

SPP TLR 5 Investigation Report
Flowgate TEMP03_16364
(Southwest Shreveport – Wallace Lake 138 kV Line for loss of Dolet 345/230 kV Transformer)
TLR Level 5: May 10-11, 2010
Report Issued: June 8, 2010

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 16364 on May 10-11, 2010. Flowgate 16364 is an SPP flowgate. The Level 5 TLR was in effect from 14:20 on May 10 until 5:00 CST on May 11, 2010. Projected post-contingent flows on the Southwest Shreveport - Wallace Lake 138 kV line were expected to exceed the SOL.

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 209 MVA. Flow on the Limiting Element was 80 MVA. Flow on the Contingent Element was 552 MVA. The LODF was approximately 22%. Post-contingent flow on the Limiting Element was approximately 200 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 3-6.

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 or market flows that impacted the flowgate by more than 5%. 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 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.

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. The Southwest Shreveport – Wallace Lake 138 kV line was showing in the RTCA application. After confirmation with the Balancing Authority, it was decided to build the temporary flowgate and issue TLR. 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 the lack of available generation in the area in combination with higher loading in Louisiana.

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. CLECO redispatched to provide relief for NNL responsibility during this TLR.

TLR Event History

16364 - SShreve-Wallace FTLO Dolet 345/230 XFMR

Status	TLR Level	TLR Date	TLR Confirm Time	Run Time	Requested Relief	Remaining Relief	Relief Provided	Total Cuts	
								Tags	MW
SUPERSEDED	3B	05/10/2010 12:25	05/10/2010 12:14	05/10/2010 12:13:43	15.0	15.0	0.0	0	0
SUPERSEDED	3A	05/10/2010 14:00	05/10/2010 13:25	05/10/2010 13:25:33	4.0	4.0	0.0	0	0
SUPERSEDED	5B	05/10/2010 14:20	05/10/2010 14:13	05/10/2010 14:10:08	15.0	0.0	15.0	2	72
SUPERSEDED	5A	05/10/2010 16:00	05/10/2010 15:31	05/10/2010 15:28:50	4.0	0.0	14.8	3	74
SUPERSEDED	5A	05/10/2010 17:00	05/10/2010 16:35	05/10/2010 16:34:13	4.0	0.0	14.6	3	74
SUPERSEDED	5A	05/10/2010 18:00	05/10/2010 17:40	05/10/2010 17:39:34	4.0	0.0	14.4	3	74
SUPERSEDED	5A	05/10/2010 19:00	05/10/2010 18:34	05/10/2010 18:34:11	5.0	0.0	15.2	3	80
SUPERSEDED	5A	05/10/2010 20:00	05/10/2010 19:38	05/10/2010 19:36:04	6.0	0.0	16.7	4	116
SUPERSEDED	5A	05/10/2010 21:00	05/10/2010 20:39	05/10/2010 20:38:14	1.0	0.0	11.2	1	7
SUPERSEDED	5A	05/10/2010 22:00	05/10/2010 21:35	05/10/2010 21:34:53	0.0	0.0	10.9	1	8
SUPERSEDED	5A	05/10/2010 23:00	05/10/2010 22:35	05/10/2010 22:34:15	10.0	0.0	11.3	1	8
SUPERSEDED	5A	05/11/2010 00:00	05/10/2010 23:33	05/10/2010 23:32:09	8.0	0.0	10.8	1	8
SUPERSEDED	5A	05/11/2010 01:00	05/11/2010 00:29	05/11/2010 00:28:59	1.0	0.0	10.4	1	8
SUPERSEDED	5A	05/11/2010 02:00	05/11/2010 01:30	05/11/2010 01:29:29	8.0	0.0	10.2	1	8
SUPERSEDED	5A	05/11/2010 03:00	05/11/2010 02:34	05/11/2010 02:33:38	6.0	0.0	10.1	1	8
SUPERSEDED	5A	05/11/2010 04:00	05/11/2010 03:29	05/11/2010 03:28:33	10.0	0.0	10.7	1	8
SUPERSEDED	3A	05/11/2010 05:00	05/11/2010 04:31	05/11/2010 04:30:32	0.2	0.0	1.7	1	31
TERMINATED	0	05/11/2010 05:35	05/11/2010 05:26	05/11/2010 05:25:55	0.0	0.0	0.0	0	0

May 10 18:34 (CST)	TLR 5A	NEXT	7-F Total	3 / 0 3 / 0	80 80	4.7 4.7	80 80	4.7 4.7	0 0	0.0 0.0	CLEC Total	11.0 11.0	11.0 11.0	ED-2 ED-6 FIRM-7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP Total	0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0	76	177	487	N/A
May 10 19:38 (CST)	TLR 5A	NEXT	7-F Total	4 / 0 4 / 0	116 116	6.5 6.5	116 116	6.5 6.5	0 0	0.0 0.0	CLEC Total	10.0 10.0	10.0 10.0	ED-2 ED-6 FIRM-7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP Total	0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0	70	164	432	N/A
May 10 20:35 (CST)	TLR 5A	NEXT	7-F Total	1 / 0 1 / 0	7 7	0.5 0.5	7 7	0.5 0.5	0 0	0.0 0.0	CLEC Total	11.0 11.0	11.0 11.0	ED-2 ED-6 FIRM-7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP Total	0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0	66	156	413	N/A
May 10 21:35 (CST)	TLR 5A	NEXT	7-F Total	1 / 0 1 / 0	8 8	0.5 0.5	8 8	0.5 0.5	0 0	0.0 0.0	CLEC Total	10.0 10.0	10.0 10.0	ED-2 ED-6 FIRM-7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP Total	0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0	67	156	410	N/A
May 10 22:35 (CST)	TLR 5A	NEXT	7-F Total	1 / 0 1 / 0	8 8	0.5 0.5	8 8	0.5 0.5	0 0	0.0 0.0	CLEC Total	11.0 11.0	11.0 11.0	ED-2 ED-6 FIRM-7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP Total	0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0	65	159	434	N/A
May 10 23:33 (CST)	TLR 5A	NEXT	7-F Total	1 / 0 1 / 0	8 8	0.5 0.5	8 8	0.5 0.5	0 0	0.0 0.0	CLEC Total	10.0 10.0	10.0 10.0	ED-2 ED-6 FIRM-7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP Total	0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0	65	160	436	N/A
May 11 00:29 (CST)	TLR 5A	NEXT	7-F Total	1 / 0 1 / 0	8 8	0.5 0.5	8 8	0.5 0.5	0 0	0.0 0.0	CLEC Total	10.0 10.0	10.0 10.0	ED-2 ED-6 FIRM-7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP Total	0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0	65	162	449	N/A
May 11 01:30 (CST)	TLR 5A	NEXT	7-F Total	1 / 0 1 / 0	8 8	0.5 0.5	8 8	0.5 0.5	0 0	0.0 0.0	CLEC Total	10.0 10.0	10.0 10.0	ED-2 ED-6 FIRM-7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP Total	0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0	65	161	442	N/A
May 11 02:34 (CST)	TLR 5A	NEXT	7-F Total	1 / 0 1 / 0	8 8	0.5 0.5	8 8	0.5 0.5	0 0	0.0 0.0	CLEC Total	10.0 10.0	10.0 10.0	ED-2 ED-6 FIRM-7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP Total	0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0	62	159	446	N/A
May 11 03:29 (CST)	TLR 5A	NEXT	7-F Total	1 / 0 1 / 0	8 8	0.5 0.5	8 8	0.5 0.5	0 0	0.0 0.0	CLEC Total	10.0 10.0	10.0 10.0	ED-2 ED-6 FIRM-7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP Total	0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0	69	170	484	N/A

May 11 04:31 (CST)	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	83	157	432	N/A
May 11 05:28 (CST)	TLR 0	CURRENT	NONE	NONE	NONE				82	151	411	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	0	0	0	0
7	28	623	623	8
Total	28	623	623	8

TLR NNL Totals

CA	NNL Relief	
	IDC MW	RC Ackn MW
CLEC	145.0	145.0
Total	145.0	145.0

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	0.0	0.0
Total for SWPP		0.0	0.0
Total		0.0	0.0

Reliability Log for May, 10			2010
Time	Initials	Comments	Monday
1313	DGA	Issued TLR Level 3B on Temp 3 Sshreve-Wallace fto Dolet 345/230 Xmfr Flgt 16364	
1425	DGA	Issued TLR Level 3A on Temp 3 Sshreve-Wallace fto Dolet 345/230 Xmfr Flgt 16364	
1510	LRG	Issued TLR Level 5B on Temp 3 Sshreve-Wallace fto Dolet 345/230 Xmfr Flgt 16364 Clec has 10.8 NNL will increase Rodemacker 1 76mw @ gsf = +5.9 decrease Dolet 76mw @ gsf = -8.3 =GSF 14.2 x 76mw =10.8 nnl	
1628	LRG	Issued TLR Level 5A on Temp 3 Sshreve-Wallace fto Dolet 345/230 Xmfr Flgt 16364 Clec has 10.5 NNL will increase Rodemacker 1 76mw @ gsf = +5.9 decrease Dolet 76mw @ gsf = -8.3 =GSF 14.2 x 76mw =10.8 nnl	
1743	LWB	Issued TLR Level 5A on Temp 3 Sshreve-Wallace fto Dolet 345/230 Xmfr Flgt 16364 Clec has 10.3 NNL will increase Rodemacker 1 76mw @ gsf = +5.9 decrease Dolet 76mw @ gsf = -8.3 =GSF 14.2 x 76mw =10.8 nnl . CLEC is maintaining as is @1628.	
1839	LWB	Issued TLR Level 5A on Temp 3 Sshreve-Wallace fto Dolet 345/230 Xmfr Flgt 16364 Clec has 10.1 NNL will increase Rodemacker 1 76mw @ gsf = +5.9 decrease Dolet 76mw @ gsf = -8.3 =GSF 14.2 x 76mw =10.8 nnl . CLEC is maintaining as is @1628.	
1934	LWB	Issued TLR Level 5A on Temp 3 Sshreve-Wallace fto Dolet 345/230 Xmfr Flgt 16364 Clec has 10.5 NNL will increase Rodemacker 1 76mw @ gsf = +5.9 decrease Dolet 76mw @ gsf = -8.3 =GSF 14.2 x 76mw =10.8 nnl . CLEC is maintaining as is @1628.	
2036	LWB	Issued TLR Level 5A on Temp 3 Sshreve-Wallace fto Dolet 345/230 Xmfr Flgt 16364 Clec has 10.2 NNL will increase Rodemacker 1 76mw @ gsf = +5.9 decrease Dolet 76mw @ gsf = -8.3 =GSF 14.2 x 76mw =10.8 nnl . CLEC is maintaining as is @1628.	
2138	LWB	Issued TLR Level 5A on Temp 3 Sshreve-Wallace fto Dolet 345/230 Xmfr Flgt 16364 Clec has 10.6 NNL will increase Rodemacker 1 76mw @ gsf = +5.9 decrease Dolet 76mw @ gsf = -8.3 =GSF 14.2 x 76mw =10.8 nnl . CLEC is maintaining as is @1628.	
2234	LWB	Issued TLR Level 5A on Temp 3 Sshreve-Wallace fto Dolet 345/230 Xmfr Flgt 16364 Clec has 10.3 NNL will increase Rodemacker 1 76mw @ gsf = +5.9 decrease Dolet 76mw @ gsf = -8.3 =GSF 14.2 x 76mw =10.8 nnl . CLEC is maintaining as is @1628.	
2334	LWB	Issued TLR Level 5A on Temp 3 Sshreve-Wallace fto Dolet 345/230 Xmfr Flgt 16364 Clec has 10.3 NNL will increase Rodemacker 1 76mw @ gsf = +5.9 decrease Dolet 76mw @ gsf = -8.3 =GSF 14.2 x 76mw =10.8 nnl . CLEC is maintaining as is @1628.	

Reliability Log for May, 11			2010
Time	Initials	Comments	Tuesday
0032	LWB	Issued TLR Level 5A on Temp 3 Sshreve-Wallace fto Dolet 345/230 Xmfr Flgt 16364 Clec has 10.3 NNL will increase Rodemacker 1 76mw @ gsf = +5.9 decrease Dolet 76mw @ gsf = -8.3 =GSF 14.2 x 76mw =10.8 nnl . CLEC is maintaining as is @1628.	
0128	LWB	Issued TLR Level 5A on Temp 3 Sshreve-Wallace fto Dolet 345/230 Xmfr Flgt 16364 Clec has 9.6 NNL will increase Rodemacker 1 76mw @ gsf = +5.9 decrease Dolet 76mw @ gsf = -8.3 =GSF 14.2 x 76mw =10.8 nnl . CLEC is maintaining as is @1628.	
0229	LWB	Issued TLR Level 5A on Temp 3 Sshreve-Wallace fto Dolet 345/230 Xmfr Flgt 16364 Clec has 9.6 NNL will increase Rodemacker 1 76mw @ gsf = +5.9 decrease Dolet 76mw @ gsf = -8.3 =GSF 14.2 x 76mw =10.8 nnl . CLEC is maintaining as is @1628.	
0333	LWB	Issued TLR Level 5A on Temp 3 Sshreve-Wallace fto Dolet 345/230 Xmfr Flgt 16364 Clec has 9.6 NNL will increase Rodemacker 1 76mw @ gsf = +5.9 decrease Dolet 76mw @ gsf = -8.3 =GSF 14.2 x 76mw =10.8 nnl . CLEC is maintaining as is @1628.	
0428	LWB	Issued TLR Level 5A on Temp 3 Sshreve-Wallace fto Dolet 345/230 Xmfr Flgt 16364 Clec has 10.2 NNL will increase Rodemacker 1 76mw @ gsf = +5.9 decrease Dolet 76mw @ gsf = -8.3 =GSF 14.2 x 76mw =10.8 nnl . CLEC is maintaining as is @1628.	
0530	LRG	Issued TLR Level 3A on Temp 3 Sshreve-Wallace fto Dolet 345/230 Xmfr Flgt 16364	
0625	LRG	Issued TLR Level 0 on Temp 3 Sshreve-Wallace fto Dolet 345/230 Xmfr Flgt 16364	

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Post Cont. SOL

