

**SPP TLR 5 Investigation Report
Flowgate 5203
(Hugo Power Plant – Valliant 138kV for loss of Pittsburg – Valliant 345kV)
(HPPVALPITVAL)
TLR Level 5: October 19, 2010
Report Issued: January 21, 2011**

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 5203 on October 19, 2010. Flowgate 5203 is an SPP flowgate. The Level 5 TLR was in effect from 13:00 until 17:40 CST on October 19, 2010. North – South loading in the region caused the projected post-contingent flows on the Hugo Power Plant – Valliant 138kV line to exceed the SOL. The monitored element on this flowgate has a dynamic temperature dependent rating. TLR is issued dependent on this dynamic rating.

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

At the time the Level 5A TLR was first issued, the Limiting Element was rated at 315 MVA. Flow on the Limiting Element was 200 MVA. Flow on the Contingent Element was 287 MVA. The LODF was approximately 28%. Post-contingent flow on the Limiting Element was approximately 279 MVA.

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

TLR 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 not enough non-firm transactions impacting the flowgate by more than 5% prior to the Level 5 TLR. The TLR was escalated to a Level 5 in order to curtail firm transactions and firm market flow to relieve loading.

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.

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 6.

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 North to South loading on the transmission system in the region. The higher loading is caused by high exports across the ERCOT East DC Tie in combination with the lack of available generation in northeastern Texas. Loading sometimes requires escalating to a Level 5 TLR in order to obtain sufficient relief to reduce overloads.

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. Non-firm Market Flow was reduced on the flowgate as reported in the TLR Event History and NERC TLR Log on pages 3-5.

Event History

Issuing RC: SWPP
Flowgate: 5203 - HppValPitVal
Event Begin: 2010-10-19 11:15
Event End: 2010-10-19 17:27
Event Duration: 6 Hours

TLR Level	TLR Date	TLR Confirm Time	Run Time	Requested Relief	Remaining Relief	Relief Provided	Total Cuts	
							Tags	MW
TLR Level 3B	10/19/2010 11:25	10/19/2010 11:15	10/19/2010 11:13:02	50.0	50.0	0.0	0	0
TLR Level 5A	10/19/2010 13:00	10/19/2010 12:27	10/19/2010 12:26:48	20.0	0.0	20.6	12	24
TLR Level 5A	10/19/2010 14:00	10/19/2010 13:31	10/19/2010 13:31:03	20.0	0.0	20.6	14	26
TLR Level 5A	10/19/2010 15:00	10/19/2010 14:27	10/19/2010 14:26:41	20.0	0.0	20.7	14	28
TLR Level 5A	10/19/2010 16:00	10/19/2010 15:28	10/19/2010 15:27:28	20.0	0.0	20.7	14	27
TLR Level 5A	10/19/2010 17:00	10/19/2010 16:28	10/19/2010 16:27:46	10.0	0.0	10.1	1	2
TLR Level 0	10/19/2010 17:40	10/19/2010 17:27	10/19/2010 17:27:32	0.0	0.0	0.0	0	0

Event Summary

FILE SAVED AS: SWPP_5203_20101019_1125.htm

Incident: SWPP_5203_20101019_1125 Date: 10/19/2010 Reliability Coordinator: SWPP

Initial Conditions: Loading

Flowgate: 5203 - HppValPitVal Rating: 315 LODF: 27.66%

TLR Direction: Normal

Effective StartTime: 10/19/2010 11:25 Effective EndTime: 10/19/2010 17:40 TLR Duration: 6 Hours and 15 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											MW	
Oct 19 11:15	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	220	341	440	N/A
		NEXT	1-NS 7-F Total	2 / 0 0 / 1 2 / 1	77 0 0	13.2 0.0 13.2	77 0 77	13.2 0.0 13.2	0 500 500	0.0 57.5 57.5	NONE			ED-2 ED-6 FIRM-7 Total	SWPP SWPP SWPP	0.0 0.0 9.0 9.0	0.0 0.0 9.0 9.0					
Oct 19 12:27	TLR 5A	NEXT	7-F Total	12 / 1 12 / 1	24 24	2.3 2.3	24 24	2.3 2.3	6 6	0.7 0.7	NONE			ED-2 ED-6 FIRM-7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP	0.0 9.0 9.2 0.0 18.2	0.0 9.0 9.2 0.0 18.2	200	279	287	N/A	
Oct 19 13:31	TLR 5A	NEXT	7-F Total	14 / 0 14 / 0	26 26	2.5 2.5	26 26	2.5 2.5	0 0	0.0 0.0	NONE			ED-2 ED-6 FIRM-7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP	0.0 9.0 9.1 0.0 18.1	0.0 9.0 9.1 0.0 18.1	182	291	397	N/A	
Oct 19 14:27	TLR 5A	NEXT	7-F Total	14 / 0 14 / 0	28 28	2.7 2.7	28 28	2.7 2.7	0 0	0.0 0.0	NONE			ED-2 ED-6 FIRM-7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP	0.0 9.0 9.0 0.0 18.0	0.0 9.0 9.0 0.0 18.0	177	282	382	N/A	
Oct 19 15:28	TLR 5A	NEXT	7-F Total	14 / 0 14 / 0	27 27	2.6 2.6	27 27	2.6 2.6	0 0	0.0 0.0	NONE			ED-2 ED-6 FIRM-7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP	0.0 9.0 9.1 0.0 18.1	0.0 9.0 9.1 0.0 18.1	178	293	417	N/A	

Oct 19 16:28	TLR 5A	NEXT	7-F Total	1 / 0 1 / 0	2 2	0.2 0.2	2 2	0.2 0.2	0 0	0.0 0.0	NONE	ED-2 ED-6 FIRM-7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP	0.0 9.0 0.8 0.0 9.8	0.0 9.0 0.8 0.0 9.8	184	283	360	N/A
Oct 19 17:27	TLR 0	CURRENT	NONE				NONE		NONE		NONE		NONE		182	288	386	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	2	77	77	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	55	107	107	506
Total	57	184	184	506

TLR Market Flow Totals

Market	Type	Market Relief	
		IDC MW	RC Ackn MW
SWPP	ED-2	0.0	0.0
	ED-6	45.0	45.0
	FIRM-7	37.2	37.2
Total for SWPP		82.2	82.2
Total		82.2	82.2

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