

SPP TLR 5 Investigation Report
Flowgate 5228
(Iatan Stranger Creek 345 kV ftlo Lake Road -Nashua 161 kV and St Joe –
Hawthorn 345 kV)
(IaScLkNaSjHa)
TLR Level 5: January 31, 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 5228 on January 31, 2011. Flowgate 5228 is an SPP flowgate. The Level 5 TLR was in effect from 6:00 AM until 7:00 AM CST on January 31, 2011. Projected post-contingent flows on the Iatan Stranger Creek 345 kV ftlo Lake Road -Nashua 161 kV and St Joe – Hawthorn 345 kV 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 1195 MVA. Flow on the Limiting Element was 874 MVA. Flow on the Contingent Element was 519 MVA. The LODF was approximately 36.7%. Post-contingent flow on the Limiting Element was approximately 1074 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.

There were no unplanned outages. A cold front moved into Nebraska, Kansas, Oklahoma, Missouri, Arkansas, Texas, Louisiana and the system experienced multiple Power plant outages.

5. Procedures implemented prior to hold/curtailment.

Curtailed non-firm transactions. 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 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 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 weather related issues. 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.

Jan 31 04:28	TLR 3A	NEXT	2-NH 8-NN Total	2 / 0 2 / 0 4 / 0	150 154 304	8.1 12.9 21.0	150 154 304	8.1 12.9 21.0	0 0 0	0.0 0.0 0.0	NONE	ED-2 ED-6 FIRM-7 Total	MISO SWPP MISO SWPP MISO SWPP	0.0 81.3 29.2 0.0 0.0 0.0 110.6	0.0 81.3 29.2 0.0 0.0 0.0 110.5	890	1094	557	N/A
Jan 31 05:31	TLR 5A	NEXT	1-NS 2-NH Total	1 / 0 1 / 0 2 / 0	100 50 150	8.0 3.1 11.1	100 50 150	8.0 3.1 11.1	0 0 0	0.0 0.0 0.0	NONE	ED-2 ED-6 FIRM-7 FIRM-CREDIT Total	MISO SWPP MISO SWPP MISO SWPP	0.0 251.0 32.9 0.0 0.0 0.0 283.9	0.0 251.0 32.9 0.0 0.0 0.0 283.9	874	1084	519	N/A
Jan 31 06:27	TLR 3A	NEXT	NONE								NONE	ED-2 ED-6 FIRM-7 Total	MISO SWPP MISO SWPP	0.0 170.7 35.3 0.0 206.0	0.0 170.7 35.3 0.0 206.0	878	1075	542	N/A
Jan 31 07:27	TLR 3A	NEXT	8-NN Total	1 / 0 1 / 0	15 15	2.3 2.3	15 15	2.3 2.3	0 0	0.0 0.0	NONE	ED-2 ED-6 FIRM-7 Total	MISO SWPP MISO SWPP	0.0 137.3 31.4 0.0 168.7	0.0 137.3 31.4 0.0 168.7	762	932	464	N/A
Jan 31 08:18	TLR 0	CURRENT	NONE								NONE	NONE		0.0 0.0 0.0	0.0 0.0 0.0	859	813	394	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	1	100	100	0
2	9	850	850	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	4	219	219	50
7	0	0	0	0
Total	14	969	969	50

TLR Market Flow Totals

Market	Type	Market Relief	
		IDC MV	RC Ackn MV
MISO	ED-2	10.4	10.4
	ED-6	143.9	143.9
	FIRM-7	0.0	0.0
Total MISO		154.3	154.3
SWPP	ED-2	850.2	850.1
	ED-6	0.0	0.0
	FIRM-7	0.0	0.0
Total for SWPP		850.2	850.1
Total		1004.5	1004.4

Date	Time	Category	Issue
1/31/2011	00:17	TLR - 3b Initial	Real time 1200, RTB solving at 1212
1/31/2011	01:26	TLR - 3a Initial	
1/31/2011	04:30	TLR - 5a Initial	For feasibility
1/31/2011	05:26	TLR - 3a Reissue	
1/31/2011	07:18	TLR - 0	