

**SPP TLR 5 Investigation Report  
Temp 21 Flowgate 16216  
(Welsh – Diana 345 kV Interface)  
TLR Level 5: February 18-19, 2010  
Report Issued: March 1, 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 16216 on February 18-19, 2010. Flowgate 16216 is an SPP flowgate created due to the planned maintenance outage of the Southwest Shreveport – Diana 345 kV line in conjunction with the forced outage of Pirkey generation. This flowgate actually monitors the #891 345/138 kV transformer at Diana. Coupled with the outage of the Southwest Shreveport line, an outage of the #890 345/138 kV transformer at Diana would isolate #890 on the two 345 kV circuits from Welsh Plant potentially overloading the transformer. The Level 5 TLR was in effect from 18:00 on February 18 until 11:40 CST on February 19, 2010. Projected flows on the Welsh – Diana 345 kV interface exceeded the SOL.

**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 460 MVA. Flow on the Welsh – Diana 345 kV interface was at 455 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 3-7.

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

The forced outage of Pirkey, located south of Diana, exacerbated the loading from the north (Welsh) at Diana.

**5. Procedures implemented prior to hold/curtailment.**

Non-firm transactions and market flows had been curtailed prior to the Level 5 TLR. 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 pages 8-9. Times in the RC Log are CST.

**9. Flowgate limitations as identified by security analysis processes conducted by the Reliability Authority for the day prior to the TLR event.**

SPP's outage coordination process identified potential for loading issues due to the outage of the Southwest Shreveport – Diana 345 kV line. The temporary flowgate was created in order to dispatch around the constraint via TLR to control the loading until Pirkey generation returned to service.

**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 pages 10.

**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 planned maintenance outage of the Southwest Shreveport – Diana 345 kV line in conjunction with the forced outage of the Pirkey unit. Since the temporary outages were the most significant factors associated with this event, no additional actions were necessary.

**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 3-7. SPA re-dispatched to provide relief for NNL responsibility during this TLR.

## TLR Event History

### 16216 - Temporary 21 Welsh - Diana interface

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	02/18/2010 16:15	02/18/2010 16:06	02/18/2010 16:03:56	75.0	14.4	60.6	3	261
<a href="#">SUPERSEDED</a>	5A	02/18/2010 18:00	02/18/2010 17:27	02/18/2010 17:26:32	254.0	0.0	255.0	31	769
<a href="#">SUPERSEDED</a>	5A	02/18/2010 19:00	02/18/2010 18:34	02/18/2010 18:32:30	102.0	0.0	114.1	3	457
<a href="#">SUPERSEDED</a>	5A	02/18/2010 20:00	02/18/2010 19:29	02/18/2010 19:28:11	175.0	0.0	176.1	30	397
<a href="#">SUPERSEDED</a>	5A	02/18/2010 21:00	02/18/2010 20:30	02/18/2010 20:26:10	73.0	0.0	75.0	21	281
<a href="#">SUPERSEDED</a>	5A	02/18/2010 22:00	02/18/2010 21:31	02/18/2010 21:29:42	81.0	0.0	82.1	27	106
<a href="#">SUPERSEDED</a>	5A	02/18/2010 23:00	02/18/2010 22:28	02/18/2010 22:27:36	143.0	0.0	145.0	29	200
<a href="#">SUPERSEDED</a>	5A	02/19/2010 00:00	02/18/2010 23:27	02/18/2010 23:26:13	198.0	0.0	199.7	25	236
<a href="#">SUPERSEDED</a>	5A	02/19/2010 01:00	02/19/2010 00:32	02/19/2010 00:30:53	212.0	0.0	214.3	27	286
<a href="#">SUPERSEDED</a>	5A	02/19/2010 02:00	02/19/2010 01:41	02/19/2010 01:40:10	289.0	0.0	291.6	33	457
<a href="#">SUPERSEDED</a>	5A	02/19/2010 03:00	02/19/2010 02:31	02/19/2010 02:30:23	283.0	0.0	286.3	34	462
<a href="#">SUPERSEDED</a>	5A	02/19/2010 04:00	02/19/2010 03:32	02/19/2010 03:31:11	243.0	0.0	245.9	31	320
<a href="#">SUPERSEDED</a>	5A	02/19/2010 05:00	02/19/2010 04:34	02/19/2010 04:33:10	221.0	0.0	224.3	36	341
<a href="#">SUPERSEDED</a>	5A	02/19/2010 06:00	02/19/2010 05:33	02/19/2010 05:32:28	0.0	0.0	2.7	1	46
<a href="#">SUPERSEDED</a>	5A	02/19/2010 07:00	02/19/2010 06:29	02/19/2010 06:28:29	54.0	0.0	55.2	30	121
<a href="#">SUPERSEDED</a>	5A	02/19/2010 07:10	02/19/2010 06:52	02/19/2010 06:51:58	62.0	0.0	63.0	30	128
<a href="#">SUPERSEDED</a>	5A	02/19/2010 08:00	02/19/2010 07:38	02/19/2010 07:34:24	0.0	0.0	2.7	1	46
<a href="#">SUPERSEDED</a>	5A	02/19/2010 09:00	02/19/2010 08:28	02/19/2010 08:28:06	0.0	0.0	2.7	1	46
<a href="#">SUPERSEDED</a>	5B	02/19/2010 09:35	02/19/2010 09:25	02/19/2010 09:25:04	75.0	0.0	76.1	29	99
<a href="#">SUPERSEDED</a>	5A	02/19/2010 11:00	02/19/2010 10:35	02/19/2010 10:31:54	50.0	0.0	57.9	19	51
<a href="#">TERMINATED</a>	0	02/19/2010 11:40	02/19/2010 11:30	02/19/2010 11:28:13	0.0	0.0	0.0	0	0

03/01/2010 10:18:20 (CST)

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## Event Summary

FILE SAVED AS: SWPP\_16216\_20100218\_1615.htm

<b>Incident:</b>	SWPP_16216_20100218_1615	<b>Date:</b> 02/18/2010	<b>Reliability Coordinator:</b> SWPP
<b>Initial Conditions:</b>	Increased Loading		
<b>Flowgate:</b>	16216 - Temporary 21 Welsh - Diana int...	<b>Rating:</b> 460	<b>LODF:</b> N/A
<b>TLR Direction:</b>	Normal		
<b>Effective StartTime:</b>	02/18/2010 16:15	<b>Effective EndTime:</b> 02/19/2010 11:40	<b>TLR Duration:</b> 19 Hours and 25 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												
Feb 18 16:05	TLR 3B	CURRENT	2-NH 3-ND <b>Total</b>	2 / 0 1 / 0 <b>3 / 0</b>	210 51 <b>261</b>	57.6 2.9 <b>60.6</b>	210 51 <b>261</b>	57.6 2.9 <b>60.6</b>	0 0 <b>0</b>	0.0 0.0 <b>0.0</b>	NONE			ED-2 ED-6 FIRM-7 <b>Total</b>	SWPP SWPP SWPP <b>0.0</b>	0.0 0.0 0.0 <b>0.0</b>	0.0 0.0 0.0 <b>0.0</b>	492	N/A	N/A	N/A	
		NEXT	2-NH 3-ND <b>Total</b>	4 / 0 1 / 0 <b>5 / 0</b>	570 52 <b>261</b>	158.7 3.0 <b>159.7</b>	570 52 <b>622</b>	158.7 3.0 <b>159.7</b>	0 0 <b>0</b>	0.0 0.0 <b>0.0</b>	NONE			ED-2 ED-6 FIRM-7 <b>Total</b>	SWPP SWPP SWPP <b>0.0</b>	0.0 0.0 0.0 <b>0.0</b>	0.0 0.0 0.0 <b>0.0</b>					
Feb 18 17:27	TLR 5A	NEXT	1-NS 2-NH 3-ND 7-F <b>Total</b>	2 / 0 2 / 0 1 / 0 26 / 1 <b>31 / 1</b>	216 412 51 90 <b>769</b>	55.8 112.9 2.9 7.0 <b>178.5</b>	216 412 51 90 <b>769</b>	55.8 112.9 2.9 7.0 <b>178.5</b>	0 0 0 75 <b>75</b>	0.0 0.0 0.0 4.7 <b>4.7</b>	SPA <b>Total</b>	1.0 <b>1.0</b>	1.0 <b>1.0</b>	ED-2 ED-6 FIRM-7 FIRM-CREDIT <b>Total</b>	SWPP SWPP SWPP SWPP <b>0.0</b>	0.0 0.0 75.7 0.0 <b>75.7</b>	0.0 0.0 75.7 0.0 <b>75.7</b>	455	N/A	N/A	N/A	
Feb 18 18:34	TLR 5A	NEXT	1-NS 2-NH 3-ND 7-F <b>Total</b>	1 / 0 1 / 0 1 / 0 0 / 1 <b>3 / 1</b>	200 206 51 0 <b>457</b>	54.7 58.4 2.9 0.0 <b>114.1</b>	200 206 51 0 <b>457</b>	54.7 58.4 2.9 0.0 <b>114.1</b>	0 0 0 100 <b>100</b>	0.0 0.0 0.0 6.3 <b>6.3</b>	NONE			ED-2 ED-6 FIRM-7 FIRM-CREDIT <b>Total</b>	SWPP SWPP SWPP SWPP <b>0.0</b>	0.0 0.0 0.0 0.0 <b>0.0</b>	0.0 0.0 0.0 0.0 <b>0.0</b>	423	N/A	N/A	N/A	
Feb 18 19:29	TLR 5A	NEXT	1-NS 3-ND 7-F <b>Total</b>	1 / 0 1 / 0 28 / 0 <b>30 / 0</b>	200 52 145 <b>397</b>	54.7 3.0 10.7 <b>68.4</b>	200 52 145 <b>397</b>	54.7 3.0 10.7 <b>68.4</b>	0 0 0 <b>0</b>	0.0 0.0 0.0 <b>0.0</b>	SPA <b>Total</b>	1.0 <b>1.0</b>	1.0 <b>1.0</b>	ED-2 ED-6 FIRM-7 FIRM-CREDIT <b>Total</b>	SWPP SWPP SWPP SWPP <b>0.0</b>	0.0 0.0 106.6 0.0 <b>106.6</b>	0.0 0.0 106.6 0.0 <b>106.6</b>	468	N/A	N/A	N/A	
Feb 18 20:30	TLR 5A	NEXT	1-NS 3-ND 7-F <b>Total</b>	1 / 0 1 / 0 19 / 1 <b>21 / 1</b>	200 51 30 <b>281</b>	54.8 2.9 2.2 <b>59.9</b>	200 51 30 <b>281</b>	54.8 2.9 2.2 <b>59.9</b>	0 0 3 <b>3</b>	0.0 0.0 0.2 <b>0.2</b>	NONE			ED-2 ED-6 FIRM-7 FIRM-CREDIT <b>Total</b>	SWPP SWPP SWPP SWPP <b>0.0</b>	0.0 0.0 14.9 0.0 <b>14.9</b>	0.0 0.0 14.9 0.0 <b>14.9</b>	403	N/A	N/A	N/A	
Feb 18 21:31	TLR 5A	NEXT	7-F <b>Total</b>	27 / 0 <b>27 / 0</b>	106 <b>106</b>	7.8 <b>7.8</b>	106 <b>106</b>	7.8 <b>7.8</b>	0 <b>0</b>	0.0 <b>0.0</b>	SPA <b>Total</b>	1.0 <b>1.0</b>	1.0 <b>1.0</b>	ED-2 ED-6 FIRM-7 FIRM-CREDIT <b>Total</b>	SWPP SWPP SWPP SWPP <b>0.0</b>	0.0 0.0 73.6 0.0 <b>73.6</b>	0.0 0.0 73.6 0.0 <b>73.6</b>	437	N/A	N/A	N/A	

Feb 18 22:28	TLR 5A	NEXT	7-F <b>Total</b>	29 / 0 <b>29 / 0</b>	200 <b>200</b>	14.9 <b>14.9</b>	200 <b>200</b>	14.9 <b>14.9</b>	0 <b>0</b>	0.0 <b>0.0</b>	SPA <b>Total</b>	1.0 <b>1.0</b>	1.0 <b>1.0</b>	ED-2 ED-6 FIRM-7 FIRM-CREDIT <b>Total</b>	SWPP SWPP SWPP SWPP	0.0 0.0 129.1 0.0 <b>129.1</b>	0.0 0.0 129.1 0.0 <b>129.1</b>	460	N/A	N/A	N/A
Feb 18 23:27	TLR 5A	NEXT	7-F <b>Total</b>	25 / 0 <b>25 / 0</b>	236 <b>236</b>	16.4 <b>16.4</b>	236 <b>236</b>	16.4 <b>16.4</b>	0 <b>0</b>	0.0 <b>0.0</b>	SPA <b>Total</b>	1.0 <b>1.0</b>	2.0 <b>2.0</b>	ED-2 ED-6 FIRM-7 FIRM-CREDIT <b>Total</b>	SWPP SWPP SWPP SWPP	0.0 0.0 181.9 0.0 <b>181.9</b>	0.0 0.0 181.9 0.0 <b>181.9</b>	443	N/A	N/A	N/A
Feb 19 00:32	TLR 5A	NEXT	7-F <b>Total</b>	27 / 1 <b>27 / 1</b>	286 <b>286</b>	19.8 <b>19.8</b>	286 <b>286</b>	19.8 <b>19.8</b>	100 <b>100</b>	6.3 <b>6.3</b>	SPA <b>Total</b>	2.0 <b>2.0</b>	2.0 <b>2.0</b>	ED-2 ED-6 FIRM-7 FIRM-CREDIT <b>Total</b>	SWPP SWPP SWPP SWPP	0.0 0.0 193.0 0.0 <b>193.0</b>	0.0 0.0 193.0 0.0 <b>193.0</b>	389	N/A	N/A	N/A
Feb 19 01:41	TLR 5A	NEXT	6-NN 7-F <b>Total</b>	1 / 0 32 / 1 <b>33 / 1</b>	46 411 <b>457</b>	2.7 31.0 <b>33.6</b>	46 411 <b>457</b>	2.7 31.0 <b>33.6</b>	0 2 <b>2</b>	0.0 0.2 <b>0.2</b>	SPA <b>Total</b>	2.0 <b>2.0</b>	2.0 <b>2.0</b>	ED-2 ED-6 FIRM-7 FIRM-CREDIT <b>Total</b>	SWPP SWPP SWPP SWPP	0.0 0.0 255.9 0.0 <b>255.9</b>	0.0 0.0 255.9 0.0 <b>255.9</b>	432	N/A	N/A	N/A
Feb 19 02:31	TLR 5A	NEXT	6-NN 7-F <b>Total</b>	1 / 0 33 / 0 <b>34 / 0</b>	46 416 <b>462</b>	2.7 31.7 <b>34.3</b>	46 416 <b>462</b>	2.7 31.7 <b>34.3</b>	0 0 <b>0</b>	0.0 0.0 <b>0.0</b>	SPA <b>Total</b>	2.0 <b>2.0</b>	2.0 <b>2.0</b>	ED-2 ED-6 FIRM-7 FIRM-CREDIT <b>Total</b>	SWPP SWPP SWPP SWPP	0.0 2.0 247.9 0.0 <b>249.9</b>	0.0 2.0 247.9 0.0 <b>249.9</b>	423	N/A	N/A	N/A
Feb 19 03:32	TLR 5A	NEXT	6-NN 7-F <b>Total</b>	1 / 0 30 / 0 <b>31 / 0</b>	46 274 <b>320</b>	2.7 18.7 <b>21.4</b>	46 274 <b>320</b>	2.7 18.7 <b>21.4</b>	0 0 <b>0</b>	0.0 0.0 <b>0.0</b>	SPA <b>Total</b>	2.0 <b>2.0</b>	2.0 <b>2.0</b>	ED-2 ED-6 FIRM-7 FIRM-CREDIT <b>Total</b>	SWPP SWPP SWPP SWPP	0.0 0.0 222.5 0.0 <b>222.5</b>	0.0 0.0 222.5 0.0 <b>222.5</b>	438	N/A	N/A	N/A
Feb 19 04:34	TLR 5A	NEXT	6-NN 7-F <b>Total</b>	1 / 0 35 / 0 <b>36 / 0</b>	46 295 <b>341</b>	2.7 20.5 <b>23.2</b>	46 295 <b>341</b>	2.7 20.5 <b>23.2</b>	0 0 <b>0</b>	0.0 0.0 <b>0.0</b>	SPA <b>Total</b>	2.0 <b>2.0</b>	2.0 <b>2.0</b>	ED-2 ED-6 FIRM-7 FIRM-CREDIT <b>Total</b>	SWPP SWPP SWPP SWPP	0.0 0.0 199.2 0.0 <b>199.2</b>	0.0 0.0 199.2 0.0 <b>199.2</b>	449	N/A	N/A	N/A
Feb 19 05:33	TLR 5A	NEXT	6-NN 7-F <b>Total</b>	1 / 0 0 / 1 <b>1 / 1</b>	46 0 <b>46</b>	2.7 0.0 <b>2.7</b>	46 0 <b>46</b>	2.7 0.0 <b>2.7</b>	0 100 <b>100</b>	0.0 6.3 <b>6.3</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>	440	N/A	N/A	N/A
Feb 19 06:29	TLR 5A	NEXT	6-NN 7-F <b>Total</b>	1 / 0 29 / 0 <b>30 / 0</b>	46 75 <b>121</b>	2.7 5.3 <b>8.0</b>	46 75 <b>121</b>	2.7 5.3 <b>8.0</b>	0 0 <b>0</b>	0.0 0.0 <b>0.0</b>	SPA <b>Total</b>	0.0 <b>0.0</b>	1.0 <b>1.0</b>	ED-2 ED-6 FIRM-7 FIRM-CREDIT <b>Total</b>	SWPP SWPP SWPP SWPP	0.0 0.0 46.7 0.0 <b>46.7</b>	0.0 0.0 46.7 0.0 <b>46.7</b>	454	N/A	N/A	N/A
Feb 19 06:52	TLR 5A	NEXT	6-NN 7-F <b>Total</b>	1 / 0 29 / 0 <b>30 / 0</b>	46 82 <b>128</b>	2.7 5.8 <b>8.5</b>	46 82 <b>128</b>	2.7 5.8 <b>8.5</b>	0 0 <b>0</b>	0.0 0.0 <b>0.0</b>	SPA <b>Total</b>	1.0 <b>1.0</b>	1.0 <b>1.0</b>	ED-2 ED-6 FIRM-7 FIRM-CREDIT <b>Total</b>	SWPP SWPP SWPP SWPP	0.0 0.0 54.0 0.0 <b>54.0</b>	0.0 0.0 54.0 0.0 <b>54.0</b>	443	N/A	N/A	N/A
Feb 19 07:38	TLR 5A	NEXT	6-NN <b>Total</b>	1 / 0 <b>1 / 0</b>	46 <b>46</b>	2.7 <b>2.7</b>	46 <b>46</b>	2.7 <b>2.7</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>	413	N/A	N/A	N/A

Feb 19 08:28	TLR 5A	NEXT	6-NN <b>Total</b>	1 / 0 <b>1 / 0</b>	46 <b>46</b>	2.7 <b>2.7</b>	46 <b>46</b>	2.7 <b>2.7</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>	439	N/A	N/A	N/A	
Feb 19 09:25	TLR 5B	CURRENT	7-F <b>Total</b>	29 / 0 <b>29 / 0</b>	99 <b>99</b>	7.0 <b>7.0</b>	99 <b>99</b>	7.0 <b>7.0</b>	0 <b>0</b>	0.0 <b>0.0</b>	SPA <b>Total</b>	1.0 <b>1.0</b>	1.0 <b>1.0</b>	ED-2 ED-6 FIRM-7 <b>Total</b>	SWPP SWPP SWPP	0.0 7.0 188.6 <b>193.6</b>	0.0 7.0 188.6 <b>193.6</b>	457	N/A	N/A	N/A
		NEXT	6-NN 7-F <b>Total</b>	1 / 0 20 / 1 <b>21 / 1</b>	46 93 <b>99</b>	2.7 6.1 <b>8.8</b>	46 93 <b>139</b>	2.7 6.1 <b>8.8</b>	0 87 <b>87</b>	0.0 5.5 <b>5.5</b>	NONE		NONE								
Feb 19 10:35	TLR 5A	NEXT	7-F <b>Total</b>	19 / 0 <b>19 / 0</b>	51 <b>51</b>	3.6 <b>3.6</b>	51 <b>51</b>	3.6 <b>3.6</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 53.9 0.0 <b>53.9</b>	0.0 0.0 53.9 0.0 <b>53.9</b>	426	N/A	N/A	N/A	
Feb 19 11:30	TLR 0	CURRENT	NONE								NONE		NONE					343	N/A	N/A	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	5	816	816	0
2	9	1398	1398	0
3	6	308	308	0
4	0	0	0	0
5	0	0	0	0
6	10	460	460	0
7	437	2889	2889	467
<b>Total</b>	<b>467</b>	<b>5871</b>	<b>5871</b>	<b>467</b>

### TLR NNL Totals

CA	NNL Relief	
	IDC MW	RC Ackn MW
SPA	17.0	19.0
<b>Total</b>	<b>17.0</b>	<b>19.0</b>

### TLR Market Flow Totals

Market	Type	Market Relief	
		IDC MW	RC Ackn MW
SWPP	ED-2	0.0	0.0
	ED-6	9.0	9.0
	FIRM-7	2041.5	2041.4
Total for SWPP		2050.5	2050.4
<b>Total</b>		<b>2050.5</b>	<b>2050.4</b>

	A	B	C	D	E
1	<b>Reliability Log for February, 18</b>			<b>2010</b>	
2	<b>Time</b>	<b>Initials</b>	<b>Comments</b>		
3	1602	MRH	AEP-Pam now reports they had to open the ring bus back up at Diana due to improper realy protection. So DIANA 345KV PCB 11910 and 12000 opened and will remain open. If the loading on the Middle Xmfr comes up they may have to clsoe the ring bus gack and open up the 138kv breakers like they did this morning. AEP reports they bought a bunch of power from Harrison for tonight that should help with loang coming from harrison power plant		
4	1603	MRH	Issued TLR Level 3B on Temp 21 Welsh-Diana Interface. FG 16216		
5	1705	MRH	AEP-Tyler advised that we see no problem with opening the Diana 168kv bus at PCB12030. AEP agreed and is going to preceed opening at Diana. Once open we agreed to end the TLR on TEMP 21.		
6	1726	LWB	Issued TLR Level 5A on Temp 21 Welsh-Diana Interface. FG 16216, SPA NNL= +0.8, Total NNL=0.8 SPA moved Brokenbow Down 60mw and moved Bull Shoals up 60.		
7	1832	LWB	Issued TLR Level 5A on Temp 21 Welsh-Diana Interface. FG 16216, SPA NNL= -0.8, Total NNL=0.0 SPA holding Brokenbow down 60mw and Bull Shoals up at 60. Andrew curtailing 40 in CAT		
8	1928	LWB	Issued TLR Level 5A on Temp 21 Welsh-Diana Interface. FG 16216, SPA NNL= +1.1, Total NNL=1.1, SPA taking an additional 7mw off Table Rock and going down 7mw on Brokenbow. Andrew curtailing 70 in CAT		
9	1950	LWB	Conference call with AEP-W BA and Generation about staying on deployment. I explained to AEP-W generation that when called by SPP Market operator or AEP-W BA and requested to maintain deployment on units please do and don't give the operators any guff. I explain the system was tight tonight an we need their help in maintaining deployment. People on conference call were AEP-W BA Tyler, AEP-W Generation Brian, SPP Market Operator Donald Tubbs and SPP RC Warren Brown.		
10	2025	LWB	Tyler with AEP-W requested that Wilkes unit 2 be allowed to increase 100mw because of circulating pump problems for one hour. Wilkes 2 is on the increment side of flgt Temp21 so I allowed it.		
11	2026	LWB	Issued TLR Level 5A on Temp 21 Welsh-Diana Interface. FG 16216, SPA NNL= -1.0, Total NNL= 0.1, SPA holding everything where it is. Andrew curtailing 70 in CAT		
12	2129	LWB	Issued TLR Level 5A on Temp 21 Welsh-Diana Interface. FG 16216, SPA NNL= +0.7, SPA Brokenbow up 7mw and reducing a lot of units on the dec side because of the time of night. Andrew curtailing 70 in CAT		
13	2201	LWB	Tyler with AEP-W reports Wilkes 2 complete with their circulating pumps test an returing to available status.		
14	2227	LWB	Issued TLR Level 5A on Temp 21 Welsh-Diana Interface. FG 16216, SPA NNL= +0.4 Total NNL=1.1, SPA Brokenbow down 10mw and inc Bull Shoals 10mw. Andrew curtailing 70 in CAT		
15	2326	LWB	Issued TLR Level 5A on Temp 21 Welsh-Diana Interface. FG 16216, SPA NNL= +0.4, total NNL= 1.5. SPA holding where they are. Andrew curtailing 70 in CAT		
16					
17					

	A	B	C	D	E
21	<b>Reliability Log for February, 19</b>			<b>0</b>	
22	Time	Initials	Comments	Friday	
23	0008	LWB	Tyler with AEP-W reports Pirkey is in parallel and coming up 170mw, will hold that until Saturday.		
24	0022	LWB	Tyler with AEP-W reports that AEP-W generation is requesting to do a RADDa test on Welsh 3. I refused to allow the test until we see what stability Pirkey is going to provide to the Diana situation.		
25	0030	LWB	Issued TLR Level 5A on Temp 21 Welsh-Diana Interface. FG 16216, SPA NNL= +0.0, total NNL= 1.5. SPA SPA will hold where they were last hour. Andrew curtailing 70 in CAT		
26	0140	LWB	Issued TLR Level 5A on Temp 21 Welsh-Diana Interface. FG 16216, SPA NNL= +0.6, total NNL= 2.1. SPA SPA will hold where they were last hour. Andrew curtailing 70 in CAT		
27	0230	LWB	Issued TLR Level 5A on Temp 21 Welsh-Diana Interface. FG 16216, SPA NNL= +0.0, total NNL= 2.1. SPA SPA will hold where they were last hour. Andrew curtailing 70 in CAT		
28	0331	LWB	Issued TLR Level 5A on Temp 21 Welsh-Diana Interface. FG 16216, SPA NNL= -0.1, total NNL= 2.0. SPA SPA will hold where they were last hour. Andrew curtailing 70 in CAT		
29	0433	LWB	Issued TLR Level 5A on Temp 21 Welsh-Diana Interface. FG 16216, SPA NNL= -0.1, total NNL= 1.9. SPA SPA will hold where they were last hour. Andrew curtailing 70 in CAT		
30	0532	MRH	Re-issued TLR Level 5A on Temp 21 Welsh-Diana Interface. FG 16216, SPA NNL= -1.9, total NNL= 0. SPA advised. SPP-SE says we are +9.0 Mw feasible now and we discussed not cutting for HE0700 but stay in TLR 5A until after ramp.		
31	0651	MRH	Re-issued TLR Level 5A on Temp 21 Welsh-Diana Interface. FG 16216, SPA NNL= 0.5, total NNL= 0.5. SPA advised. Discussed with SPP-SE the desired level of curtailment HE0800.		
32	0734	MRH	Re-issued TLR Level 5A on Temp 21 Welsh-Diana Interface. FG 16216, SPA NNL= 0.0, total NNL= 0.0. SPA advised. Discussed with SPP-SE the desired level of curtailment HE0900		
33	0745	MRH	Calculated SPA NNL for HE0800, came up with 2.37. No way to credit it back since they have no NNL for HE0900 in regards to FG 16216. Inc, 42Mw at Bull Shoals and DEC 7 Mw at Broken Bull and 35Mws at Keystone.		
34	0828	MRH	Re-issued TLR Level 5A on Temp 21 Welsh-Diana Interface. FG 16216, SPA NNL= 0.0, total NNL= 0.0. Discussed with SPP-SE the desired level of curtailment HE1000		
35	0925	MRH	Re-issued TLR Level 5B on Temp 21 Welsh-Diana Interface. FG 16216, Current Hour SPA NNL= 0.0, Total NNL= 0.0. Next Hour SPA NNL 0.6 and NNL Total = 0.6. Discussed with SPP-SE the desired level of curtailment HE1100. Had to re-issue 5B due to Harrison schedule partial shutdown.		
36	0958	MRH	SPA reports Providing -7.1 NNL for HE 1100, SPA was required to carry 0.6. Will credit NNL for HE 1200.		
37	1031	MRH	Re-issued TLR Level 5A on Temp 21 Welsh-Diana Interface. FG 16216, Next Hour SPA NNL 0.4 and NNL Total = 0.4. Discussed with SPP-SE the desired level of curtailment HE1200.		
38	1058	MRH	SPA reports providing 0.4 NNL, Broken Bow DEC 3Mw and BullShoals INC 3MW HE1200.		
39	1128	MRH	Re-issued TLR Level 0 on Temp 21 Welsh-Diana Interface. FG 16216.		
40					
41					

# TEMP21\_16216

— Interface flow — Rating

