

ICTE TLR 5 Investigation Report
Flowgate 1911
(Hartburg-Inland Orange 230 kV ftlo Hartburg-Cypress 500 kV)
TLR Level 5: June 18, 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 1911 on June 18, 2011. Flowgate 1911 is an Entergy flowgate. The TLR 5 was in effect from 12:37 PM until 9:28 PM on June 18, 2011. Projected post-contingent flows on the Hartburg-Inland Orange 230 kV ftlo Hartburg-Cypress 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 715 MVA. Flow on the Limiting Element was 363 MVA. Flow on the Contingent Element was 856 MVA. The LODF was approximately 44%. Post-contingent flow on the Limiting Element was approximately 740 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 outage on the Lewis Creek 2 and Sabine 3 generators that impacted the TLR 5 event. The decrement generators in the area of the constraint have an average generator shift factor of -8% while increment generators in the area have an average generator shift factor of 21%. Due to regulating and economic reasons decrement generation in the area was operating at or near pmax while increment generation in the area was operating at a lower level.

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.

Excluded Reliability Purchases SPA_WRGSRT0517967_EES and SPA_WRGSRT0518019_EES.

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, 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.

		Firm AFC available on HBIN_HBCYP (MW)																								
		AFC Initialization Summary Report Timestamp	06/18 HBO	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Prior to Day Ahead	6/16/11 18:58		294	290	317	340	351	355	368	389	287	197	189	156	159	157	137	127	133	148	159	182	186	255	305	294
Day Ahead	6/17/11 11:18		268	265	293	317	328	333	346	366	261	165	150	117	112	109	86	75	80	95	109	135	141	210	265	263

		Sum of impact of firm reservations and rfoale baseflow on HBIN_HBCYP (MW)																								
		AFC Initialization Summary Report Timestamp	06/18 HBO	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Prior to Day Ahead	6/16/11 18:58		401	395	368	345	334	330	317	298	398	488	496	529	528	528	548	558	552	537	528	503	499	430	380	391
Day Ahead	6/17/11 11:18		417	420	392	368	357	352	339	319	424	520	535	569	573	576	599	610	605	590	576	550	544	475	420	422

TFC of HBIN_HBCYP
685

		AFC Initialization Summary Report Timestamp	Average Firm AFC available on HBIN_HBCYP (MW)
Prior to Day Ahead	6/16/11 18:58		240
Day Ahead	6/17/11 11:18		204
		Difference	-37

		AFC Initialization Summary Report Timestamp	Ave. of impact of firm reservations and rfoale baseflow on HBIN_HBCYP (MW)
Prior to Day Ahead	6/16/11 18:58		446
Day Ahead	6/17/11 11:18		481
		Difference	37

		AFC available on HBIN_HBCYP (MW)																								
AFC Initialization Summary Report		06/18																								
Timestamp (CDT)		HBO	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
Prior to Day Ahead	6/16/11 18:58	284	290	317	340	351	355	368	369	287	197	189	156	159	157	137	127	133	148	159	182	186	255	305	294	Firm
Day Ahead	6/17/11 11:18	268	265	293	317	328	333	346	366	261	165	150	117	112	109	86	75	80	95	109	135	141	210	265	263	Firm
Operating Horizon	6/18/11 0:23	478	370	361	372	372	363	365	374	306	234	190	144	109	106	100	96	94	106	113	146	177	233	256	311	Non-Firm
Operating Horizon	6/18/11 2:36			391	356	360	343	345	355	285	219	176	130	95	92	85	82	80	91	99	132	163	220	243	296	Non-Firm
Operating Horizon	6/18/11 3:23				419	344	351	333	342	271	206	162	115	77	73	66	63	61	72	80	114	145	203	226	279	Non-Firm
Operating Horizon	6/18/11 3:41				419	344	351	333	342	271	206	162	114	76	72	65	62	60	71	79	113	145	203	226	279	Non-Firm
Operating Horizon	6/18/11 4:21					419	362	365	351	283	219	175	130	93	89	83	79	78	88	96	129	160	218	240	293	Non-Firm
Operating Horizon	6/18/11 5:21						419	348	359	287	223	179	133	96	92	86	82	80	91	99	132	164	221	244	296	Non-Firm
Operating Horizon	6/18/11 6:58							419	308	260	169	120	73	35	31	24	21	19	30	39	73	105	164	189	241	Non-Firm
Operating Horizon	6/18/11 7:30								419	249	215	129	77	37	34	28	25	23	34	42	75	109	167	188	240	Non-Firm
Operating Horizon	6/18/11 8:19									419	224	194	80	42	39	34	31	30	41	48	81	114	170	195	248	Non-Firm
Operating Horizon	6/18/11 9:18										419	182	163	37	34	28	26	24	35	43	73	108	163	182	231	Non-Firm
Operating Horizon	6/18/11 11:16											419	98	146	61	57	55	66	77	110	142	198	186	245	Non-Firm	
Operating Horizon	6/18/11 12:36												419	78	74	-7	-9	2	14	47	79	145	136	194	Non-Firm	
Operating Horizon	6/18/11 13:32														0	0	0	0	0	143	181	244	229	290	Non-Firm	
Operating Horizon	6/18/11 14:30															0	0	0	0	124	163	226	215	278	Non-Firm	
Operating Horizon	6/18/11 15:30																0	0	0	28	66	129	115	175	Non-Firm	
Operating Horizon	6/18/11 16:28																	0	0	0	116	151	212	197	257	Non-Firm
Operating Horizon	6/18/11 17:28																		0	0	192	154	216	201	262	Non-Firm
Operating Horizon	6/18/11 19:06																				0	0	0	0	0	Non-Firm
Operating Horizon	6/18/11 19:25																				0	0	0	0	0	Non-Firm
Operating Horizon	6/18/11 20:25																				0	0	0	0	0	Non-Firm
Operating Horizon	6/18/11 21:25																				0	0	0	0	0	Non-Firm
Operating Horizon	6/18/11 22:25																				0	0	0	0	0	Non-Firm
Operating Horizon	6/18/11 23:24																								418	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 a combination of generation outage, 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 had 655 MW of NNL and LAGN had 43 MW of NNL.

Jun 18 22:52	TLR 1	CURRENT	NONE	NONE	NONE	280	678	659	N/A
Jun 18 23:35	TLR 0	CURRENT	NONE	NONE	NONE	213	453	531	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	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	10	2775	2775	0
7	226	1659	1659	0
Total	236	4434	4434	0

TLR>NNL Totals

CA	NNL Relief	
	IDC MV	RC Ackn MV
EES	655.0	655.0
LAGN	42.0	43.0
Total	697.0	698.0

Date	Time	Category	'Detail'
06/18/11	1211	Flow Gate Assessment	Assessed as ICP, PC 104%
06/18/11	1237	TLR - Redispatch Question	Requested the transmission operator to identify any known redispatch options that are available to the transmission customer that will mitigate the loading on the Constrained Facilities. SS at EES said that there were none. Also, asked if there are any conditional firm schedules for the constrained flowgate. SS at EES said that there were none.
06/18/11	1237	TA Notification	Suspended AFCs till 19:00
06/18/11	1237	TLR - 5a Initial	PC 103%, Suspended AFCs till 19:00,>NNL: EES 62.1, LAGN 4.2, Ref 443691
06/18/11	1237	No Internal NonFirm Tags	
06/18/11	1328	TLR - 5a Reissue	PC 96%, Suspended AFCs till 19:00,>NNL: EES 76.9, LAGN 5.2
06/18/11	1328	No Internal NonFirm Tags	
06/18/11	1433	TLR - 5a Reissue	PC 97%, Suspended AFCs till 19:00,>NNL: EES 77.8, LAGN 5.2
06/18/11	1433	No Internal NonFirm Tags	
06/18/11	1531	No Internal NonFirm Tags	
06/18/11	1531	TLR - 5a Reissue	PC 93%, Suspended AFCs till 19:00,>NNL: EES 75.7, LAGN 5.0
06/18/11	1630	No Internal NonFirm Tags	
06/18/11	1630	TLR - 5a Reissue	PC 90%, Suspended AFCs till 19:00,>NNL: EES 74.4, LAGN 4.9
06/18/11	1730	TLR - 5a Reissue	PC 96%. EES>NNL 73.9, LAGN>NNL 4.8
06/18/11	1805	No Internal NonFirm Tags	
06/18/11	1830	TLR - 5a Reissue	
06/18/11	1852	No Internal NonFirm Tags	

06/18/11	1926	TLR - 5a Reissue	
06/18/11	1927	No Internal NonFirm Tags	
06/18/11	2028	TLR - 5a Reissue	
06/18/11	2028	No Internal NonFirm Tags	
06/18/11	2128	TLR - 5a Reissue	
06/18/11	2129	No Internal NonFirm Tags	
06/18/11	2232	TLR - 1	PC 76%. OASIS Ref# 443691
06/18/11	2253	TA Notification	Restored AFCs as of 2300
06/18/11	2335	TLR - 0	PC 62% OASIS Ref# 443691
06/18/11	2336	TA Notification	Notified to restore AFCs