

**SPP TLR 5 Investigation Report
Flowgate 15943
(KSG12 - Hals 138 kV for loss of Reno – Wich 345 kV)
(SEDFALWICREN)
TLR Level 5: August 26, 2009
Report Issued: September 1, 2009**

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 15943 on August 26, 2009. Flowgate 15943 is an SPP flowgate. The Level 5 TLR was in effect from 10:55 until 11:20 CST on August 26, 2009. Projected post-contingent flows on the KSG12 – Hals 138 kV line exceeded the SOL. This flowgate was created to monitor loading during an extended outage of the Jeffrey-Summit 345 kV line. The outage was due to extensive damage caused by storms.

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

At the time the Level 5B TLR was issued, the Limiting Element was rated at 170 MVA. Flow on the Limiting Element was 95 MVA. Flow on the Contingent Element was 230 MVA. The LODF was approximately 33%. Post-contingent flow on the Limiting Element was approximately 171 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, other than the Jeffrey – Summit 345 kV line, that contributed to this TLR.

5. Procedures implemented prior to hold/curtailment.

Non-firm transactions had already been curtailed. The TLR was escalated to a Level 5 in order to curtail firm transactions and firm market flow 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, 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 study process did not indicate an issue with this flowgate based upon 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 during the outage of the Jeffrey – Summit 345 kV line. Due to this situation, no further actions were taken.

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

15943 - Temporary 3 - SEDHALWICREN

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	08/26/2009 10:55	08/26/2009 10:48	08/26/2009 10:47:34	20.0	15.9	4.1	1	50
SUPERSEDED	5B	08/26/2009 10:55	08/26/2009 10:58	08/26/2009 10:57:34	50.0	0.0	50.0	0	0
SUPERSEDED	3B	08/26/2009 11:20	08/26/2009 11:10	08/26/2009 11:09:25	0.0	0.0	0.0	0	0
TERMINATED	0	08/26/2009 12:25	08/26/2009 12:15	08/26/2009 12:14:53	0.0	0.0	0.0	0	0

09/01/2009 12:42:37 (CST)

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Event Summary

FILE SAVED AS: SWPP_15943_20090826_1055.htm

Incident: SWPP_15943_20090826_1055	Date: 08/26/2009	Reliability Coordinator: SWPP
Initial Conditions: increasing load		
Flowgate: 15943 - Temporary 3 - SEDHALWICREN	Rating: 170	LODF: 33.09%
TLR Direction: Normal		
Effective StartTime: 08/26/2009 10:55	Effective EndTime: 08/26/2009 12:25	TLR Duration: 1 Hour and 30 Minutes

TLR Actions

Confirm Time	Level	Effective Hour	Priority	Schedule							NNL Relief			Market Relief				Flow			TLR Action Comments
				Total Tags Cut / Hold	IDC Cut		RC Cut Acknowledge		Hold		CA	IDC MW	RC Ackn MW	Type	Mkt	IDC MW	RC Ackn MW	Current	Post Cont.	Cont. Flow	
					MW	Relief	MW	Relief	MW	Relief											
Aug 26 10:48	TLR 3B	CURRENT	8-NN Total	1 / 0 1 / 0	50 100	4.1 4.1	50 50	4.1 4.1	0 0	0.0 0.0	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 0.0	94	171	233	N/A
		NEXT	8-NN Total	1 / 0 1 / 0	50 100	4.1 4.1	50 50	4.1 4.1	0 0	0.0 0.0	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 0.0				
Aug 26 10:58	TLR 5B	CURRENT	NONE							NONE			ED-2 ED-6 FIRM-7 Total	SWPP SWPP SWPP 5.0	0.0 5.0 45.0 50.0	0.0 5.0 45.0 50.0	95	171	230	N/A	
		NEXT	8-NN Total	1 / 0 1 / 0	50 0	4.1 4.1	50 50	4.1 4.1	0 0	0.0 0.0	NONE			NONE							
Aug 26 11:10	TLR 3B	CURRENT	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 0.0	77	136	180	N/A	
		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 0.0					
Aug 26 12:15	TLR 0	CURRENT	NONE							NONE			NONE				56	102	139	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	3	150	150	0
7	0	0	0	0
Total	3	150	150	0

TLR Market Flow Totals

Market	Type	Market Relief	
		IDC MW	RC Ackn MW
SWPP	ED-2	0.0	0.0
	ED-6	5.0	5.0
	FIRM-7	45.0	45.0
Total for SWPP		50.0	50.0
Total		50.0	50.0

	A	B	C	D	E
36	Reliability Log for August, 26			2009	
37	Time	Initials	Comments	Wednesday	
38	1148	LWB	Re-issued TLR Level 3A on Temp 3 SEDHALWICREN FG 15943		
39	1157	MRH	Re-issued TLR Level 5B on Temp 3 SEDHALWICREN FG 15943		
40	1209	MRH	Re-issued TLR Level 3B on Temp 3 SEDHALWICREN FG 15943		
41	1314	MRH	Re-issued TLR Level 0 on Temp 3 SEDHALWICREN FG 15943		
42	1606	MRH	Re-issued TLR Level 3B on Temp 3 SEDHALWICREN FG 15943		
43	1727	MRH	Re-issued TLR Level 0 on Temp 3 SEDHALWICREN FG 15943		
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