

**SPP TLR 5 Investigation Report
Flowgate 5203
(Hugo Power Plant – Valliant 138kV for loss of Pittsburg – Valliant 345kV)
(HPPVALPITVAL)
TLR Level 5: October 22, 2008
Report Issued: November 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 5203 on October 22, 2008. Flowgate 5203 is an SPP flowgate. The Level 5 TLR was in effect from 14:15 until 19:00 CST on October 22, 2008. Projected post-contingent flows on the Hugo Power Plant – Valliant 138kV line exceeded 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 5B TLR was issued, the Limiting Element was rated at 315 MVA. Flow on the Limiting Element was 153 MVA. Flow on the Contingent Element was 474 MVA. The LODF was approximately 26%. Post-contingent flow on the Limiting Element was approximately 274 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 3-6.

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

There were no unplanned outages.

5. Procedures implemented prior to hold/curtailment.

Curtailed non-firm transactions. TLR was escalated to level 5 upon redispatch of firm market flow.

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 7. 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, see page 8.

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. 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 on pages 3-6.

TLR Event History

5203 - HppValPitVal

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	10/22/2008 10:35	10/22/2008 10:29	10/22/2008 10:28:46	100.0	89.5	10.5	3	132
SUPERSEDED	3A	10/22/2008 12:00	10/22/2008 11:26	10/22/2008 11:26:11	0.0	0.0	0.0	0	0
SUPERSEDED	3A	10/22/2008 13:00	10/22/2008 12:27	10/22/2008 12:27:06	73.0	47.0	26.0	2	235
SUPERSEDED	3A	10/22/2008 14:00	10/22/2008 13:26	10/22/2008 13:25:32	50.0	28.0	22.0	1	200
SUPERSEDED	5B	10/22/2008 14:15	10/22/2008 14:08	10/22/2008 14:06:52	0.0	0.0	0.0	0	0
SUPERSEDED	5A	10/22/2008 16:00	10/22/2008 15:27	10/22/2008 15:26:37	0.0	0.0	22.3	1	200
SUPERSEDED	5A	10/22/2008 17:00	10/22/2008 16:28	10/22/2008 16:28:30	0.0	0.0	0.0	0	0
SUPERSEDED	5A	10/22/2008 18:00	10/22/2008 17:29	10/22/2008 17:28:53	0.0	0.0	0.0	0	0
SUPERSEDED	3A	10/22/2008 19:00	10/22/2008 18:27	10/22/2008 18:26:59	0.0	0.0	0.0	0	0
SUPERSEDED	3A	10/22/2008 20:00	10/22/2008 19:26	10/22/2008 19:25:52	39.0	16.7	22.3	1	200
SUPERSEDED	3A	10/22/2008 21:00	10/22/2008 20:26	10/22/2008 20:25:50	0.0	0.0	0.0	0	0
SUPERSEDED	3A	10/22/2008 22:00	10/22/2008 21:26	10/22/2008 21:25:43	0.0	0.0	0.0	0	0
SUPERSEDED	3A	10/22/2008 23:00	10/22/2008 22:26	10/22/2008 22:26:09	0.0	0.0	0.0	0	0
TERMINATED	0	10/22/2008 23:20	10/22/2008 23:07	10/22/2008 23:07:04	0.0	0.0	0.0	0	0

11/05/2008 11:07:48 (CST)

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Event Summary

FILE SAVED AS: SWPP_5203_20081022_1035.htm

Incident:	SWPP_5203_20081022_1035	Date: 10/22/2008	Reliability Coordinator: SWPP
Initial Conditions:	load increasing		
Flowgate:	5203 - HppValPitVal	Rating: 315	LODF: 25.64%
TLR Direction:	Normal		
Effective StartTime:	10/22/2008 10:35	Effective EndTime: 10/22/2008 23:20	TLR Duration: 12 Hours and 45 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												
Oct 22 10:29	TLR 3B	CURRENT	2-NH	3 / 0	132	10.5	132	10.5	0	0.0	NONE	ED-2	SWPP	0.0	0.0	183	276	366	N/A			
		Total	3 / 0	214	10.5	132	10.5	0	0.0						0.0					0.0		
		NEXT	2-NH	2 / 0	82	6.4	82	6.4	0	0.0	NONE	ED-2	SWPP	0.0	0.0							
		Total	2 / 0	214	6.4	82	6.4	0	0.0					0.0	0.0							
Oct 22 11:26	TLR 3A	NEXT	NONE								NONE	ED-2	SWPP	0.0	0.0	183	274	358	N/A			
														0.0	0.0							
Oct 22 12:27	TLR 3A	NEXT	2-NH	2 / 0	235	26.0	235	26.0	0	0.0	NONE	ED-2	SWPP	0.0	0.0	174	286	440	N/A			
			Total	2 / 0	235	26.0	235	26.0	0	0.0				0.0	0.0							
Oct 22 13:26	TLR 3A	NEXT	2-NH	1 / 0	200	22.0	200	22.0	0	0.0	NONE	ED-2	SWPP	0.0	0.0	134	272	540	N/A			
			Total	1 / 0	200	22.0	200	22.0	0	0.0				0.0	0.0							
Oct 22 14:08	TLR 5B	CURRENT	NONE								NONE	ED-2	SWPP	0.0	0.0	153	274	474	feasibility			
														37.0	37.0							
		NEXT	2-NH	1 / 0	200	21.5	200	21.5	0	0.0	NONE	NONE										
			7-F	3 / 0	10	1.0	10	1.0	0	0.0												
		Total	4 / 0	0	22.5	210	22.5	0	0.0													
Oct 22 15:27	TLR 5A	NEXT	2-NH	1 / 0	200	22.3	200	22.3	0	0.0	NONE	ED-2	SWPP	0.0	0.0	167	285	384	feasibility			
			Total	1 / 0	200	22.3	200	22.3	0	0.0				0.0	0.0							
Oct 22 16:28	TLR 5A	NEXT	NONE								NONE	ED-2	SWPP	0.0	0.0	180	275	371	feasibility			
														0.0	0.0							
														0.0	0.0							

Oct 22 17:29	TLR 5A	NEXT	NONE								NONE	ED-2 ED-6 FIRM-7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP	0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0	175	284	350	N/A
Oct 22 18:27	TLR 3A	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	177	274	382	N/A
Oct 22 19:26	TLR 3A	NEXT	2-NH Total	1 / 0 1 / 0	200 200	22.3 22.3	200 200	22.3 22.3	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	148	258	440	N/A
Oct 22 20:26	TLR 3A	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	150	262	440	N/A
Oct 22 21:26	TLR 3A	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	167	259	359	N/A
Oct 22 22:26	TLR 3A	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	138	217	312	N/A
Oct 22 23:07	TLR 0	CURRENT	NONE								NONE	NONE			113	183	275	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	11	1249	1249	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
7	3	10	10	0
Total	14	1259	1259	0

TLR Market Flow Totals

Market	Type	Market Relief	
		IDC MW	RC Ackn MW
SWPP	ED-2	0.0	0.0
	ED-6	0.0	0.0
	FIRM-7	37.0	37.0
Total for SWPP		37.0	37.0
Total		37.0	37.0

11/05/2008 11:08:21 (CST)

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	A	B	C	D
1	Reliability Log for October, 22			2008
2	Time	Initials	Comments	
7	0030	RST	Re-issued TLR level 3A on HppValPitVal #5203.	
13	0131	RST	Re-issued TLR level 3A on HppValPitVal #5203.	
19	0231	RST	Re-issued TLR level 3A on HppValPitVal #5203.	
24	0333	RST	Re-issued TLR level 3A on HppValPitVal #5203.	
27	0427	RST	Re-issued TLR level 3A on HppValPitVal #5203.	
30	0528	RST	Re-issued TLR level 0 on HppValPitVal #5203.	
40	1128	RGH	Issued TLR level 3B on HppValPitVal #5203	
41	1226	RGH	Issued TLR level 3A on HppValPitVal #5203	
43	1327	RGH	Issued TLR level 3A on HppValPitVal #5203	
46	1425	RGH	Issued TLR level 3A on HppValPitVal #5203	
49	1506	RGH	Issued TLR level 5B on HppValPitVal #5203 for feasibility	
56	1626	RGH	Issued TLR level 5A on HppValPitVal #5203 for feasibility	
60	1728	RGH	Issued TLR level 5A on HppValPitVal #5203 for feasibility	
62	1828	RST	Re-issued TLR level 5A on HppValPitVal #5203 for feasibility	
63	1926	RST	Re-issued TLR level 3A on HppValPitVal #5203.	
65	2025	RST	Re-issued TLR level 3A on HppValPitVal #5203.	
69	2125	RST	Re-issued TLR level 3A on HppValPitVal #5203.	
74	2225	RST	Re-issued TLR level 3A on HppValPitVal #5203.	
79	2326	RST	Re-issued TLR level 3A on HppValPitVal #5203.	
83				
84				
85				

5203 10-22-08

