

SPP TLR 5 Investigation Report
Flowgate 5354
(Randall-Palo Duro 115kV for the loss of Amarillo-Swisher 230kV)
TLR Level 5: July 30-31, 2009
Report Issued: August 4, 2009

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 5354 on July 30-31, 2009. Flowgate 5354 is an SPP flowgate. The Level 5 TLR was in effect from 9:00 until 21:00 CST on July 30 and again from 23:40 on July 30 until 20:00 on July 31, 2009. Projected post-contingent flows on the Randall – Palo Duro 115 kV line exceeded the SOL. This flowgate was created in response to a request from the balancing authority due to an equipment rating decrease which in turn caused thermal loading concerns. The rating is based on the limit within the substation.

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

At the time the Level 5A TLR was issued, the Limiting Element was rated at 99 MVA. Flow on the Limiting Element was 54 MVA. Flow on the Contingent Element was 177 MVA. The LODF was approximately 20%. Post-contingent flow on the Limiting Element was approximately 90 MVA. However, the balancing authority had been reporting post-contingent loading on the Limiting Element up to 30% higher than those recorded by the Reliability Coordinator. The Reliability Coordinator took action based on the higher loading observed by the balancing authority.

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 no non-firm transactions 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 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 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 coupled with a facility derating. This facility has been in TLR frequently since the derate in October 2008. Loading sometimes requires escalating to a Level 5 TLR in order to obtain sufficient relief to reduce overloads. There are currently no plans to uprate this facility; however, a permanent reconfiguration option has been studied, and a new operation guide is being developed to alleviate loading on the flowgate.

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 Market Flow was reduced on the flowgate as reported in the TLR Event History and NERC TLR Log on pages 3-10.

TLR Event History

5354 - RANPALAMASWI

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	07/29/2009 20:55	07/29/2009 20:45	07/29/2009 20:44:43	20.0	20.0	0.0	0	0
SUPERSEDED	3A	07/29/2009 22:00	07/29/2009 21:34	07/29/2009 21:33:37	8.0	8.0	0.0	0	0
SUPERSEDED	3A	07/29/2009 23:00	07/29/2009 22:28	07/29/2009 22:28:23	10.0	6.0	4.0	0	0
SUPERSEDED	3A	07/30/2009 00:00	07/29/2009 23:30	07/29/2009 23:30:13	6.0	0.0	6.0	0	0
SUPERSEDED	3A	07/30/2009 01:00	07/30/2009 00:38	07/30/2009 00:38:05	4.0	3.0	1.0	0	0
SUPERSEDED	3A	07/30/2009 02:00	07/30/2009 01:27	07/30/2009 01:26:54	2.0	1.0	1.0	0	0
SUPERSEDED	3A	07/30/2009 03:00	07/30/2009 02:32	07/30/2009 02:30:57	9.0	9.0	0.0	0	0
SUPERSEDED	3A	07/30/2009 04:00	07/30/2009 03:29	07/30/2009 03:29:23	4.0	4.0	0.0	0	0
SUPERSEDED	3A	07/30/2009 05:00	07/30/2009 04:26	07/30/2009 04:25:56	3.0	3.0	0.0	0	0
SUPERSEDED	3A	07/30/2009 06:00	07/30/2009 05:26	07/30/2009 05:26:18	0.0	0.0	0.0	0	0
SUPERSEDED	3A	07/30/2009 07:00	07/30/2009 06:26	07/30/2009 06:26:09	0.0	0.0	0.0	0	0
SUPERSEDED	3A	07/30/2009 08:00	07/30/2009 07:26	07/30/2009 07:26:18	0.0	0.0	0.0	0	0
SUPERSEDED	5A	07/30/2009 09:00	07/30/2009 08:26	07/30/2009 08:25:34	0.0	0.0	0.0	0	0
SUPERSEDED	5A	07/30/2009 10:00	07/30/2009 09:25	07/30/2009 09:25:31	0.0	0.0	0.0	0	0
SUPERSEDED	5A	07/30/2009 11:00	07/30/2009 10:27	07/30/2009 10:27:17	0.0	0.0	0.0	0	0
SUPERSEDED	5A	07/30/2009 12:00	07/30/2009 11:25	07/30/2009 11:25:36	0.0	0.0	0.0	0	0
SUPERSEDED	5A	07/30/2009 13:00	07/30/2009 12:26	07/30/2009 12:25:45	0.0	0.0	0.0	0	0
SUPERSEDED	5A	07/30/2009 14:00	07/30/2009 13:26	07/30/2009 13:25:51	0.0	0.0	0.0	0	0
SUPERSEDED	5A	07/30/2009 15:00	07/30/2009 14:27	07/30/2009 14:27:21	0.0	0.0	0.0	0	0
SUPERSEDED	5A	07/30/2009 16:00	07/30/2009 15:27	07/30/2009 15:26:58	0.0	0.0	0.0	0	0
SUPERSEDED	5A	07/30/2009 17:00	07/30/2009 16:27	07/30/2009 16:27:25	0.0	0.0	0.0	0	0
SUPERSEDED	5A	07/30/2009 18:00	07/30/2009 17:29	07/30/2009 17:29:04	4.0	0.0	4.0	0	0
SUPERSEDED	5A	07/30/2009 19:00	07/30/2009 18:29	07/30/2009 18:29:14	3.0	0.0	3.0	0	0
SUPERSEDED	5A	07/30/2009 20:00	07/30/2009 19:37	07/30/2009 19:36:57	0.0	0.0	0.0	0	0
SUPERSEDED	3A	07/30/2009 21:00	07/30/2009 20:35	07/30/2009 20:35:29	0.0	0.0	0.0	0	0
SUPERSEDED	3A	07/30/2009 22:00	07/30/2009 21:32	07/30/2009 21:31:43	10.0	5.0	5.0	0	0
SUPERSEDED	3A	07/30/2009 23:00	07/30/2009 22:29	07/30/2009 22:29:02	0.0	0.0	0.0	0	0
SUPERSEDED	5B	07/30/2009 23:40	07/30/2009 23:27	07/30/2009 23:26:31	3.0	0.0	3.0	0	0
SUPERSEDED	5A	07/31/2009 01:00	07/31/2009 00:26	07/31/2009 00:26:21	0.0	0.0	0.0	0	0
SUPERSEDED	5A	07/31/2009 02:00	07/31/2009 01:26	07/31/2009 01:26:30	0.0	0.0	4.0	0	0
SUPERSEDED	5A	07/31/2009 03:00	07/31/2009 02:28	07/31/2009 02:28:26	0.0	0.0	0.0	0	0
SUPERSEDED	5A	07/31/2009 04:00	07/31/2009 03:27	07/31/2009 03:26:33	0.0	0.0	0.0	0	0
SUPERSEDED	5A	07/31/2009 05:00	07/31/2009 04:26	07/31/2009 04:26:01	0.0	0.0	0.0	0	0
SUPERSEDED	5A	07/31/2009 06:00	07/31/2009 05:26	07/31/2009 05:26:11	0.0	0.0	0.0	0	0
SUPERSEDED	5A	07/31/2009 07:00	07/31/2009 06:26	07/31/2009 06:25:58	0.0	0.0	0.0	0	0

SUPERSEDED	5A	07/31/2009 08:00	07/31/2009 07:29	07/31/2009 07:28:44	0.0	0.0	5.0	0	0
SUPERSEDED	5A	07/31/2009 09:00	07/31/2009 08:26	07/31/2009 08:25:45	0.0	0.0	0.0	0	0
SUPERSEDED	5A	07/31/2009 10:00	07/31/2009 09:27	07/31/2009 09:27:20	0.0	0.0	0.0	0	0
SUPERSEDED	5A	07/31/2009 11:00	07/31/2009 10:28	07/31/2009 10:28:19	0.0	0.0	0.0	0	0
SUPERSEDED	5A	07/31/2009 12:00	07/31/2009 11:27	07/31/2009 11:26:46	0.0	0.0	0.0	0	0
SUPERSEDED	5A	07/31/2009 13:00	07/31/2009 12:26	07/31/2009 12:25:43	0.0	0.0	0.0	0	0
SUPERSEDED	5A	07/31/2009 14:00	07/31/2009 13:26	07/31/2009 13:25:49	0.0	0.0	0.0	0	0
SUPERSEDED	5A	07/31/2009 15:00	07/31/2009 14:27	07/31/2009 14:26:41	0.0	0.0	0.0	0	0
SUPERSEDED	5A	07/31/2009 16:00	07/31/2009 15:26	07/31/2009 15:26:10	0.0	0.0	0.0	0	0
SUPERSEDED	5A	07/31/2009 17:00	07/31/2009 16:26	07/31/2009 16:25:37	0.0	0.0	0.0	0	0
SUPERSEDED	5A	07/31/2009 18:00	07/31/2009 17:31	07/31/2009 17:30:28	0.0	0.0	0.0	0	0
SUPERSEDED	5A	07/31/2009 19:00	07/31/2009 18:26	07/31/2009 18:26:13	0.0	0.0	0.0	0	0
SUPERSEDED	3A	07/31/2009 20:00	07/31/2009 19:27	07/31/2009 19:27:03	52.0	52.0	0.0	0	0
TERMINATED	0	07/31/2009 20:25	07/31/2009 20:11	07/31/2009 20:11:30	0.0	0.0	0.0	0	0

08/04/2009 14:54:08 (CST)

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Event Summary

FILE SAVED AS: SWPP_5354_20090729_2055.htm

Incident:	SWPP_5354_20090729_2055	Date: 07/29/2009	Reliability Coordinator: SWPP
Initial Conditions:	increasing flow		
Flowgate:	5354 - RANPALAMASWI	Rating: 99	LODF: 20.39%
TLR Direction:	Normal		
Effective StartTime:	07/29/2009 20:55	Effective EndTime: 07/31/2009 20:25	TLR Duration: 47 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 MW	RC Ackn MW	Type	Mkt	IDC MW	RC Ackn MW	Current	Post Cont.	Cont. Flow		
					MW	Relief	MW	Relief	MW	Relief												
Jul 29 20:45	TLR 3B	CURRENT		NONE								NONE			ED-2	SWPP	0.0	0.0	88	113	223	N/A
		NEXT		NONE								NONE			ED-6	SWPP	0.0	0.0				
Jul 29 21:34	TLR 3A	NEXT		NONE								NONE			ED-2	SWPP	0.0	0.0	64	108	217	N/A
Jul 29 22:28	TLR 3A	NEXT		NONE								NONE			ED-6	SWPP	4.0	4.0	55	91	178	N/A
Jul 29 23:30	TLR 3A	NEXT		NONE								NONE			ED-2	SWPP	0.0	0.0	55	91	179	N/A
Jul 30 00:38	TLR 3A	NEXT		NONE								NONE			ED-6	SWPP	8.0	8.0	55	91	180	N/A
Jul 30 01:27	TLR 3A	NEXT		NONE								NONE			ED-2	SWPP	0.0	0.0	54	90	177	N/A
Jul 30 02:32	TLR 3A	NEXT		NONE								NONE			ED-6	SWPP	1.0	1.0	53	87	171	N/A
Jul 30 03:29	TLR 3A	NEXT		NONE								NONE			ED-2	SWPP	0.0	0.0	53	88	172	N/A

July TLR Sc vlc

Jul 30 04:26	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	54	90	178	N/A
Jul 30 05:26	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	54	89	176	N/A
Jul 30 06:26	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	57	95	188	N/A
Jul 30 07:26	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	56	93	185	N/A
Jul 30 08:26	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	54	90	177	N/A
Jul 30 09:25	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	55	91	178	N/A
Jul 30 10:27	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	54	89	173	N/A
Jul 30 11:25	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	56	92	179	N/A
Jul 30 12:26	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	55	92	182	N/A
Jul 30 13:26	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	56	93	184	N/A
Jul 30 14:27	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	54	89	175	N/A
Jul 30 15:27	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	54	89	173	N/A

Jul 30 18:27	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	55	91	179	N/A
Jul 30 17:29	TLR 5A	NEXT	NONE	NONE	ED-2 ED-6 FIRM-7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP	0.0 0.0 4.0 0.0 4.0	0.0 0.0 4.0 0.0 4.0	56	92	180	N/A
Jul 30 18:29	TLR 5A	NEXT	NONE	NONE	ED-2 ED-6 FIRM-7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP	0.0 0.0 3.0 0.0 3.0	0.0 0.0 3.0 0.0 3.0	55	91	178	N/A
Jul 30 19:37	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	53	88	172	N/A
Jul 30 20:35	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	51	85	168	N/A
Jul 30 21:32	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	55	91	179	N/A
Jul 30 22:29	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	56	94	188	N/A
Jul 30 23:27	TLR 5B	CURRENT	NONE	NONE	ED-2 ED-6 FIRM-7 Total	SWPP SWPP SWPP	0.0 7.0 21.0 28.0	0.0 7.0 21.0 28.0	59	97	188	N/A
		NEXT	NONE	NONE	NONE							
Jul 31 00:26	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	57	95	188	N/A
Jul 31 01:28	TLR 5A	NEXT	NONE	NONE	ED-2 ED-6 FIRM-7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP	0.0 4.0 0.0 0.0 4.0	0.0 4.0 0.0 0.0 4.0	56	92	179	N/A
Jul 31 02:28	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	57	94	183	N/A

Jul 31 03:27	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	56	92	181	N/A
Jul 31 04:28	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	56	92	181	N/A
Jul 31 05:28	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	56	92	180	N/A
Jul 31 06:28	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	55	91	178	N/A
Jul 31 07:28	TLR 5A	NEXT	NONE	NONE	ED-2 ED-6 FIRM-7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP	0.0 4.0 0.0 0.0 4.0	0.0 0.0 0.0 0.0 0.0	56	93	185	N/A
Jul 31 07:27	TLR 5A	NEXT	NONE	NONE	ED-2 ED-6 FIRM-7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP	0.0 5.0 0.0 0.0 5.0	0.0 0.0 0.0 0.0 0.0	56	93	185	N/A
Jul 31 07:29	TLR 5A	NEXT	NONE	NONE	ED-2 ED-6 FIRM-7 FIRM-CREDIT Total	SWPP SWPP SWPP SWPP	0.0 5.0 0.0 0.0 5.0	0.0 5.0 0.0 0.0 5.0	56	93	185	N/A
Jul 31 08:28	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	53	88	172	N/A
Jul 31 09:27	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	51	85	170	N/A
Jul 31 10:28	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	52	87	172	N/A
Jul 31 11:27	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	53	88	174	N/A

Jul 31 12:26	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	52	87	172	N/A
Jul 31 13:26	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	47	78	154	N/A
Jul 31 14:27	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	45	75	149	N/A
Jul 31 15:26	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	46	80	157	N/A
Jul 31 16:26	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	47	78	153	N/A
Jul 31 17:31	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	46	76	151	N/A
Jul 31 18:26	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	46	81	162	N/A
Jul 31 19:27	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	45	73	141	N/A
Jul 31 20:11	TLR 0	CURRENT	NONE	NONE	NONE				49	81	159	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	0	0	0	0
Total	0	0	0	0

TLR Market Flow Totals

Market	Type	Market Relief	
		IDC MW	RC Ackn MW
SWPP	ED-2	0.0	0.0
	ED-6	42.0	42.0
	FIRM-7	28.0	28.0
Total for SWPP		70.0	70.0
Total		70.0	70.0

	A	B	C	D
272	Reliability Log for July, 29			2009
273	Time	Initials	Comments	
353	2144	AH	Issued TLR level 3b on RanPalAmaSwi flgt #5354.	
357	2233	AH	Issued TLR level 3A on RanPalAmaSwi flgt #5354.	
360	2328	AH	Issued TLR level 3A on RanPalAmaSwi flgt #5354.	
362				
363	Reliability Log for July, 30			2009
364	Time	Initials	Comments	
367	0030	AH	Issued TLR level 3A on RanPalAmaSwi flgt #5354.	
369	0138	AH	Issued TLR level 3A on RanPalAmaSwi flgt #5354.	
371	0226	AH	Issued TLR level 3A on RanPalAmaSwi flgt #5354.	
373	0330	AH	Issued TLR level 3A on RanPalAmaSwi flgt #5354.	
375	0429	AH	Issued TLR level 3A on RanPalAmaSwi flgt #5354.	
379	0525	AH	Issued TLR level 3A on RanPalAmaSwi flgt #5354.	
381	0626	LRG	Issued TLR level 3A on RanPalAmaSwi flgt #5354.	
383	0726	LRG	Issued TLR level 3A on RanPalAmaSwi flgt #5354.	
384	0826	LRG	Issued TLR level 3A on RanPalAmaSwi flgt #5354.	
386	0925	LRG	Issued TLR level 5A on RanPalAmaSwi flgt #5354.	
387	1025	LRG	Issued TLR level 5A on RanPalAmaSwi flgt #5354.	
388	1127	LRG	Issued TLR level 5A on RanPalAmaSwi flgt #5354.	
391	1225	LRG	Issued TLR level 5A on RanPalAmaSwi flgt #5354.	
393	1325	LRG	Issued TLR level 5A on RanPalAmaSwi flgt #5354.	
396	1425	LRG	Issued TLR level 5A on RanPalAmaSwi flgt #5354.	
399	1527	LRG	Issued TLR level 5A on RanPalAmaSwi flgt #5354.	
402	1627	LRG	Issued TLR level 5A on RanPalAmaSwi flgt #5354.	
405	1727	LRG	Issued TLR level 5A on RanPalAmaSwi flgt #5354.	
411	1829	AH	Issued TLR level 5A on RanPalAmaSwi flgt #5354.	
414	1929	AH	Issued TLR level 5A on RanPalAmaSwi flgt #5354.	
417	2036	AH	Issued TLR level 5A on RanPalAmaSwi flgt #5354.	
421	2135	AH	Issued TLR level 3A on RanPalAmaSwi flgt #5354.	
424	2231	AH	Issued TLR level 3A on RanPalAmaSwi flgt #5354.	
426	2329	AH	Issued TLR level 3A on RanPalAmaSwi flgt #5354.	
428				

	A	B	C	D
429	Reliability Log for July, 31			2009
430	Time	Initials	Comments	
433	0026	AH	Issued TLR level 5B on RanPalAmaSwi flgt #5354.	
435	0126	AH	Issued TLR level 5A on RanPalAmaSwi flgt #5354.	
438	0226	AH	Issued TLR level 5A on RanPalAmaSwi flgt #5354.	
440	0328	AH	Issued TLR level 5A on RanPalAmaSwi flgt #5354.	
442	0426	AH	Issued TLR level 5A on RanPalAmaSwi flgt #5354.	
444	0526	AH	Issued TLR level 5A on RanPalAmaSwi flgt #5354.	
448	0626	LRG	Issued TLR level 5A on RanPalAmaSwi flgt #5354.	
450	0725	LRG	Issued TLR level 5A on RanPalAmaSwi flgt #5354.	
453	0828	LRG	Issued TLR level 5A on RanPalAmaSwi flgt #5354.	
455	0925	LRG	Issued TLR level 5A on RanPalAmaSwi flgt #5354.	
456	1027	LRG	Issued TLR level 5A on RanPalAmaSwi flgt #5354.	
457	1128	LRG	Issued TLR level 5A on RanPalAmaSwi flgt #5354.	
460	1226	LRG	Issued TLR level 5A on RanPalAmaSwi flgt #5354.	
462	1325	LRG	Issued TLR level 5A on RanPalAmaSwi flgt #5354.	
464	1425	LRG	Issued TLR level 5A on RanPalAmaSwi flgt #5354.	
466	1526	LRG	Issued TLR level 5A on RanPalAmaSwi flgt #5354.	
469	1626	LRG	Issued TLR level 5A on RanPalAmaSwi flgt #5354.	
471	1725	LRG	Issued TLR level 5A on RanPalAmaSwi flgt #5354.	
475	1830	LWB	Re-issued TLR level 5A on RanPalAmaSwi flgt #5354.	
483	1926	LWB	Re-issued TLR level 5A on RanPalAmaSwi flgt #5354.	
489	2027	LWB	Issued TLR level 3A on RanPalAmaSwi flgt #5354.	
490				
491				

5354 7/30/09 - 7/31/09

