

SPP TLR 5 Investigation Report
Flowgate 15437
(Flint Creek – Chambers 161kV for loss of Flint Creek – S. Springs 161kV)
(TEMPORARY10)
TLR Level 5: November 14, 2008
Report Issued: December 5, 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 15437 on November 14, 2008. Flowgate 15437 is an SPP flowgate. The Level 5 TLR was in effect from 10:30 until 14:00 CST on November 14, 2008. Projected post-contingent flows on the Flint Creek – Chambers 161kV line exceeded the SOL. The monitored element on this flowgate has a dynamic temperature dependent rating. TLR is issued dependent on this dynamic rating. This flowgate was created to control loading during the outage of the Flint Creek – Tontitown 161kV line.

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 335 MVA. Flow on the Limiting Element was 221 MVA. Flow on the Contingent Element was 201 MVA. The LODF was approximately 50%. Post-contingent flow on the Limiting Element was approximately 321 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 impacting the flowgate by more than 5%. The TLR was initially issued as a Level 5 in order to control loading on the Dyess – East Rogers 161kV line.

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. This area of northwest Arkansas is one of the fastest growing areas in the country. There are only a few generation resources in this load pocket and limited transmission for distributing generation to the load. Any transmission outage in the area causes potential post-contingency loading issues but facilities must be removed from service for maintenance. Several projects have already been completed in the area to address this situation and several more are currently planned.

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

137 - Temporary 10 Flint Creek - Chambers 161 kV ftlo Flint Creek - SSprings 161

Status	TLR Level	TLR Date (CST)	TLR Confirm Time (CST)	Run Time (CST)	Requested Relief	Remaining Relief	Relief Provided	Total Cuts	
								Tags	MW
SUPERSEDED	5B	11/14/2008 10:30	11/14/2008 10:20	11/14/2008 10:20:13	30.0	0.0	30.0	1	2
SUPERSEDED	5A	11/14/2008 12:00	11/14/2008 11:27	11/14/2008 11:26:53	0.0	0.0	2.0	0	0
SUPERSEDED	5A	11/14/2008 13:00	11/14/2008 12:26	11/14/2008 12:26:35	0.0	0.0	2.0	0	0
SUPERSEDED	5A	11/14/2008 14:00	11/14/2008 13:28	11/14/2008 13:27:00	0.0	0.0	2.0	0	0
TERMINATED	0	11/14/2008 14:00	11/14/2008 13:47	11/14/2008 13:47:39	0.0	0.0	0.0	0	0

12/05/2008 14:05:42 (CST)

OATI IDC Support Phone: 763-201-2010 Fax: 763-553-2813

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Event Summary

FILE SAVED AS: SWPP_15437_20081114_1030.htm

Incident: SWPP_15437_20081114_1030	Date: 11/14/2008	Reliability Coordinator: SWPP
Initial Conditions: load increasing		
Flowgate: 15437 - Temporary 10 Flint Creek - Cha...	Rating: 335	LODF: 49.84%
TLR Direction: Normal		
Effective StartTime: 11/14/2008 10:30	Effective EndTime: 11/14/2008 14:00	TLR Duration: 3 Hours 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		
Nov 14 10:20	TLR 5B	CURRENT	7-F	1 / 0	2	0.1	2	0.1	0	0.0	NONE			ED-2	SWPP	0.0	0.0	221	321	201	N/A	
		Total	1 / 0	2	0.1	2	0.1	0	0.0	ED-6	SWPP	0.0	0.0	FIRM-7	SWPP	29.9	29.9					
		NEXT		NONE								NONE			NONE							
Nov 14 11:27	TLR 5A	NEXT		NONE								NONE			ED-2	SWPP	0.0	0.0	203	295	186	feasibility
				NONE								NONE			ED-6	SWPP	2.0	2.0				
				NONE								NONE			FIRM-7	SWPP	0.0	0.0				
				NONE								NONE			FIRM-CREDIT	SWPP	0.0	0.0				
				NONE								NONE			Total		2.0	2.0				
Nov 14 12:28	TLR 5A	NEXT		NONE								NONE			ED-2	SWPP	0.0	0.0	206	299	188	feasibility
				NONE								NONE			ED-6	SWPP	2.0	2.0				
				NONE								NONE			FIRM-7	SWPP	0.0	0.0				
				NONE								NONE			FIRM-CREDIT	SWPP	0.0	0.0				
				NONE								NONE			Total		2.0	2.0				
Nov 14 13:28	TLR 5A	NEXT		NONE								NONE			ED-2	SWPP	0.0	0.0	129	190	124	feasibility
				NONE								NONE			ED-6	SWPP	2.0	2.0				
				NONE								NONE			FIRM-7	SWPP	0.0	0.0				
				NONE								NONE			FIRM-CREDIT	SWPP	0.0	0.0				
				NONE								NONE			Total		2.0	2.0				
Nov 14 13:47	TLR 0	CURRENT		NONE								NONE			NONE				131	193	126	Flint Creek - Tontitown 161kV fdr. returned to service

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	1	2	2	0
Total	1	2	2	0

TLR Market Flow Totals

Market	Type	Market Relief	
		IDC MW	RC Ackn MW
SWPP	ED-2	0.0	0.0
	ED-6	6.0	6.0
	FIRM-7	29.9	29.9
Total for SWPP		35.9	35.9
Total		35.9	35.9

12/05/2008 14:07:40 (CST)

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	A	B	C	D
1	Reliability Log for November, 14			2008
2	Time	Initials	Comments	
14	1020	RGH	Issued TLR level 5B on Temp10 Flint Creek - Chambers 161kV flo Flint Creek - S.Springs 161kV #15437 -- CSWS wants Level 5 TLR due to running Mattison units would cause loading issues on Dyess - E. Rogers 161kV line	
18	1126	RGH	Issued TLR level 5A on Temp10 Flint Creek - Chambers 161kV flo Flint Creek - S.Springs 161kV #15437 -- feasibility	
21	1226	RGH	Issued TLR level 5A on Temp10 Flint Creek - Chambers 161kV flo Flint Creek - S.Springs 161kV #15437	
25	1327	RGH	Issued TLR level 5A on Temp10 Flint Creek - Chambers 161kV flo Flint Creek - S.Springs 161kV #15437	
26	1327	RGH	CSWS Flint Creek - Tontitown 161kV line returned to service	
29	1347	RGH	Issued TLR level 0 on Temp10 Flint Creek - Chambers 161kV flo Flint Creek - S.Springs 161kV #15437	
57				
58				
59				
60				
61				

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