

ICTE TLR 5 Investigation Report
Flowgate 1972
(Webre – Willow Glen 500 KV for the loss of Big Cajun – Fancy Point 500 kV)
TLR Level 5: April 29, 2011
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 1972 on April 29, 2011. Flowgate 1972 is an Entergy flowgate. The TLR 5 was in effect from 1:55 PM until 7:30 PM on April 29, 2011. Projected post-contingent flows on the Webre – Willow Glen 500kV for the loss of Big Cajun – Fancy Point 500kV 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 1039 MVA. Flow on the Limiting Element was 711 MVA. Flow on the Contingent Element was 867 MVA. The LODF was approximately 85%. Post-contingent flow on the Limiting Element was approximately 1450 MVA.

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

TLRs levels, timing and relief requested amounts are shown on pages 4 and 5.

4. Transmission and generation outages or changes from prediction that may have contributed.

- There was an unplanned outage on the ICTE system associated with this flowgate.
- There were no abnormal load changes.
- There was 0 mw of non-firm service impacting the flowgate day of since the RC was in a TLR 5 event.

There was an unplanned breaker outage on the Willow Glen 500kv ring bus that impacted the TLR 5 event. Due to the outage on the Willow Glen 500kv ring bus, the rating on the Webre – Willow Glen 500kv line changed from 1732mva to 1039mva which created the need for the TLR 5 event.

5. Procedures implemented prior to hold/curtailment.

There were not enough non-firm transactions with greater than 5% TDF available for curtailment to alleviate the flowgate. The system was not re-dispatched to prevent curtailment of firm service. The ICT RC verifies with Entergy's Shift Supervisor before a TLR 5 event is called if there are any re-dispatch options available. The Entergy Shift Supervisor to-date has not offered any re-dispatch solutions to prevent a TLR 5 event.

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.

		Firm AFC available on WEBWG_CJFAN (MW)																						
AFC Initialization Summary Report		04/29 HB0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Timestamp																								
Prior to Day Ahead	4/27/11 18:47	1030	1030	1050	1058	1078	950	905	909	909	909	909	909	909	909	909	972	958	967	929	939	936	876	878
Day Ahead	4/28/11 11:03	1134	1099	1118	1123	1117	1085	1313	1309	1314	1314	1314	1370	1325	1325	1358	1379	1388	1367	1344	1344	1337	1419	1038

		Sum of impact of firm reservations and rfcalc baseflow on WEBWG_CJFAN (MW)																						
AFC Initialization Summary Report		04/29 HB0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Timestamp																								
Prior to Day Ahead	4/27/11 18:47	702	702	882	874	854	782	827	823	823	823	823	823	823	823	823	780	778	765	803	793	798	858	854
Day Ahead	4/28/11 11:03	598	633	616	609	615	647	419	423	418	418	418	362	407	407	374	353	344	365	388	388	385	313	694
Prior to Day Ahead - Day Ahead		104	69	66	65	39	135	408	400	405	405	405	461	416	416	440	407	432	400	415	405	401	542	159

TFC of WEBWVG_CJFAN
1732

	AFC Initialization Summary Report Timestamp	Average Firm AFC available on WEBWVG_CJFAN (MW)
Prior to Day Ahead	4/27/11 18:47	949
Day Ahead	4/28/11 11:03	1271
	Difference	322

	AFC Initialization Summary Report Timestamp	Ave. o f impact of firm reservations and rfcals base low on WEBWVG_CJFAN (MW)
Prior to Day Ahead	4/27/11 18:47	783
Day Ahead	4/28/11 11:03	461
	Difference	-322

	AFC Initialization Summary Report Timestamp (CDT)	04/29 HB0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
Prior to Day Ahead	4/27/11 18:47	1030	1030	1050	1058	1078	950	905	909	909	909	909	909	909	909	909	972	956	967	929	939	936	876	878	Firm
Day Ahead	4/28/11 11:03	1134	1099	1116	1123	1117	1085	1313	1309	1314	1314	1314	1370	1325	1325	1358	1379	1388	1367	1344	1344	1337	1419	1038	Firm
Operating Horizon	4/29/11 0:24	1714	936	951	961	949	911	888	880	865	892	979	859	865	830	888	907	908	903	916	905	871	903	964	Non-Firm
Operating Horizon	4/29/11 2:18			1082	1092	1081	1041	917	869	854	881	968	848	853	818	876	876	895	891	904	894	858	890	890	Non-Firm
Operating Horizon	4/29/11 2:21			1391	1134	1107	1061	938	891	877	904	992	873	879	844	903	923	923	918	931	920	884	915	976	Non-Firm
Operating Horizon	4/29/11 3:20			1380	1165	1107	973	926	912	940	1029	910	917	883	942	962	962	962	958	969	958	922	952	1010	Non-Firm
Operating Horizon	4/29/11 3:41			1380	1165	1107	973	926	912	940	1029	910	917	883	942	962	962	962	958	969	958	922	952	1010	Non-Firm
Operating Horizon	4/29/11 4:21				1411	1083	994	900	887	915	1003	884	890	856	916	934	933	928	940	930	893	922	982	Non-Firm	
Operating Horizon	4/29/11 5:20					1400	1411	1411	1411	949	977	1066	947	955	921	980	999	999	995	1006	995	958	986	1043	Non-Firm
Operating Horizon	4/29/11 7:12							1411	1411	1012	1102	1004	1013	981	1040	1058	1060	1054	1065	1053	1017	1044	1100	Non-Firm	
Operating Horizon	4/29/11 7:17							1411	1411	1411	1093	996	1005	972	972	1050	1052	1047	1057	1048	1012	1039	1095	Non-Firm	
Operating Horizon	4/29/11 8:18								1411	1411	1411	984	992	960	1019	1026	1054	1048	1056	1054	1018	1043	1098	Non-Firm	
Operating Horizon	4/29/11 9:18									1411	1411	1411	1002	950	1032	1036	1023	1015	1004	1013	975	971	1056	Non-Firm	
Operating Horizon	4/29/11 11:03										1380	1250	1136	1136	1225	1213	1206	1193	1201	1161	1160	1230	Non-Firm		
Operating Horizon	4/29/11 11:29										1380	1293	1411	1208	1216	1205	1197	1185	1193	1154	1153	1223	Non-Firm		
Operating Horizon	4/29/11 12:36											1352	1319	1411	1113	1091	1084	1073	1088	1033	1019	1113	Non-Firm		
Operating Horizon	4/29/11 13:28												1351	1354	1411	1027	1022	1013	1031	975	964	1064	Non-Firm		
Operating Horizon	4/29/11 14:28													1354	1411	1411	1029	1020	1038	983	972	1072	Non-Firm		
Operating Horizon	4/29/11 15:28														0	0	0	0	0	0	1227	1221	1121	Non-Firm	
Operating Horizon	4/29/11 16:25															0	0	0	0	0	840	844	941	Non-Firm	
Operating Horizon	4/29/11 17:28																0	0	0	0	1555	1555	1284	Non-Firm	
Operating Horizon	4/29/11 18:59																		0	0	1411	848	957	Non-Firm	
Operating Horizon	4/29/11 19:24																			0	1411	1411	954	Non-Firm	
Operating Horizon	4/29/11 20:24																				1411	1411	1411	Non-Firm	
Operating Horizon	4/29/11 21:23																					1411	1411	Non-Firm	
Operating Horizon	4/29/11 22:23																						1411	Non-Firm	

Indicates TLR Avoidance (Non-sale of Non-Firm)

12. Description of actions taken to avoid future hold/curtailments.

This TLR was caused by an unplanned breaker outage. The unplanned breaker outage caused a change in the rating on the monitored element. 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 had 731 MW of NNL, CLEC had 112 MW of NNL, LAGN had 343 MW of NNL, SME had 15 MW of NNL, SPA had 1 MW of NNL.

Event History

Issuing RC: ICTE
Flowgate: 1972 - Webre-Willow Glen 500kv ftto Big Cajun-Fancy 500kv
Event Begin: 2011-04-29 13:55
Event End: 2011-04-29 21:15
Event Duration: 8 Hours

TLR Level	TLR Date	TLR Confirm Time	Run Time	Requested Relief	Remaining Relief	Relief Provided	Total Cuts	
							Tags	MW
TLR Level 5B	04/29/2011 13:55	04/29/2011 14:08	04/29/2011 14:04:30	400.0	0.0	404.6	47	586
TLR Level 5A	04/29/2011 16:00	04/29/2011 15:31	04/29/2011 15:28:39	157.0	0.0	335.9	44	285
TLR Level 5A	04/29/2011 17:00	04/29/2011 16:30	04/29/2011 16:28:24	479.0	0.0	661.5	46	782
TLR Level 5A	04/29/2011 18:00	04/29/2011 17:31	04/29/2011 17:26:11	230.0	0.0	603.9	46	526
TLR Level 5A	04/29/2011 19:00	04/29/2011 18:30	04/29/2011 18:26:53	0.0	0.0	312.8	46	309
TLR Level 1	04/29/2011 19:30	04/29/2011 19:11	04/29/2011 19:10:50	0.0	0.0	0.0	0	0
TLR Level 0	04/29/2011 21:15	04/29/2011 21:03	04/29/2011 21:02:41	0.0	0.0	0.0	0	0

Event Summary

FILE SAVED AS: ICTE_1972_20110429_1255.htm

Incident: ICTE_1972_20110429_1255	Date: 04/29/2011	Reliability Coordinator: ICTE
Initial Conditions: N/A		
Flowgate: 1972 - Webre-Willow Glen 500kv ftto B...	Rating: 1039	LODF: 84.85%
TLR Direction: Normal		
Effective StartTime: 04/29/2011 13:55	Effective EndTime: 04/29/2011 21:15	TLR Duration: 7 Hours and 20 Minutes

TLR Actions

Confirm Time	Level	Effective Hour	Priority	Schedule						NIL Relief			Market Relief				Flow			TLR Action Comments	
				Total Tags Cut / Hold	IDC Cut MW	RC Cut Acknowledge MW	Relief MW	Hold MW	Relief MW	CA	IDC MW	RC Ackn MW	Type	Mkt	IDC MW	RC Ackn MW	Current	Post Cont.	Cont. Flow		
Apr 29 14:08	TLR 5B	CURRENT	1-NS	2 / 0	132	71.9	132	71.9	0	0.0	CLEC	16.0	16.0	ED-2	SWPP	0.0	0.0	711	1446	887	N/A
			2-NH	2 / 0	157	39.8	157	39.8	0	0.0	EES	112.0	112.0	ED-5	SWPP	17.7	17.7				
			6-NN	1 / 0	75	4.2	75	4.2	0	0.0	LAGN	43.0	43.0	FIRM-7	SWPP	0.0	0.0				
			7-F	43 / 0	222	100.7	196	85.6	0	0.0	SME	2.0	2.0			17.7	17.7				
			Total	48 / 0	586	213.6	560	198.5	0	0.0	Total	173.0	173.0	Total		17.7	17.7				
Apr 29 15:31	TLR 5A	NEXT	1-NS	9 / 0	130	77.4	130	77.4	0	0.0	NONE			NONE			557	1239	804	N/A	
			2-NH	2 / 0	104	8.2	104	8.2	0	0.0											
			6-NN	4 / 0	135	11.8	135	11.8	0	0.0											
			7-F	25 / 0	191	97.4	155	72.4	0	0.0											
			Total	44 / 0	586	184.8	534	169.8	0	0.0											
Apr 29 15:30	TLR 5A	NEXT	1-NS	1 / 0	31	18.4	31	18.4	0	0.0	CLEC	17.0	17.0	ED-2	SWPP	0.0	0.0	599	1246	763	N/A
			7-F	43 / 0	254	113.5	254	113.5	0	0.0	EES	108.0	108.0	ED-5	SWPP	23.0	23.0				
											LAGN	51.0	51.0	FIRM-7	SWPP	5.1	5.1				
											SME	2.0	2.0	FIRM-CREDIT	SWPP	0.0	0.0				
			Total	44 / 0	285	131.9	285	131.9	0	0.0	Total	176.0	176.0	Total		28.1	28.1				
Apr 29 16:30	TLR 5A	NEXT	1-NS	1 / 0	31	18.5	31	18.5	0	0.0	CLEC	34.0	34.0	ED-2	SWPP	0.0	0.0	358	903	643	N/A
			2-NH	2 / 0	284	27.4	284	27.4	0	0.0	EES	219.0	219.0	ED-5	SWPP	23.0	23.0				
			7-F	43 / 0	497	214.9	467	214.9	0	0.0	LAGN	109.0	109.0	FIRM-7	SWPP	10.9	10.9				
											SME	4.0	4.0	FIRM-CREDIT	SWPP	0.0	0.0				
			Total	46 / 0	782	260.7	782	260.7	0	0.0	Total	366.0	366.0	Total		33.9	33.9				
Apr 29 17:31	TLR 5A	NEXT	1-NS	1 / 0	31	18.5	31	18.5	0	0.0	CLEC	31.0	31.0	ED-2	SWPP	0.0	0.0	336	905	671	N/A
			2-NH	1 / 0	51	13.5	51	13.5	0	0.0	EES	203.0	203.0	ED-5	SWPP	23.0	23.0				
			7-F	44 / 0	444	203.3	444	203.3	0	0.0	LAGN	95.0	95.0	FIRM-7	SWPP	10.2	10.2				
											SME	4.0	4.0	FIRM-CREDIT	SWPP	0.0	0.0				
			Total	46 / 0	526	235.2	526	235.2	0	0.0	Total	336.0	336.0	Total		33.2	33.2				
Apr 29 18:30	TLR 5A	NEXT	1-NS	1 / 0	31	18.4	31	18.4	0	0.0	CLEC	13.0	13.0	ED-2	SWPP	0.0	0.0	382	980	705	N/A
			2-NH	1 / 0	51	13.5	51	13.5	0	0.0	EES	81.0	81.0	ED-5	SWPP	27.5	27.5				
			7-F	44 / 0	227	105.3	227	105.3	0	0.0	LAGN	42.0	42.0	FIRM-7	SWPP	0.0	0.0				
											SME	2.0	2.0	FIRM-CREDIT	SWPP	0.0	0.0				
			Total	46 / 0	309	137.2	309	137.2	0	0.0	Total	148.0	148.0	Total		27.5	27.5				
Apr 29 19:11	TLR 1	CURRENT		NONE						NONE			NONE								

TLR Schedule Totals

Priority	Schedule			
	Total Tags Cut / Hold	IDC Cut MV	RC Cut Acknowledge MV	Hold MV
0	0	0	0	0
1	15	388	388	0
2	8	847	847	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	5	210	210	0
7	248	1805	1753	0
Total	274	3048	2996	0

TLR>NNL Totals

CA	NNL Relief	
	IDC MV	RC Ackn MV
CLEC	111.0	112.0
EES	731.0	731.0
LAGN	343.0	343.0
SME	14.0	15.0
SPA	0.0	1.0
Total	1199.0	1202.0

TLR Market Flow Totals

Market	Type	Market Relief	
		IDC MV	RC Ackn MV
SWPP	ED-2	0.0	0.0
	ED-8	114.2	114.2
	FIRM-7	26.2	26.2
Total for SWPP		140.5	140.4
Total		140.5	140.4

Date	Time	Category	Issue
04/29/11	1354	ICP/LAP Assessment	assessed as ICP PC 139%.
04/29/11	1408	TA Notification	Talked to ICT Tariff to 0 out AFC's from 1400 through 2000 for six hours.
04/29/11	1408	TLR - Redispatch Question	Talked to SS and asked if they had any known redispatch option that are available to the transmission customer that will mitigate the loading on the Constarined Facilities.
04/29/11	1408	No Internal NonFirm Tags	
04/29/11	1408	TLR - 5b Initial	issued TLR 5b PC 139%. Notified EES, SOCO, CLECO, LAGN, and SPA. EES>NNL=111.7, SOCO>NNL=2.1, CLECO>NNL=15.9, LAGN=43.4, SPA=.2. REF. 417269
04/29/11	1528	TLR - 5a Initial	issued TLR 5a PC 119%.>NNL EES=106, SOCO=2.1, CLECO=16.7, LAGN=50.9, SPA=.2
04/29/11	1531	TA Notification	Talked to ICT TA just to inform him we went from a 5b to a 5a. AFC's still 0 from 1400 through 2000.
04/29/11	1531	No Internal NonFirm Tags	
04/29/11	1630	No Internal NonFirm Tags	
04/29/11	1630	TLR - 5a Reissue	reissued TLR 5a PC 120%.>NNL EES=218.6, SOCO=4.5, CLECO=34.5, LAGN=108.9, SPA=.5.
04/29/11	1731	No Internal NonFirm	

		Tags	
04/29/11	1731	TLR - 5a Reissue	reissued TLR 5a PC 87%, NNL EES 202.6, SOCO 4.0, CLEC 30.6, LAGN 97.9, SPA .4 RC at SOCO RC stated that they were going to hold at 4.5 to help.
04/29/11	1830	TLR - 5a Reissue	reissued TLR 5a PC 87% NNL EES 91.1, SOCO 1.9, CLEC 13.2, LAGN 41.7, SPA 0.2
04/29/11	1830	No Internal NonFirm Tags	
04/29/11	1911	TLR - 1	Ended TLR 5A and reduced to TLR 1 PC 56% REF#417269
04/29/11	2103	TLR - 0	Ended TLR PC77%