

**SPP TLR 5 Investigation Report  
Flowgate 5203  
(Hugo Power Plant – Valliant 138kV for loss of Pittsburg – Valliant 345kV)  
(HPPVALPITVAL)  
TLR Level 5: September 11, 2008  
Report Issued: October 21, 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 September 11, 2008. Flowgate 5203 is an SPP flowgate. The Level 5 TLR was in effect from 13:30 until 19:00 CST on September 11, 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 211 MVA. Flow on the Contingent Element was 523 MVA. The LODF was approximately 24%. Post-contingent flow on the Limiting Element was approximately 334 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. Next hour flows for the 20:00 hour 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, 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	09/11/2008 10:35	09/11/2008 10:26	09/11/2008 10:25:48	0.0	0.0	0.0	0	0
<a href="#">SUPERSEDED</a>	3A	09/11/2008 12:00	09/11/2008 11:28	09/11/2008 11:28:03	0.0	0.0	0.0	0	0
<a href="#">SUPERSEDED</a>	3A	09/11/2008 13:00	09/11/2008 12:30	09/11/2008 12:29:36	35.0	35.0	0.0	0	0
<a href="#">SUPERSEDED</a>	5B	09/11/2008 13:30	09/11/2008 13:15	09/11/2008 13:14:17	25.0	0.0	25.0	16	45
<a href="#">SUPERSEDED</a>	5A	09/11/2008 15:00	09/11/2008 14:30	09/11/2008 14:27:29	18.0	0.0	18.0	15	115
<a href="#">SUPERSEDED</a>	5A	09/11/2008 16:00	09/11/2008 15:29	09/11/2008 15:28:21	20.0	0.0	20.0	15	117
<a href="#">SUPERSEDED</a>	5A	09/11/2008 17:00	09/11/2008 16:28	09/11/2008 16:27:44	16.0	0.0	16.0	11	120
<a href="#">SUPERSEDED</a>	5A	09/11/2008 18:00	09/11/2008 17:28	09/11/2008 17:28:07	11.0	0.0	12.3	1	110
<a href="#">SUPERSEDED</a>	3A	09/11/2008 19:00	09/11/2008 18:27	09/11/2008 18:25:57	0.0	0.0	0.0	0	0
<a href="#">SUPERSEDED</a>	3A	09/11/2008 20:00	09/11/2008 19:26	09/11/2008 19:25:47	0.0	0.0	0.0	0	0
<a href="#">SUPERSEDED</a>	3A	09/11/2008 21:00	09/11/2008 20:26	09/11/2008 20:25:54	0.0	0.0	0.0	0	0
<a href="#">SUPERSEDED</a>	3A	09/11/2008 22:00	09/11/2008 21:26	09/11/2008 21:26:36	0.0	0.0	0.0	0	0
<a href="#">SUPERSEDED</a>	3A	09/11/2008 23:00	09/11/2008 22:27	09/11/2008 22:27:11	32.0	0.0	32.0	1	251
<a href="#">SUPERSEDED</a>	3A	09/12/2008 00:00	09/11/2008 23:33	09/11/2008 23:32:58	44.0	0.0	44.0	1	251
<a href="#">SUPERSEDED</a>	3A	09/12/2008 01:00	09/12/2008 00:29	09/12/2008 00:28:54	36.0	0.0	36.0	1	251
<a href="#">TERMINATED</a>	0	09/12/2008 01:40	09/12/2008 01:29	09/12/2008 01:28:52	0.0	0.0	0.0	0	0



Sep 11 17:28	TLR 5A	NEXT	2-NH <b>Total</b>	1 / 0 <b>1 / 0</b>	110 <b>110</b>	12.3 <b>12.3</b>	110 <b>110</b>	12.3 <b>12.3</b>	0 <b>0</b>	0.0 <b>0.0</b>	NONE	ED-2 ED-6 FIRM-7 FIRM-CREDIT <b>Total</b>	SWPP SWPP SWPP SWPP	0.0 0.0 0.0 0.0 <b>0.0</b>	0.0 0.0 0.0 0.0 <b>0.0</b>	176	285	465	N/A
Sep 11 18:27	TLR 3A	NEXT	NONE								NONE	ED-2 ED-6 FIRM-7 <b>Total</b>	SWPP SWPP SWPP	0.0 0.0 0.0 <b>0.0</b>	0.0 0.0 0.0 <b>0.0</b>	196	297	430	N/A
Sep 11 19:28	TLR 3A	NEXT	NONE								NONE	ED-2 ED-6 FIRM-7 <b>Total</b>	SWPP SWPP SWPP	0.0 0.0 0.0 <b>0.0</b>	0.0 0.0 0.0 <b>0.0</b>	198	287	378	N/A
Sep 11 20:28	TLR 3A	NEXT	NONE								NONE	ED-2 ED-6 FIRM-7 <b>Total</b>	SWPP SWPP SWPP	0.0 0.0 0.0 <b>0.0</b>	0.0 0.0 0.0 <b>0.0</b>	196	294	416	N/A
Sep 11 21:28	TLR 3A	NEXT	NONE								NONE	ED-2 ED-6 FIRM-7 <b>Total</b>	SWPP SWPP SWPP	0.0 0.0 0.0 <b>0.0</b>	0.0 0.0 0.0 <b>0.0</b>	190	302	475	N/A
Sep 11 22:27	TLR 3A	NEXT	2-NH <b>Total</b>	1 / 0 <b>1 / 0</b>	251 <b>251</b>	26.7 <b>26.7</b>	251 <b>251</b>	26.7 <b>26.7</b>	0 <b>0</b>	0.0 <b>0.0</b>	NONE	ED-2 ED-6 FIRM-7 <b>Total</b>	SWPP SWPP SWPP	0.0 5.3 0.0 <b>5.3</b>	0.0 5.3 0.0 <b>5.3</b>	185	293	460	N/A
Sep 11 23:33	TLR 3A	NEXT	2-NH <b>Total</b>	1 / 0 <b>1 / 0</b>	251 <b>251</b>	27.6 <b>27.6</b>	251 <b>251</b>	27.6 <b>27.6</b>	0 <b>0</b>	0.0 <b>0.0</b>	NONE	ED-2 ED-6 FIRM-7 <b>Total</b>	SWPP SWPP SWPP	0.0 16.4 0.0 <b>16.4</b>	0.0 16.4 0.0 <b>16.4</b>	178	249	304	N/A
Sep 12 00:29	TLR 3A	NEXT	2-NH <b>Total</b>	1 / 0 <b>1 / 0</b>	251 <b>251</b>	27.3 <b>27.3</b>	251 <b>251</b>	27.3 <b>27.3</b>	0 <b>0</b>	0.0 <b>0.0</b>	NONE	ED-2 ED-6 FIRM-7 <b>Total</b>	SWPP SWPP SWPP	0.0 8.7 0.0 <b>8.7</b>	0.0 8.7 0.0 <b>8.7</b>	161	224	269	N/A
Sep 12 01:29	TLR 0	CURRENT	NONE								NONE	NONE				156	227	303	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	8	1252	1252	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
7	70	148	148	0
<b>Total</b>	<b>78</b>	<b>1400</b>	<b>1400</b>	<b>0</b>

### TLR Market Flow Totals

Market	Type	Market Relief	
		IDC MW	RC Ackn MW
SWPP	ED-2	0.0	0.0
	ED-6	30.4	30.4
	FIRM-7	39.6	39.6
<b>Total for SWPP</b>		<b>70.0</b>	<b>70.0</b>
<b>Total</b>		<b>70.0</b>	<b>70.0</b>

10/22/2008 09:52:37 (CST)

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	A	B	C	D
1	<b>Reliability Log for September, 11</b>			<b>2008</b>
2	Time	Initials	Comments	
25	1125	AH	Issued TLR 3B on HppValPitVal flgt#5203	
28	1228	AH	Issued TLR 3A on HppValPitVal flgt#5203	
33	1329	AH	Issued TLR 3A on HppValPitVal flgt#5203	
36	1414	AH	Issued TLR 5B on HppValPitVal flgt#5203,curtailments.	
40	1527	AH	Issued TLR 5A on HppValPitVal flgt#5203,curtailments.	
44	1628	AH	Issued TLR 5A on HppValPitVal flgt#5203,curtailments.	
48	1727	AH	Issued TLR 5A on HppValPitVal flgt#5203,curtailments.	
53	1828	RST	Re-issued TLR 5A on HppValPitVal flgt#5203.	
57	1925	"	Re-issued TLR 3A on HppValPitVal flgt#5203.	
61	2025	"	Re-issued TLR 3A on HppValPitVal flgt#5203.	
65	2125	"	Re-issued TLR 3A on HppValPitVal flgt#5203.	
72	2226	"	Re-issued TLR 3A on HppValPitVal flgt#5203.	
77	2327	"	Re-issued TLR 3A on HppValPitVal flgt#5203.	
79				

