

**SPP TLR 5 Investigation Report
Temp 26 Flowgate 16045
(Neosho – Columbus 161 kV for the loss of Neosho – Delaware 345 kV)
TLR Level 5: March 27-28, 2010
Report Issued: March 31, 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 16045 on March 27, 2010. Flowgate 16045 is an SPP flowgate created for a planned outage of Neosho – Morgan 345 kV line earlier last fall. Loading on the flowgate remained relatively high after the Neosho – Morgan 345 kV line was returned to service so the flowgate was maintained following the end of the outage. The Level 5 TLR was in effect from 1:00 until 5:00 CST on March 27 and again from 21:15 on March 27 until 3:00 on March 28. Projected post contingent flows on the Neosho – Columbus 161 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 first Level 5A TLR was issued, the Limiting Element was rated at 215 MVA. Flow on the Limiting Element was 148 MVA. Flow on the Contingent Element was 405 MVA. The LODF was approximately 16%. Post-contingent flow on the Limiting Element was approximately 210 MW. When the second Level 5A TLR was issued, flow on the Limiting Element was 149 MVA, and flow on the Contingent Element was 424 MVA. Post-contingent flow on the Limiting Element was approximately 214 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 3-10.

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 and market flows to provide the necessary relief on the flowgate. 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, see page 11-12. 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 13.

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 during the weekend.

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 Flows were reduced on the flowgate as reported in the TLR Event History and NERC TLR Log on pages 3-10.

TLR Event History

16045 - Temporary 26 - Neosho-Columbus 161 flo Neosho-Delaware 345

Status	TLR Level	TLR Date	TLR Confirm Time	Run Time	Requested Relief	Remaining Relief	Relief Provided	Total Cuts	
								Tags	MW
SUPERSEDED	3B	03/26/2010 21:30	03/26/2010 21:19	03/26/2010 21:19:05	25.0	24.9	0.1	1	2
SUPERSEDED	3A	03/26/2010 23:00	03/26/2010 22:29	03/26/2010 22:28:45	25.0	19.0	6.0	0	0
SUPERSEDED	3A	03/27/2010 00:00	03/26/2010 23:30	03/26/2010 23:30:17	27.0	14.0	13.0	0	0
SUPERSEDED	5A	03/27/2010 01:00	03/27/2010 00:35	03/27/2010 00:33:10	0.0	0.0	5.0	0	0
SUPERSEDED	5A	03/27/2010 02:00	03/27/2010 01:29	03/27/2010 01:28:19	0.0	0.0	17.0	0	0
SUPERSEDED	5A	03/27/2010 03:00	03/27/2010 02:31	03/27/2010 02:30:51	0.0	0.0	8.0	0	0
SUPERSEDED	5A	03/27/2010 04:00	03/27/2010 03:31	03/27/2010 03:30:25	0.0	0.0	7.0	0	0
SUPERSEDED	3A	03/27/2010 05:00	03/27/2010 04:29	03/27/2010 04:29:22	43.0	33.0	10.0	0	0
SUPERSEDED	3A	03/27/2010 06:00	03/27/2010 05:31	03/27/2010 05:30:41	49.0	38.0	11.0	0	0
SUPERSEDED	3A	03/27/2010 07:00	03/27/2010 06:34	03/27/2010 06:33:34	60.0	52.0	8.0	0	0
SUPERSEDED	3A	03/27/2010 08:00	03/27/2010 07:28	03/27/2010 07:27:38	50.0	48.0	2.0	0	0
SUPERSEDED	3A	03/27/2010 09:00	03/27/2010 08:32	03/27/2010 08:32:25	48.0	41.0	7.0	0	0
SUPERSEDED	3A	03/27/2010 10:00	03/27/2010 09:28	03/27/2010 09:28:22	34.0	26.0	8.0	0	0
SUPERSEDED	3A	03/27/2010 11:00	03/27/2010 10:27	03/27/2010 10:26:50	37.0	28.0	9.0	0	0
SUPERSEDED	3A	03/27/2010 12:00	03/27/2010 11:27	03/27/2010 11:27:09	45.0	29.0	16.0	0	0
SUPERSEDED	3A	03/27/2010 13:00	03/27/2010 12:32	03/27/2010 12:31:39	25.0	6.0	19.0	0	0
SUPERSEDED	3A	03/27/2010 14:00	03/27/2010 13:28	03/27/2010 13:28:09	30.0	10.0	20.0	0	0
SUPERSEDED	3A	03/27/2010 15:00	03/27/2010 14:28	03/27/2010 14:26:59	26.0	3.0	23.0	0	0
SUPERSEDED	3A	03/27/2010 16:00	03/27/2010 15:31	03/27/2010 15:31:24	32.0	28.0	4.0	0	0
SUPERSEDED	3A	03/27/2010 17:00	03/27/2010 16:31	03/27/2010 16:30:44	23.0	20.0	3.0	0	0
SUPERSEDED	3A	03/27/2010 18:00	03/27/2010 17:31	03/27/2010 17:30:51	30.0	24.0	6.0	0	0
SUPERSEDED	3A	03/27/2010 19:00	03/27/2010 18:34	03/27/2010 18:33:54	23.0	20.0	3.0	0	0
SUPERSEDED	3A	03/27/2010 20:00	03/27/2010 19:29	03/27/2010 19:28:45	30.0	25.0	5.0	0	0
SUPERSEDED	3A	03/27/2010 21:00	03/27/2010 20:31	03/27/2010 20:30:30	16.0	16.0	0.0	0	0
SUPERSEDED	5A	03/27/2010 21:15	03/27/2010 20:58	03/27/2010 20:57:35	0.0	0.0	0.0	0	0
SUPERSEDED	5A	03/27/2010 22:00	03/27/2010 21:41	03/27/2010 21:41:27	0.0	0.0	2.0	0	0
SUPERSEDED	5A	03/27/2010 23:00	03/27/2010 22:35	03/27/2010 22:34:34	23.0	0.0	23.2	7	36
SUPERSEDED	5A	03/28/2010 00:00	03/27/2010 23:32	03/27/2010 23:32:29	20.0	0.0	20.2	7	31
SUPERSEDED	5A	03/28/2010 01:00	03/28/2010 00:31	03/28/2010 00:30:51	10.0	0.0	10.2	7	14
SUPERSEDED	5A	03/28/2010 02:00	03/28/2010 01:33	03/28/2010 01:32:52	10.0	0.0	10.2	8	15
SUPERSEDED	3A	03/28/2010 03:00	03/28/2010 02:35	03/28/2010 02:35:03	30.0	29.0	1.0	0	0
SUPERSEDED	3A	03/28/2010 04:00	03/28/2010 03:30	03/28/2010 03:30:41	35.0	35.0	0.0	0	0
SUPERSEDED	3A	03/28/2010 05:00	03/28/2010 04:27	03/28/2010 04:27:43	61.0	53.0	8.0	0	0
SUPERSEDED	3A	03/28/2010 06:00	03/28/2010 05:33	03/28/2010 05:33:09	29.0	23.0	6.0	0	0
SUPERSEDED	3A	03/28/2010 07:00	03/28/2010 06:29	03/28/2010 06:29:30	20.0	13.0	7.0	0	0
SUPERSEDED	3A	03/28/2010 08:00	03/28/2010 07:34	03/28/2010 07:33:53	24.0	16.0	8.0	0	0

SUPERSEDED	3A	03/28/2010 09:00	03/28/2010 08:35	03/28/2010 08:34:44	42.0	32.0	10.0	0	0
SUPERSEDED	3A	03/28/2010 10:00	03/28/2010 09:33	03/28/2010 09:32:49	37.0	23.0	14.0	0	0
SUPERSEDED	3A	03/28/2010 11:00	03/28/2010 10:34	03/28/2010 10:34:04	46.0	27.0	19.0	0	0
SUPERSEDED	3A	03/28/2010 12:00	03/28/2010 11:27	03/28/2010 11:26:55	38.0	17.0	21.0	0	0
SUPERSEDED	3A	03/28/2010 13:00	03/28/2010 12:29	03/28/2010 12:28:54	34.0	9.0	25.0	0	0
SUPERSEDED	3A	03/28/2010 14:00	03/28/2010 13:30	03/28/2010 13:30:34	49.0	23.0	26.0	0	0
SUPERSEDED	3A	03/28/2010 15:00	03/28/2010 14:28	03/28/2010 14:27:54	33.0	6.0	27.0	0	0
SUPERSEDED	3A	03/28/2010 16:00	03/28/2010 15:29	03/28/2010 15:28:59	39.0	18.0	21.0	0	0
SUPERSEDED	3A	03/28/2010 17:00	03/28/2010 16:29	03/28/2010 16:28:11	32.0	13.0	19.0	0	0
SUPERSEDED	3A	03/28/2010 18:00	03/28/2010 17:35	03/28/2010 17:34:43	38.0	20.0	18.0	0	0
SUPERSEDED	3A	03/28/2010 19:00	03/28/2010 18:29	03/28/2010 18:29:13	21.0	0.0	21.1	4	52
SUPERSEDED	3A	03/28/2010 20:00	03/28/2010 19:32	03/28/2010 19:32:08	12.0	0.0	12.1	4	76
SUPERSEDED	3A	03/28/2010 21:00	03/28/2010 20:27	03/28/2010 20:27:18	20.0	0.0	20.0	1	30
SUPERSEDED	3A	03/28/2010 22:00	03/28/2010 21:31	03/28/2010 21:31:27	0.0	0.0	0.0	0	0
SUPERSEDED	3A	03/28/2010 23:00	03/28/2010 22:33	03/28/2010 22:33:08	50.0	24.2	25.8	1	75
SUPERSEDED	3A	03/29/2010 00:00	03/28/2010 23:29	03/28/2010 23:29:31	40.0	11.2	28.8	1	75
SUPERSEDED	3A	03/29/2010 01:00	03/29/2010 00:28	03/29/2010 00:27:39	50.0	27.2	22.8	1	75
SUPERSEDED	3A	03/29/2010 02:00	03/29/2010 01:28	03/29/2010 01:28:09	40.0	16.2	23.8	1	75
SUPERSEDED	3A	03/29/2010 03:00	03/29/2010 02:28	03/29/2010 02:27:48	50.0	27.2	22.8	1	75
SUPERSEDED	3A	03/29/2010 04:00	03/29/2010 03:25	03/29/2010 03:25:33	40.0	17.2	22.8	1	75
TERMINATED	0	03/29/2010 04:00	03/29/2010 04:00	03/29/2010 03:59:58	0.0	0.0	0.0	0	0

Event Summary

FILE SAVED AS: SWPP_16045_20100326_2130.htm

Incident:	SWPP_16045_20100326_2130	Date: 03/26/2010 (CST)	Reliability Coordinator: SWPP
Initial Conditions:	Increased Flows		
Flowgate:	16045 - Temporary 26 - Neosho-Columbus...	Rating: 215	LODF: 15.54%
TLR Direction:	Normal		
Effective StartTime:	03/26/2010 21:30 (CST)	Effective EndTime: 03/29/2010 04:00 (CST)	TLR Duration: 54 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 MVV	RC Ackn MVV	Type	Mkt	IDC MVV	RC Ackn MVV	Current	Post Cont.	Cont. Flow		
					MW	Relief	MW	Relief	MW	Relief												
Mar 26 21:19 (CST)	TLR 3B	CURRENT	2-NH	1 / 0	2	0.1	2	0.1	0	0.0	NONE			ED-2	SWPP	0.0	0.0	159	227	442	N/A	
		Total	1 / 0	4	0.1	2	0.1	0	0.0	ED-6	SWPP	0.0	0.0	FIRM-7	SWPP	0.0	0.0					Total
		NEXT	2-NH	1 / 0	2	0.1	2	0.1	0	0.0	NONE			ED-2	SWPP	0.0	0.0					
		Total	1 / 0	4	0.1	2	0.1	0	0.0	ED-6	SWPP	0.0	0.0	FIRM-7	SWPP	0.0	0.0					Total
Mar 26 22:29 (CST)	TLR 3A	NEXT	NONE								NONE			ED-2	SWPP	0.0	0.0	146	206	390	N/A	
														ED-6	SWPP	8.0	8.0					
														FIRM-7	SWPP	0.0	0.0					
														Total		6.0	6.0					
Mar 26 23:30 (CST)	TLR 3A	NEXT	NONE								NONE			ED-2	SWPP	0.0	0.0	148	207	388	N/A	
														ED-6	SWPP	13.0	13.0					
														FIRM-7	SWPP	0.0	0.0					
														Total		13.0	13.0					
Mar 27 00:35 (CST)	TLR 5A	NEXT	NONE								NONE			ED-2	SWPP	0.0	0.0	148	210	405	N/A	
														ED-6	SWPP	5.0	5.0					
														FIRM-7	SWPP	0.0	0.0					
														FIRM-CREDIT	SWPP	0.0	0.0					
														Total		5.0	5.0					
Mar 27 01:29 (CST)	TLR 5A	NEXT	NONE								NONE			ED-2	SWPP	0.0	0.0	147	209	404	N/A	
														ED-6	SWPP	17.0	17.0					
														FIRM-7	SWPP	0.0	0.0					
														FIRM-CREDIT	SWPP	0.0	0.0					
														Total		17.0	17.0					
Mar 27 02:31 (CST)	TLR 5A	NEXT	NONE								NONE			ED-2	SWPP	0.0	0.0	145	209	414	N/A	
														ED-6	SWPP	8.0	8.0					
														FIRM-7	SWPP	0.0	0.0					
														FIRM-CREDIT	SWPP	0.0	0.0					
														Total		8.0	8.0					

Mar 27 03:31 (CST)	TLR 5A	NEXT	NONE								NONE	ED-2 ED-6 FIRM-7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP	0.0 7.0 0.0 0.0 7.0	0.0 7.0 0.0 0.0 7.0	148	212	412	N/A
Mar 27 04:29 (CST)	TLR 3A	NEXT	NONE								NONE	ED-2 ED-6 FIRM-7 Total	SWPP SWPP SWPP	0.0 10.0 0.0 10.0	0.0 10.0 0.0 10.0	152	213	399	N/A
Mar 27 05:31 (CST)	TLR 3A	NEXT	NONE								NONE	ED-2 ED-6 FIRM-7 Total	SWPP SWPP SWPP	0.0 11.0 0.0 11.0	0.0 11.0 0.0 11.0	153	213	387	N/A
Mar 27 06:34 (CST)	TLR 3A	NEXT	NONE								NONE	ED-2 ED-6 FIRM-7 Total	SWPP SWPP SWPP	0.0 8.0 0.0 8.0	0.0 8.0 0.0 8.0	157	215	378	N/A
Mar 27 07:28 (CST)	TLR 3A	NEXT	NONE								NONE	ED-2 ED-6 FIRM-7 Total	SWPP SWPP SWPP	0.0 2.0 0.0 2.0	0.0 2.0 0.0 2.0	180	219	385	N/A
Mar 27 08:32 (CST)	TLR 3A	NEXT	7-F Total	0 / 1 0 / 1	0 0	0.0 0.0	0 0	0.0 0.0	2 2	0.2 0.2	NONE	ED-2 ED-6 FIRM-7 Total	SWPP SWPP SWPP	0.0 7.0 0.0 7.0	0.0 7.0 0.0 7.0	161	228	434	N/A
Mar 27 09:28 (CST)	TLR 3A	NEXT	NONE								NONE	ED-2 ED-6 FIRM-7 Total	SWPP SWPP SWPP	0.0 8.0 0.0 8.0	0.0 8.0 0.0 8.0	148	212	415	N/A
Mar 27 10:27 (CST)	TLR 3A	NEXT	NONE								NONE	ED-2 ED-6 FIRM-7 Total	SWPP SWPP SWPP	0.0 9.0 0.0 9.0	0.0 9.0 0.0 9.0	148	220	468	N/A
Mar 27 11:27 (CST)	TLR 3A	NEXT	NONE								NONE	ED-2 ED-6 FIRM-7 Total	SWPP SWPP SWPP	0.0 16.0 0.0 16.0	0.0 16.0 0.0 16.0	145	219	478	N/A
Mar 27 12:32 (CST)	TLR 3A	NEXT	NONE								NONE	ED-2 ED-6 FIRM-7 Total	SWPP SWPP SWPP	0.0 19.0 0.0 19.0	0.0 19.0 0.0 19.0	148	223	484	N/A
Mar 27 13:28 (CST)	TLR 3A	NEXT	NONE								NONE	ED-2 ED-6 FIRM-7 Total	SWPP SWPP SWPP	0.0 20.0 0.0 20.0	0.0 20.0 0.0 20.0	143	219	493	N/A
Mar 27 14:28 (CST)	TLR 3A	NEXT	NONE								NONE	ED-2 ED-6 FIRM-7 Total	SWPP SWPP SWPP	0.0 23.0 0.0 23.0	0.0 23.0 0.0 23.0	146	227	524	N/A

Mar 27 15:31 (CST)	TLR 3A	NEXT	NONE								NONE	ED-2 ED-6 FIRM-7 Total	SWPP SWPP SWPP	0.0 4.0 0.0 4.0	0.0 4.0 0.0 4.0	143	219	491	N/A
Mar 27 16:31 (CST)	TLR 3A	NEXT	NONE								NONE	ED-2 ED-6 FIRM-7 Total	SWPP SWPP SWPP	0.0 3.0 0.0 3.0	0.0 3.0 0.0 3.0	148	224	496	N/A
Mar 27 17:31 (CST)	TLR 3A	NEXT	NONE								NONE	ED-2 ED-6 FIRM-7 Total	SWPP SWPP SWPP	0.0 6.0 0.0 6.0	0.0 6.0 0.0 6.0	151	227	491	N/A
Mar 27 18:34 (CST)	TLR 3A	NEXT	NONE								NONE	ED-2 ED-6 FIRM-7 Total	SWPP SWPP SWPP	0.0 3.0 0.0 3.0	0.0 3.0 0.0 3.0	148	214	428	N/A
Mar 27 19:29 (CST)	TLR 3A	NEXT	NONE								NONE	ED-2 ED-6 FIRM-7 Total	SWPP SWPP SWPP	0.0 5.0 0.0 5.0	0.0 5.0 0.0 5.0	148	213	423	N/A
Mar 27 20:31 (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	147	212	421	N/A
Mar 27 20:58 (CST)	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	149	214	424	N/A
Mar 27 21:41 (CST)	TLR 5A	NEXT	NONE								NONE	ED-2 ED-6 FIRM-7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP	0.0 2.0 0.0 0.0 2.0	0.0 2.0 0.0 0.0 2.0	149	217	439	N/A
Mar 27 22:35 (CST)	TLR 5A	NEXT	7-F Total	7 / 0 7 / 0	36 36	2.2 2.2	36 36	2.2 2.2	0 0	0.0 0.0	NONE	ED-2 ED-6 FIRM-7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP	0.0 12.0 9.1 0.0 21.1	0.0 12.0 9.1 0.0 21.1	144	215	459	N/A
Mar 27 23:32 (CST)	TLR 5A	NEXT	7-F Total	7 / 0 7 / 0	31 31	1.8 1.8	31 31	1.8 1.8	0 0	0.0 0.0	NONE	ED-2 ED-6 FIRM-7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP	0.0 11.0 7.4 0.0 18.4	0.0 11.0 7.4 0.0 18.4	139	217	507	N/A
Mar 28 00:31 (CST)	TLR 5A	NEXT	7-F Total	7 / 0 7 / 0	14 14	0.8 0.8	14 14	0.8 0.8	0 0	0.0 0.0	NONE	ED-2 ED-6 FIRM-7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP	0.0 9.4 0.0 0.0 9.4	0.0 9.4 0.0 0.0 9.4	142	219	499	N/A

Mar 28 01:33 (CST)	TLR 5A	NEXT	7-F Total	8 / 0 8 / 0	15 15	0.9 0.9	15 15	0.9 0.9	0 0	0.0 0.0	NONE	ED-2 ED-6 FIRM-7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP	0.0 9.3 0.0 0.0 9.3	0.0 9.3 0.0 0.0 9.3	141	217	490	N/A
Mar 28 02:35 (CST)	TLR 3A	NEXT	NONE								NONE	ED-2 ED-6 FIRM-7 Total	SWPP SWPP SWPP	0.0 1.0 0.0 1.0	0.0 1.0 0.0 1.0	142	216	479	N/A
Mar 28 03:30 (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	141	210	447	N/A
Mar 28 04:27 (CST)	TLR 3A	NEXT	NONE								NONE	ED-2 ED-6 FIRM-7 Total	SWPP SWPP SWPP	0.0 8.0 0.0 8.0	0.0 8.0 0.0 8.0	146	219	471	N/A
Mar 28 05:33 (CST)	TLR 3A	NEXT	NONE								NONE	ED-2 ED-6 FIRM-7 Total	SWPP SWPP SWPP	0.0 6.0 0.0 6.0	0.0 6.0 0.0 6.0	146	219	471	N/A
Mar 28 06:29 (CST)	TLR 3A	NEXT	7-F Total	0 / 1 0 / 1	0 0	0.0 0.0	0 0	0.0 0.0	1 1	0.1 0.1	NONE	ED-2 ED-6 FIRM-7 Total	SWPP SWPP SWPP	0.0 7.0 0.0 7.0	0.0 7.0 0.0 7.0	151	221	455	N/A
Mar 28 07:34 (CST)	TLR 3A	NEXT	NONE								NONE	ED-2 ED-6 FIRM-7 Total	SWPP SWPP SWPP	0.0 8.0 0.0 8.0	0.0 8.0 0.0 8.0	159	229	452	N/A
Mar 28 08:35 (CST)	TLR 3A	NEXT	NONE								NONE	ED-2 ED-6 FIRM-7 Total	SWPP SWPP SWPP	0.0 10.0 0.0 10.0	0.0 10.0 0.0 10.0	157	223	428	N/A
Mar 28 09:33 (CST)	TLR 3A	NEXT	NONE								NONE	ED-2 ED-6 FIRM-7 Total	SWPP SWPP SWPP	0.0 14.0 0.0 14.0	0.0 14.0 0.0 14.0	157	221	417	N/A
Mar 28 10:34 (CST)	TLR 3A	NEXT	NONE								NONE	ED-2 ED-6 FIRM-7 Total	SWPP SWPP SWPP	0.0 19.0 0.0 19.0	0.0 19.0 0.0 19.0	154	225	460	N/A
Mar 28 11:27 (CST)	TLR 3A	NEXT	NONE								NONE	ED-2 ED-6 FIRM-7 Total	SWPP SWPP SWPP	0.0 21.0 0.0 21.0	0.0 21.0 0.0 21.0	150	223	471	N/A
Mar 28 12:29 (CST)	TLR 3A	NEXT	7-F Total	0 / 1 0 / 1	0 0	0.0 0.0	0 0	0.0 0.0	10 10	0.7 0.7	NONE	ED-2 ED-6 FIRM-7 Total	SWPP SWPP SWPP	0.0 25.0 0.0 25.0	0.0 25.0 0.0 25.0	150	228	507	N/A

Mar 28 13:30 (CST)	TLR 3A	NEXT	7-F Total	0 / 1 0 / 1	0 0	0.0 0.0	0 0	0.0 0.0	5 5	0.6 0.6	NONE	ED-2 ED-6 FIRM-7 Total	SWPP SWPP SWPP	0.0 26.0 0.0 26.0	0.0 26.0 0.0 26.0	151	229	507	N/A
Mar 28 14:28 (CST)	TLR 3A	NEXT	7-F Total	0 / 1 0 / 1	0 0	0.0 0.0	0 0	0.0 0.0	2 2	0.2 0.2	NONE	ED-2 ED-6 FIRM-7 Total	SWPP SWPP SWPP	0.0 27.0 0.0 27.0	0.0 27.0 0.0 27.0	147	224	496	N/A
Mar 28 15:29 (CST)	TLR 3A	NEXT	NONE								NONE	ED-2 ED-6 FIRM-7 Total	SWPP SWPP SWPP	0.0 21.0 0.0 21.0	0.0 21.0 0.0 21.0	145	220	484	N/A
Mar 28 16:29 (CST)	TLR 3A	NEXT	NONE								NONE	ED-2 ED-6 FIRM-7 Total	SWPP SWPP SWPP	0.0 19.0 0.0 19.0	0.0 19.0 0.0 19.0	154	227	475	N/A
Mar 28 17:35 (CST)	TLR 3A	NEXT	NONE								NONE	ED-2 ED-6 FIRM-7 Total	SWPP SWPP SWPP	0.0 18.0 0.0 18.0	0.0 18.0 0.0 18.0	149	222	476	N/A
Mar 28 18:29 (CST)	TLR 3A	NEXT	6-NN Total	4 / 0 4 / 0	52 52	2.6 2.6	52 52	2.6 2.6	0 0	0.0 0.0	NONE	ED-2 ED-6 FIRM-7 Total	SWPP SWPP SWPP	0.0 18.5 0.0 18.5	0.0 18.5 0.0 18.5	149	217	441	N/A
Mar 28 19:32 (CST)	TLR 3A	NEXT	6-NN Total	4 / 0 4 / 0	76 76	3.9 3.9	76 76	3.9 3.9	0 0	0.0 0.0	NONE	ED-2 ED-6 FIRM-7 Total	SWPP SWPP SWPP	0.0 8.2 0.0 8.2	0.0 8.2 0.0 8.2	152	218	426	N/A
Mar 28 20:27 (CST)	TLR 3A	NEXT	6-NN Total	1 / 0 1 / 0	30 30	1.5 1.5	30 30	1.5 1.5	0 0	0.0 0.0	NONE	ED-2 ED-6 FIRM-7 Total	SWPP SWPP SWPP	0.0 18.5 0.0 18.5	0.0 18.5 0.0 18.5	152	225	473	N/A
Mar 28 21:31 (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	156	225	449	N/A
Mar 28 22:33 (CST)	TLR 3A	NEXT	6-NN 7-F Total	1 / 0 0 / 1 1 / 1	75 0 75	3.8 0.0 3.8	75 0 75	3.8 0.0 3.8	0 14 14	0.0 1.6 1.6	NONE	ED-2 ED-6 FIRM-7 Total	SWPP SWPP SWPP	0.0 22.0 0.0 22.0	0.0 22.0 0.0 22.0	153	224	460	N/A
Mar 28 23:29 (CST)	TLR 3A	NEXT	6-NN Total	1 / 0 1 / 0	75 75	3.8 3.8	75 75	3.8 3.8	0 0	0.0 0.0	NONE	ED-2 ED-6 FIRM-7 Total	SWPP SWPP SWPP	0.0 25.0 0.0 25.0	0.0 25.0 0.0 25.0	141	214	476	N/A
Mar 29 00:28 (CST)	TLR 3A	NEXT	6-NN Total	1 / 0 1 / 0	75 75	3.8 3.8	75 75	3.8 3.8	0 0	0.0 0.0	NONE	ED-2 ED-6 FIRM-7 Total	SWPP SWPP SWPP	0.0 19.0 0.0 19.0	0.0 19.0 0.0 19.0	141	209	442	N/A
Mar 29 01:28 (CST)	TLR 3A	NEXT	6-NN Total	1 / 0 1 / 0	75 75	3.8 3.8	75 75	3.8 3.8	0 0	0.0 0.0	NONE	ED-2 ED-6 FIRM-7 Total	SWPP SWPP SWPP	0.0 20.0 0.0 20.0	0.0 20.0 0.0 20.0	142	209	432	N/A

Mar 29 02:28 (CST)	TLR 3A	NEXT	6-NN Total	1 / 0 1 / 0	75 75	3.8 3.8	75 75	3.8 3.8	0 0	0.0 0.0	NONE	ED-2 ED-6 FIRM-7 Total	SWPP SWPP SWPP	0.0 19.0 0.0 19.0	0.0 19.0 0.0 19.0	146	211	424	N/A
Mar 29 03:25 (CST)	TLR 3A	NEXT	6-NN 7-F Total	1 / 0 0 / 1 1 / 1	75 0 75	3.8 0.0 3.8	75 0 75	3.8 0.0 3.8	0 2 2	0.0 0.2 0.2	NONE	ED-2 ED-6 FIRM-7 Total	SWPP SWPP SWPP	0.0 19.0 0.0 19.0	0.0 19.0 0.0 19.0	148	210	403	N/A
Mar 29 04:00 (CST)	TLR 0	CURRENT	NONE								NONE	NONE				127	181	354	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	2	4	4	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	15	608	608	0
7	29	96	96	36
Total	46	708	708	36

TLR Market Flow Totals

Market	Type	Market Relief	
		IDC MW	RC Ackn MW
SWPP	ED-2	0.0	0.0
	ED-6	662.9	662.9
	FIRM-7	16.5	16.5
Total for SWPP		669.4	669.4
Total		669.4	669.4

	A	B	C	D
1	Reliability Log for March, 26			2010
2	Time	Initials	Comments	Friday
3	2219	MRH	Issued TLR Level 3B on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045, set effective limit at 210.	
4	2231	MRH	Set effective limit on Flgt 16045 to 200 to control for loading, Flgt at 105% and no NF tags or NF market.	
5	2328	MRH	Re-issued TLR Level 3A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045.	
6				
7				
8	Reliability Log for March, 27			2010
9	Time	Initials	Comments	Saturday
10	0030	MRH	Re-issued TLR Level 3A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045.	
11	0133	MRH	Re-issued TLR Level 5A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045. FEASIBILITY	
12	0228	MRH	Re-issued TLR Level 5A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045. FEASIBILITY, set limit at 210.	
13	0330	MRH	Re-issued TLR Level 5A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045. FEASIBILITY, set limit at 215.	
14	0430	MRH	Re-issued TLR Level 5A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045. FEASIBILITY, set limit at 215.	
15	0529	MRH	Re-issued TLR Level 3A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045.	
16	0630	RST	Re-issued TLR Level 3A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045.	
17	0733	RST	Re-issued TLR Level 3A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045.	
18	0827	RST	Re-issued TLR Level 3A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045.	
19	0932	RST	Re-issued TLR Level 3A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045.	
20	1028	RST	Re-issued TLR Level 3A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045.	
21	1126	RST	Re-issued TLR Level 3A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045.	
22	1227	RST	Re-issued TLR Level 3A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045.	
23	1331	RST	Re-issued TLR Level 3A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045.	
24	1428	RST	Re-issued TLR Level 3A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045.	
25	1526	RST	Re-issued TLR Level 3A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045.	
26	1631	RST	Re-issued TLR Level 3A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045.	
27	1730	RST	Re-issued TLR Level 3A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045.	
28	1830	MRH	Re-issued TLR Level 3A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045. Set effective to 200	
29	1931	MRH	Re-issued TLR Level 3A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045	
30	2028	MRH	Re-issued TLR Level 3A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045	
31	2130	MRH	Re-issued TLR Level 3A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045	
32	2159	MRH	Re-issued TLR Level 5A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045- FEASIBILITY	
33	2241	MRH	Re-issued TLR Level 5A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045- FEASIBILITY	
34	2334	MRH	Re-issued TLR Level 5A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045- Feasibility	
35				
36				

	A	B	C	D
37	Reliability Log for March, 28			2010
38	Time	Initials	Comments	Sunday
39	0032	MRH	Re-issued TLR Level 5A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045-Feasibility	
40	0130	MRH	Re-issued TLR Level 5A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045-Feasibility	
41	0232	MRH	Re-issued TLR Level 5A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045-Feasibility	
42	0335	MRH	Re-issued TLR Level 3A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045	
43	0439	MRH	Re-issued TLR Level 3A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045	
44	0527	MRH	Re-issued TLR Level 3A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045	
45	0633	RST	Re-issued TLR Level 3A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045	
46	0729	RST	Re-issued TLR Level 3A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045	
47	0833	RST	Re-issued TLR Level 3A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045	
48	0934	RST	Re-issued TLR Level 3A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045	
49	1032	RST	Re-issued TLR Level 3A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045	
50	1134	RST	Re-issued TLR Level 3A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045	
51	1226	RST	Re-issued TLR Level 3A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045	
52	1328	RST	Re-issued TLR Level 3A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045	
53	1430	RST	Re-issued TLR Level 3A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045	
54	1527	RST	Re-issued TLR Level 3A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045	
55	1628	RST	Re-issued TLR Level 3A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045	
56	1728	RST	Re-issued TLR Level 3A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045	
57	1834	MRH	Re-issued TLR Level 3A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045	
58	1929	MRH	Re-issued TLR Level 3A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045	
59	2032	MRH	Re-issued TLR Level 3A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045	
60	2127	MRH	Re-issued TLR Level 3A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045	
61	2231	MRH	Re-issued TLR Level 3A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045	
62	2333	MRH	Re-issued TLR Level 3A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045	
63				
64				
65	Reliability Log for March, 29			2010
66	Time	Initials	Comments	Monday
67	0029	MRH	Re-issued TLR Level 3A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045	
68	0127	MRH	Re-issued TLR Level 3A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045	
69	0228	MRH	Re-issued TLR Level 3A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045	
70	0327	MRH	Re-issued TLR Level 3A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045	
71	0425	MRH	Re-issued TLR Level 3A on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045	
72	0459	MRH	Re-issued TLR Level 0 on Temp 26 Neosho-Columbus 161 fto Neosho-Delware 345Kv Flgt 16045	
73				
74				

TEMP26_16045

— Post Cont. — Rating

