

**ICTE TLR 5 Investigation Report**  
**Flowgate 16470**  
**(Melbourne - Calico Rock 161kV for the loss of ISES - Dell 500kV)**  
**TLR Level 5: January 12, 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 16470 on January 12, 2011. Flowgate 16470 is an Entergy flowgate. The TLR 5 was in effect from 9:10 PM on January 12, 2011 until 4:26 AM on January 13, 2011. Projected post-contingent flows on the Melbourne - Calico Rock 161kV line for the loss of the ISES - Dell 500kV 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 148 MVA. Flow on the Limiting Element was 108 MVA. Flow on the Contingent Element was 1130 MVA. The LODF was approximately 5.2%. Post-contingent flow on the Limiting Element was approximately 166 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 on the ICTE system associated with this flowgate.
- There were high loads on the system due to low temperatures.
- There was 0 mw of non-firm service impacting the flowgate day of since the RC was in a TLR 5 event.

There were no unplanned/planned transmission outages that significantly impacted the TLR 5 event. Do to extreme low temperatures and high loading in the north, the flowgate experienced higher than normal flows. The constraint is a south to north flowgate. Units in the Entergy BA (including internal IPPs and QFs) are all south of the constraint and have an average decrement GSF of 6%. Units north of the constraint are external to the Entergy BA and have an average GSF of +15%. There were external units with increment GSF north of the constraint that were unavailable due to restrictions.

**5. Procedures implemented prior to hold/curtailment.**

There were no 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.



		AFC available on SAGMEL_ISDEL (MW)																			
AFC initialization Summary Report Timestamp (CST)		01/12 HB0	11	12	13	14	15	16	17	18	19	20	21	22	23	01/13 HB0	1	2	3	4	
Day Ahead	1/12/11 10:55															-17	-21	-22	-21	-21	Firm
Operating Horizon	1/12/11 11:05	21	21	26	27	25	21	24	24	20	22	19	11	30							Non-Firm
Operating Horizon	1/12/11 11:16	-3	19	22	22	22	16	20	21	17	19	17	8	18							Non-Firm
Operating Horizon	1/12/11 12:36		-3	148	148	31	25	28	28	24	26	22	17	22	32	32	31	31	35		Non-Firm
Operating Horizon	1/12/11 13:25			0	0	0	0	0	0	18	18	17	13	23	21	19	20	21	24		Non-Firm
Operating Horizon	1/12/11 14:25				122	148	148	20	22	18	20	17	13	20	20	18	19	19	24		Non-Firm
Operating Horizon	1/12/11 15:25					44	24	26	19	15	14	14	10	18	17	15	16	16	23		Non-Firm
Operating Horizon	1/12/11 16:24						39	39	29	20	21	20	16	24	23	23	24	22	29		Non-Firm
Operating Horizon	1/12/11 17:23							39	31	23	22	18	12	18	20	17	19	19	23		Non-Firm
Operating Horizon	1/12/11 18:42								3	24	26	23	17	22	21	18	19	20	24		Non-Firm
Operating Horizon	1/12/11 19:24									-3	25	21	13	18	22	19	21	21	26		Non-Firm
Operating Horizon	1/12/11 20:22										-8	13	8	11	16	14	15	15	21		Non-Firm
Operating Horizon	1/12/11 21:21											0	0	0	0	0	0	22	22		Non-Firm
Operating Horizon	1/12/11 22:21												0	0	0	0	0	26	31		Non-Firm
Operating Horizon	1/12/11 23:22													0	0	0	0	28	33		Non-Firm
Operating Horizon	1/13/11 0:21														0	0	0	35	35		Non-Firm
Operating Horizon	1/13/11 1:19															0	0	48	48		Non-Firm
Operating Horizon	1/13/11 2:42																0	48	48		Non-Firm
Operating Horizon	1/13/11 3:17																	48	46		Non-Firm
Operating Horizon	1/13/11 4:17																	48	48		Non-Firm

**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 had 1022 MW of NNL.

Event History								
Issuing RC:	ICTE							
Flowgate:	16470 - Melbourne-Calico Rock 161kV ftlo ISES-Dell 500kV							
Event Begin:	2011-01-12 22:20							
Event End:	2011-01-13 08:00							
Event Duration:	10 Hours							
TLR Level	TLR Date	TLR Confirm Time	Run Time	Requested Relief	Remaining Relief	Relief Provided	Total Cuts	
							Tags	MW
<a href="#">TLR Level 5B</a>	01/12/2011 22:20	01/12/2011 22:10	01/12/2011 22:08:43	25.0	0.0	25.1	5	124
<a href="#">TLR Level 5A</a>	01/13/2011 00:00	01/12/2011 23:31	01/12/2011 23:28:22	24.0	0.0	42.4	5	248
<a href="#">TLR Level 5A</a>	01/13/2011 01:00	01/13/2011 00:28	01/13/2011 00:26:05	0.0	0.0	25.2	4	128
<a href="#">TLR Level 5A</a>	01/13/2011 02:00	01/13/2011 01:31	01/13/2011 01:28:44	0.0	0.0	17.4	4	86
<a href="#">TLR Level 5A</a>	01/13/2011 03:00	01/13/2011 02:28	01/13/2011 02:27:21	0.0	0.0	7.8	4	39
<a href="#">TLR Level 5A</a>	01/13/2011 04:00	01/13/2011 03:26	01/13/2011 03:25:58	6.0	0.0	11.8	4	59
<a href="#">TLR Level 5A</a>	01/13/2011 05:00	01/13/2011 04:27	01/13/2011 04:26:06	0.0	0.0	5.9	5	31
<a href="#">TLR Level 5A</a>	01/13/2011 06:00	01/13/2011 05:29	01/13/2011 05:26:02	4.0	0.0	8.4	5	70
<a href="#">TLR Level 1</a>	01/13/2011 06:45	01/13/2011 06:26	01/13/2011 06:26:17	0.0	0.0	0.0	0	0
<a href="#">TLR Level 0</a>	01/13/2011 08:00	01/13/2011 07:49	01/13/2011 07:49:34	0.0	0.0	0.0	0	0

### Event Summary

FILE SAVED AS: ICTE\_16470\_20110112\_2120.htm

Incident: ICTE_16470_20110112_2120	Date: 01/12/2011	Reliability Coordinator: ICTE
Initial Conditions: N/A		
Flowgate: 16470 - Melbourne-Calico Rock 161kV ft..	Rating: 148	LODF: 5.33%
TLR Direction: Normal		
Effective StartTime: 01/12/2011 22:20	Effective EndTime: 01/13/2011 08:00	TLR Duration: 9 Hours and 40 Minutes

### TLR Actions

Confirm Time	Level	Effective Hour	Priority	Schedule						NNL Relief			Market Relief				Flow			TLR Action Comments	
				Total Tags Cut / Hold	IDC Cut MW	RC Cut Acknowledge MW	Hold MW	CA	IDC MW	RC Ackn MW	Type	Mkt	IDC MW	RC Ackn MW	Current	Post Cont.	Cont. Flow				
Jan 12 22:10	TLR 5B	CURRENT	7-F	5 / 0	124	6.9	124	6.9	0	0.0	EES	18.0	18.0	NONE				108	168	1130	N/A
		TOTAL	5 / 0	124	6.9	124	6.9	0	0.0	EES	18.0	18.0	NONE								
Jan 12 23:31	TLR 5A	NEXT	7-F	5 / 0	167	9.3	167	9.3	0	0.0	NONE			NONE							
		TOTAL	5 / 0	124	9.3	167	9.3	0	0.0	NONE			NONE								
Jan 13 00:28	TLR 5A	NEXT	7-F	4 / 0	128	6.9	128	6.9	0	0.0	EES	18.0	18.0	NONE				79	124	849	N/A
		TOTAL	4 / 0	128	6.9	128	6.9	0	0.0	EES	18.0	18.0	NONE								
Jan 13 01:31	TLR 5A	NEXT	7-F	4 / 0	86	4.6	86	4.6	0	0.0	EES	13.0	13.0	NONE				89	135	884	N/A
		TOTAL	4 / 0	86	4.6	86	4.6	0	0.0	EES	13.0	13.0	NONE								
Jan 13 02:28	TLR 5A	NEXT	7-F	4 / 0	39	2.1	39	2.1	0	0.0	EES	6.0	6.0	NONE				84	131	893	N/A
		TOTAL	4 / 0	39	2.1	39	2.1	0	0.0	EES	6.0	6.0	NONE								
Jan 13 03:28	TLR 5A	NEXT	7-F	4 / 0	59	3.2	59	3.2	0	0.0	EES	9.0	9.0	NONE				95	142	898	N/A
		TOTAL	4 / 0	59	3.2	59	3.2	0	0.0	EES	9.0	9.0	NONE								
Jan 13 04:27	TLR 5A	NEXT	7-F	5 / 0	31	1.7	31	1.7	0	0.0	EES	4.0	4.0	NONE				84	133	898	N/A
		TOTAL	5 / 0	31	1.7	31	1.7	0	0.0	EES	4.0	4.0	NONE								
Jan 13 05:29	TLR 5A	NEXT	7-F	5 / 0	70	3.8	70	3.8	0	0.0	EES	5.0	5.0	NONE				71	117	871	N/A
		TOTAL	5 / 0	70	3.8	70	3.8	0	0.0	EES	5.0	5.0	NONE								
Jan 13 06:28	TLR 1	CURRENT			NONE						NONE			NONE				29	74	851	N/A
Jan 13 07:49	TLR 0	CURRENT			NONE						NONE			NONE				39	81	801	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	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	0	0	0	0
5	0	0	0	0	0
6	0	0	0	0	0
7	41	952	952	0	
<b>Total</b>	<b>41</b>	<b>952</b>	<b>952</b>	<b>0</b>	

### TLR NNL Totals

CA	NNL Relief	
	IDC MW	RC Ackn MW
EES	102.0	102.0
<b>Total</b>	<b>102.0</b>	<b>102.0</b>

Date	Time	Category	'Detail'
01/12/11	1802	ICP/LAP Assessment	Assessed as ICP. PC 96% Notified EES (Alan)
01/12/11	2108	TLR - 5b Initial	Issued TLR 5B. PC 112% Notified EES (Alan) EES NNL 18.3  OASIS Ref# 364895  EES (Derwood) - No known redispatch options available.

			Relssued TLR 5A. PC 108% Notified EES (Alan) EES NNL 29.1
01/12/11	2228	TLR - 5a Reissue	OASIS Ref# 364895
01/12/11	2326	TLR - 5a Reissue	Relssued TLR 5A. PC 83% Notified EES (Alan) EES NNL 18.3
01/13/11	0028	TLR - 5a Reissue	Relssued TLR 5A. PC 90% Notified EES (Alan) EES NNL 12.7
01/13/11	0127	TLR - 5a Reissue	Relssued TLR 5A. PC 88% Notified EES (Alan) EES NNL 5.7
01/13/11	0225	TLR - 5a Reissue	Relssued TLR 5A. PC 96% Notified EES (Alan) EES NNL 8.7
01/13/11	0326	TLR - 5a Reissue	Relssued TLR 5A. PC 89% Notified EES (Alan) EES NNL 4.2
01/13/11	0426	TLR - 5a Reissue	Relssued TLR 5A. PC 78% Notified EES (Alan) EES NNL 4.6
01/13/11	0526	TLR - 1	Issued TLR 1 to end TLR 5a PC 49% EES notified REF# 364895 updated
01/13/11	0650	TLR - 0	Issued TLR 0 PC 54% ended REF# 364895