

**SPP TLR 5 Investigation Report
Flowgate 15337
(Kress – Hale Co. 115kV for loss of Swisher – Tuco 230kV)
(TEMPORARY07)
TLR Level 5: December 7, 2008
Report Issued: January 12, 2008**

1. Description of purpose/cause of hold/curtailment.

This report is submitted in accordance with the NERC Transmission Loading Relief Investigation Procedure for the Level 5 TLR event that occurred on Flowgate 15337 on December 7, 2008. Flowgate 15337 is an SPP flowgate. The Level 5 TLR was in effect from 14:00 until 17:00 CST on December 7, 2008. Projected post-contingent flows on the Kress – Hale Co. 115kV line exceeded the SOL. This flowgate was created in response to the request from the balancing authority due to thermal loading. The rating is based on the limit within the substation.

2. Facility/flowgate limitations and flows at the time the TLR was initiated.

At the time the Level 5A TLR was issued, the Limiting Element was rated at 106 MVA. Flow on the Limiting Element was 52 MVA. Flow on the Contingent Element was 158 MVA. The LODF was approximately 36%. Post-contingent flow on the Limiting Element was approximately 108 MVA.

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

TLRs levels, timing and relief requested amounts are shown in the Event History and NERC TLR Log on pages 3-5.

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

There were no unplanned outages that contributed to this TLR.

5. Procedures implemented prior to hold/curtailment.

There were no non-firm transactions that impacted the flowgate by more than 5%. The TLR was escalated to a Level 5 in order to curtail firm transactions and firm market flow.

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 SPP Reliability Coordinators logged information describing the actions taken at each issuance of the TLR, see page 6. Times in the RC Log are CST.

9. Flowgate limitations as identified by security analysis processes conducted by the Reliability Authority for the day prior to the TLR event.

The next day process did not indicate an issue with this flowgate based upon the conditions at the time of the daily peak.

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 SPP Reliability Coordinator was monitoring their state estimator, RTCA and RTLODF applications for current flowgate loading and other potential issues during this time. eDNA data historian recorded all line flows before, during and after the Level 5 TLR event, see page 7.

11. ATC limitations before, during, and after the TLR event.

SPP Tariff Administration grants transmission service using an AFC process. This process evaluates each transmission request on a case by case basis. SPP Tariff Administration was not granting any transmission requests that impacted the congested flowgate by 3 % or greater at the time of the Level 5 TLR.

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

This TLR was caused by a combination of generation patterns, load, and system flows coupled with a facility derating. The facility has been in TLR frequently since the derate in October. Loading sometimes requires escalating to a Level 5 TLR in order to obtain sufficient relief to reduce overloads. No plans currently exist for upgrading the facility.

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 are archived in the IDC. These screen shots have not been included to reduce the size of this report.

14. Re-dispatch actions taken.

SPP EIS Market redispatch was implemented during the entire TLR event. Firm and non-firm Market Flow were reduced on the flowgate as reported in the TLR Event History and NERC TLR Log on pages 3-5.

TLR Event History

15337 - Temporary 07 Kress - Hale Co. 115 kV ftlo Swisher - Tuco 230 kV

Status	TLR Level	TLR Date (CST)	TLR Confirm Time (CST)	Run Time (CST)	Requested Relief	Remaining Relief	Relief Provided	Total Cuts	
								Tags	MW
SUPERSEDED	3B	12/07/2008 12:25	12/07/2008 12:15	12/07/2008 12:14:47	10.0	10.0	0.0	0	0
SUPERSEDED	3A	12/07/2008 14:00	12/07/2008 13:26	12/07/2008 13:25:56	0.0	0.0	0.0	0	0
SUPERSEDED	5A	12/07/2008 14:00	12/07/2008 13:38	12/07/2008 13:38:21	0.0	0.0	0.0	0	0
SUPERSEDED	5A	12/07/2008 15:00	12/07/2008 14:28	12/07/2008 14:28:11	0.0	0.0	0.0	0	0
SUPERSEDED	5A	12/07/2008 16:00	12/07/2008 15:26	12/07/2008 15:25:44	0.0	0.0	0.0	0	0
SUPERSEDED	3A	12/07/2008 17:00	12/07/2008 16:26	12/07/2008 16:26:10	0.0	0.0	0.0	0	0
SUPERSEDED	3A	12/07/2008 18:00	12/07/2008 17:26	12/07/2008 17:26:01	0.0	0.0	0.0	0	0
SUPERSEDED	3A	12/07/2008 19:00	12/07/2008 18:25	12/07/2008 18:25:43	0.0	0.0	0.0	0	0
TERMINATED	0	12/07/2008 19:20	12/07/2008 19:06	12/07/2008 19:06:10	0.0	0.0	0.0	0	0

01/12/2009 09:02:48 (CST)

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Dec 07 18:25	TLR 3A	NEXT	NONE	NONE	ED-2 ED-6 FIRM-7 Total	SWPP SWPP SWPP	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	30	70	115	N/A
Dec 07 19:06	TLR 0	CURRENT	NONE	NONE	NONE				26	65	111	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
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	0	0	0	0
7	0	0	0	0
Total	0	0	0	0

TLR Market Flow Totals

Market	Type	Market Relief	
		IDC MW	RC Ackn MW
SWPP	ED-2	0.0	0.0
	ED-6	0.0	0.0
	FIRM-7	0.0	0.0
Total for SWPP		0.0	0.0
Total		0.0	0.0

	A	B	C	D
1	Reliability Log for December, 7			2008
2	Time	Initials	Comments	
3				
6	0027	LWB	Re-issued TLR Level 3A on Temp 7 Kress-Hale Co. 115kv flo Swisher-Tuco 230 kv Flgt. 15337.	
8	0126	LWB	Re-issued TLR Level 3A on Temp 7 Kress-Hale Co. 115kv flo Swisher-Tuco 230 kv Flgt. 15337.	
9	0226	LWB	Re-issued TLR Level 3A on Temp 7 Kress-Hale Co. 115kv flo Swisher-Tuco 230 kv Flgt. 15337.	
10	0326	LWB	Re-issued TLR Level 3A on Temp 7 Kress-Hale Co. 115kv flo Swisher-Tuco 230 kv Flgt. 15337.	
11	0425	LWB	Re-issued TLR Level 3A on Temp 7 Kress-Hale Co. 115kv flo Swisher-Tuco 230 kv Flgt. 15337.	
12	0525	LWB	Re-issued TLR Level 3A on Temp 7 Kress-Hale Co. 115kv flo Swisher-Tuco 230 kv Flgt. 15337.	
14	0626	AH	Re-issued TLR Level 3A on Temp 7 Kress-Hale Co. 115kv flo Swisher-Tuco 230 kv Flgt. 15337.	
15	0740	AH	Re-issued TLR Level 3A on Temp 7 Kress-Hale Co. 115kv flo Swisher-Tuco 230 kv Flgt. 15337.	
16	0828	AH	Re-issued TLR Level 3A on Temp 7 Kress-Hale Co. 115kv flo Swisher-Tuco 230 kv Flgt. 15337.	
17	0928	AH	Issued TLR Level 0 on Temp 7 Kress-Hale Co. 115kv flo Swisher-Tuco 230 kv Flgt. 15337.	
18	1214	AH	Issued TLR Level 3B on Temp 7 Kress-Hale Co. 115kv flo Swisher-Tuco 230 kv Flgt. 15337.	
19	1326	AH	Issued TLR Level 5A on Temp 7 Kress-Hale Co. 115kv flo Swisher-Tuco 230 kv Flgt. 15337.Feasability	
20	1338	AH	Issued TLR Level 5A on Temp 7 Kress-Hale Co. 115kv flo Swisher-Tuco 230 kv Flgt. 15337.Feasability	
21	1428	AH	Issued TLR Level 5A on Temp 7 Kress-Hale Co. 115kv flo Swisher-Tuco 230 kv Flgt. 15337.Feasability	
22	1526	AH	Issued TLR Level 5A on Temp 7 Kress-Hale Co. 115kv flo Swisher-Tuco 230 kv Flgt. 15337.Feasability	
23	1626	AH	Issued TLR Level 3A on Temp 7 Kress-Hale Co. 115kv flo Swisher-Tuco 230 kv Flgt. 15337.	
24	1726	AH	Re-issued TLR Level 3A on Temp 7 Kress-Hale Co. 115kv flo Swisher-Tuco 230 kv Flgt. 15337.	
26	1825	RGH	Re-issued TLR Level 3A on Temp 7 Kress-Hale Co. 115kv flo Swisher-Tuco 230 kv Flgt. 15337.	
27	1906	RGH	Re-issued TLR Level 0 on Temp 7 Kress-Hale Co. 115kv flo Swisher-Tuco 230 kv Flgt. 15337.	
29				
30				

15337 12-07-08

