167	29.5	167	29.5	0	0.0	SOCCO	8.0	8.0	FIRM-7	SWPP	0.0	0.0				
			Total	72 / 0	170	30.0	170	30.0	0	0.0	Total	3.0	3.0	Total	9.4	9.4					
Jul 23 18:35	TLR 5A	NEXT	1-NS	1 / 0	2	0.2	2	0.2	0	0.0	AECI	1.0	1.0	ED-2	SWPP	0.0	0.0	1384	1774	1097	N/A
			6-NN	1 / 0	1	0.3	1	0.3	0	0.0	EES	18.0	18.0	ED-5	SWPP	9.4	9.4				
			7-F	69 / 0	165	29.2	165	29.2	0	0.0	SOCCO	7.0	7.0	FIRM-7	SWPP	0.0	0.0				
			Total	71 / 0	183	34.3	183	34.3	0	0.0	Total	2.0	2.0	Total	9.4	9.4					
Jul 23 19:38	TLR 5A	NEXT	1-NS	1 / 0	2	0.2	2	0.2	0	0.0	AECI	1.0	1.0	ED-2	SWPP	0.0	0.0	1394	1792	1118	N/A
			6-NN	1 / 0	1	0.3	1	0.3	0	0.0	EES	24.0	24.0	ED-5	SWPP	9.5	9.5				
			7-F	72 / 0	204	36.8	204	36.8	0	0.0	SOCCO	10.0	10.0	FIRM-7	SWPP	0.0	0.0				
			Total	74 / 0	221	41.5	221	41.5	0	0.0	Total	3.0	3.0	Total	9.5	9.5					

Jul 23 20:37	TLR 5A	NEXT	1-NS 7-F Total	1 / 0 47 / 0 48 / 0	2 139 141	0.2 25.5 25.7	2 139 141	0.2 25.5 25.7	0 0 0	0.0 0.0 0.0	AECI EES SOCO SPA TVA Total	1.0 24.0 11.0 2.0 3.0 41.0	1.0 24.0 11.0 2.0 3.0 41.0	ED-2 ED-5 FIRM-7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP Total	0.0 14.0 10.0 0.0 24.0	0.0 14.0 10.0 0.0 24.0	1432	1529	1118	N/A
Jul 23 21:29	TLR 1	CURRENT	NONE							NONE				NONE				1208	1578	1041	N/A
Jul 23 22:33	TLR 0	CURRENT	NONE							NONE				NONE				1052	1386	884	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	0
1	17	72	72	89	
2	9	500	500	128	
3	0	0	0	0	
4	0	0	0	0	
5	0	0	0	0	
6	43	1185	1185	77	
7	1022	4424	4424	57	
Total	1091	6181	6181	351	

TLR>NNL Totals

CA	NNL Relief	
	IDC MW	RC Ackn MW
AECI	29.0	29.0
EES	505.0	510.0
SOCO	291.0	293.0
SPA	49.0	49.0
TVA	80.0	80.0
Total	1057.0	1061.0

TLR Market Flow Totals

Market	Type	Market Relief	
		IDC MW	RC Ackn MW
SWPP	ED-2	0.0	0.0
	ED-5	217.7	217.8
	FIRM-7	101.8	101.8
Total for SWPP		319.2	319.4
Total		319.2	319.4

07/23/10	0615	ICP/LAP Assessment	Assessed as ICP. PC 91%
07/23/10	0711	TLR - 4	Issued TLR. EES notified. EES tariff to Zero AFCs through 13:00. Oasis REF #274750.
07/23/10	0827	TLR - 5a	Issued TLR 5a. EES notified of NNL Responsibility of 104.3 EES tariff to Zero Affecting AFCs through 13:00. Oasis Ref #274750.
07/23/10	0927	TLR - 5a	Re - Issued TLR 5a. EES notified of NNL Responsibility of 95.7. SOCO NNL of 50.4. EES tariff to Zero Affecting AFCs through 13:00. Oasis Ref #274750.
07/23/10	1027	TLR - 5a	Re - Issued TLR 5a. EES notified of NNL Responsibility of 68.2. SOCO NNL of 36.0. EES tariff to Zero Affecting AFCs through 13:00. Oasis Ref #274750.
07/23/10	1127	TLR - 5a	Re - Issued TLR 5a. EES notified of NNL Responsibility of 58.5. SOCO NNL of 28.8. EES tariff to Zero Affecting AFCs through 13:00. Oasis Ref #274750.
07/23/10	1227	TLR - 5a	Re - Issued TLR 5a. PC 98% EES notified of NNL Responsibility of 50.8. SOCO NNL of 23.3. EES tariff to Zero Affecting AFCs through 19:00. Oasis Ref #274750

07/23/10	1327	TLR - 5a	Re - Issued TLR 5a. PC 100% EES notified of NNL Responsibility of 38.6. SOCO NNL of 17.0. EES tariff to Zero Affecting AFCs through 19:00. Oasis Ref #274750
07/23/10	1427	TLR - 5a	Re - Issued TLR 5a. PC 95% EES notified of NNL Responsibility of 39.7. SOCO NNL of 16.8. EES tariff to Zero Affecting AFCs through 19:00. Oasis Ref #274750
07/23/10	1533	TLR - 5a	Re - Issued TLR 5a. PC 102% EES notified of NNL Responsibility of 31.7. SOCO NNL of 13.4. EES tariff to Zero Affecting AFCs through 19:00. Oasis Ref #274750
07/23/10	1630	TLR - 5a	Re - Issued TLR 5a. PC 100% EES notified of NNL Responsibility of 18.5. SOCO NNL of 7.7. EES tariff to Zero Affecting AFCs through 19:00. Oasis Ref #274750
07/23/10	1732	TLR - 5a	ICT RC reissued TLR-5A on FG. PC 101%. NNL responsibility notified. EES NNL - 18.4, SOCO NNL - 7.8, SPA NNL - 1.6, AECI NNL - 1.1, TVA NNL - 2.6.
07/23/10	1812	TA Notification	Requested ICT TA (Parker) to continue TLR avoidance for another 6 hours
07/23/10	1832	TLR - 5a	ICT RC reissued TLR-5A on FG. PC 97%. NNL responsibility notified. EES NNL - 18.4, SOCO NNL - 7.8, SPA NNL - 1.5, AECI NNL - 0.9, TVA NNL - 2.6.
07/23/10	1935	TLR - 5a	ICT RC reissued TLR-5A on FG. PC 102%. NNL responsibility notified. EES NNL - 17.5, SOCO NNL - 7.5, SPA NNL - 1.3, AECI NNL - 1.0, TVA NNL - 2.4.
07/23/10	2036	TLR - 5a	ICT RC reissued TLR-5A on FG. PC 103%. NNL responsibility notified. EES NNL - 24.1, SOCO NNL - 10.5, SPA NNL - 1.8, AECI NNL - 1.4, TVA NNL - 3.3
07/23/10	2137	TLR - 5a	ICT RC reissued TLR-5A on FG. PC 105%. NNL responsibility notified. EES NNL - 23.9, SOCO NNL - 10.7, SPA NNL - 1.8, AECI NNL - 1.1, TVA NNL - 3.4
07/23/10	2229	TLR - 1	ICT RC issued TLR-1 on FG effective 23:00. PC 90%. OASIS posting # 274750 updated.
07/23/10	2323	TLR - 0	ICT RC closed TLR on FG 1913. PC 78%. OASIS posting # 274750 closed. EES (Rigo) notified.