

SPP TLR 5 Investigation Report
Flowgate 17027
(Temp 35: Hereford - Friona (ftlo) Tolk - Roosevelt 230kV Ckt 2)
TLR Level 5: April 4, 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 Level 5 TLR event that occurred on Flowgate 17027 on April 4, 2011. Flowgate 17027 is an SPP flowgate. The Level 5 TLR was in effect from 20:00 until 00:40 CST on April 5, 2011. Projected post-contingent flows on the Temp 35: Hereford - Friona (ftlo) Tolk - Roosevelt 230kV Ckt 2 line did not exceed the SOL.

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 96 MVA. Flow on the Limiting Element was 39 MVA. Flow on the Contingent Element was 189 MVA. The LODF was approximately 9.4%. Post-contingent flow on the Limiting Element was approximately 56 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.

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

The outage of Tolk – Roosevelt 230 kV contributed to the TLR 5.

5. Procedures implemented prior to hold/curtailment.

There were no available non-firm transactions to curtail. Next hour flows predicted that not enough non-firm could be curtailed to alleviate loading on 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 SPP Reliability Coordinators logged information describing the actions taken at each issuance of the TLR. Times in the RC Log are CDT.

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 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.

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 the outage of Tolk - Roosevelt. 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 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.

Event History

Issuing RC: SWPP
Flowgate: 17027 - Temp 35: Hereford - Friona (ftlo) Tolk - Roosevelt 230kV Ckt 2
Event Begin: 2011-04-04 20:00
Event End: 2011-04-05 00:40
Event Duration: 4 Hours

TLR Level	TLR Date	TLR Confirm Time	Run Time	Requested Relief	Remaining Relief	Relief Provided	Total Cuts	
							Tags	MW
TLR Level 5A	04/04/2011 20:00	04/04/2011 19:34	04/04/2011 19:32:12	82.0	0.2	81.8	1	100
TLR Level 5A	04/04/2011 21:00	04/04/2011 20:31	04/04/2011 20:30:32	48.0	0.0	48.0	1	59
TLR Level 5A	04/04/2011 22:00	04/04/2011 21:30	04/04/2011 21:29:56	46.0	0.0	46.1	1	57
TLR Level 5A	04/04/2011 23:00	04/04/2011 22:30	04/04/2011 22:30:08	44.0	0.0	44.0	1	54
TLR Level 5A	04/05/2011 00:00	04/04/2011 23:41	04/04/2011 23:38:31	29.0	0.0	29.0	0	0
TLR Level 0	04/05/2011 00:40	04/05/2011 00:27	04/05/2011 00:27:04	0.0	0.0	0.0	0	0

Event Summary

FILE SAVED AS: SWPP_17027_20110404_1900.htm

Incident: SWPP_17027_20110404_1900 **Date:** 04/04/2011 **Reliability Coordinator:** SWPP
Initial Conditions: loading load should be 37%
Flowgate: 17027 - Temp 35: Hereford - Friona (ftl... **Rating:** 96 **LODF:** 9.38%
TLR Direction: Normal
Effective StartTime: 04/04/2011 20:00 **Effective EndTime:** 04/05/2011 00:40 **TLR Duration:** 4 Hours and 40 Minutes

TLR Actions

Confirm Time	Level	Effective Hour	Priority	Schedule						NHL 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 04 19:34	TLR 5A	NEXT	7-F	1 / 0	100	10.8	100	10.8	0	0.0	NONE	ED-2 ED-5 FIRM-7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP	0.0 7.0 64.0 0.0 71.0	0.0 7.0 64.0 0.0 71.0	39	56	189	N/A		
Apr 04 20:31	TLR 5A	NEXT	7-F	1 / 0	59	6.4	59	6.4	0	0.0	NONE	ED-2 ED-5 FIRM-7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP	0.0 4.0 37.6 0.0 41.6	0.0 4.0 37.6 0.0 41.6	20	30	107	N/A		
Apr 04 21:30	TLR 5A	NEXT	7-F	1 / 0	57	6.2	57	6.2	0	0.0	NONE	ED-2 ED-5 FIRM-7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP	0.0 4.0 35.9 0.0 39.9	0.0 4.0 35.9 0.0 39.9	20	31	122	N/A		
Apr 04 22:30	TLR 5A	NEXT	7-F	1 / 0	54	5.8	54	5.8	0	0.0	NONE	ED-2 ED-5 FIRM-7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP	0.0 4.0 34.2 0.0 38.2	0.0 4.0 34.2 0.0 38.2	28	42	153	N/A		
Apr 04 23:41	TLR 5A	NEXT			NONE						NONE	ED-2 ED-5 FIRM-7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP	0.0 4.0 28.0 0.0 29.0	0.0 4.0 28.0 0.0 29.0	37	51	166	N/A		
Apr 05 00:27	TLR 0	CURRENT			NONE						NONE							31	40	105	N/A

TLR Schedule Totals

Priority	Schedule			
	Total Tags Cut / Hold	IDC Cut MIV	RC Cut Acknowledge MIV	Hold MIV
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	4	270	270	0
Total	4	270	270	0

TLR Market Flow Totals

Market	Type	Market Relief	
		IDC MIV	RC Askn MIV
SWPP	ED-2	0.0	0.0
	ED-6	23.0	23.0
	FIRM-7	196.7	196.7
Total for SWPP		219.7	219.7
Total		219.7	219.7

Date	Time	Category	Issue
4/4/2011	19:32	TLR - 5a Initial	Issued TLR level 5A at BA request due to the imports on Blackwater tie going to 0
4/5/2011	00:27	TLR - 0	