

# Southwest Power Pool, Inc. Corporate Metrics

for the period ending  
August 31, 2008



# Southwest Power Pool

## Corporate Metrics

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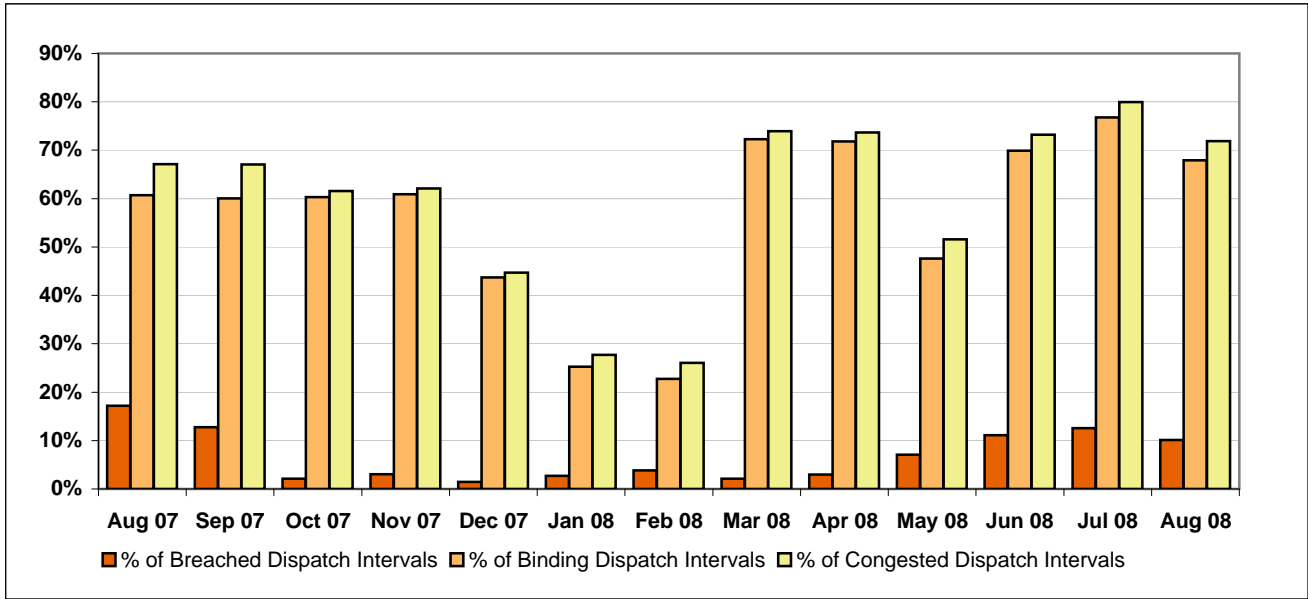
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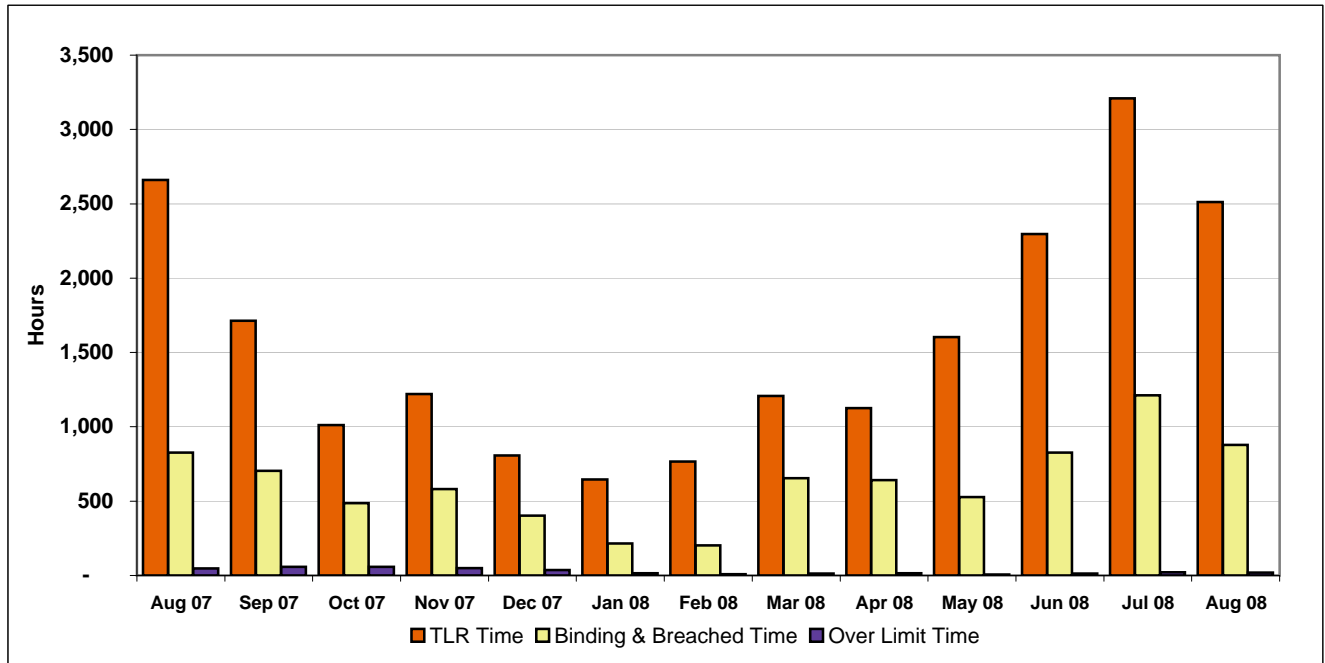
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## 1. Congestion

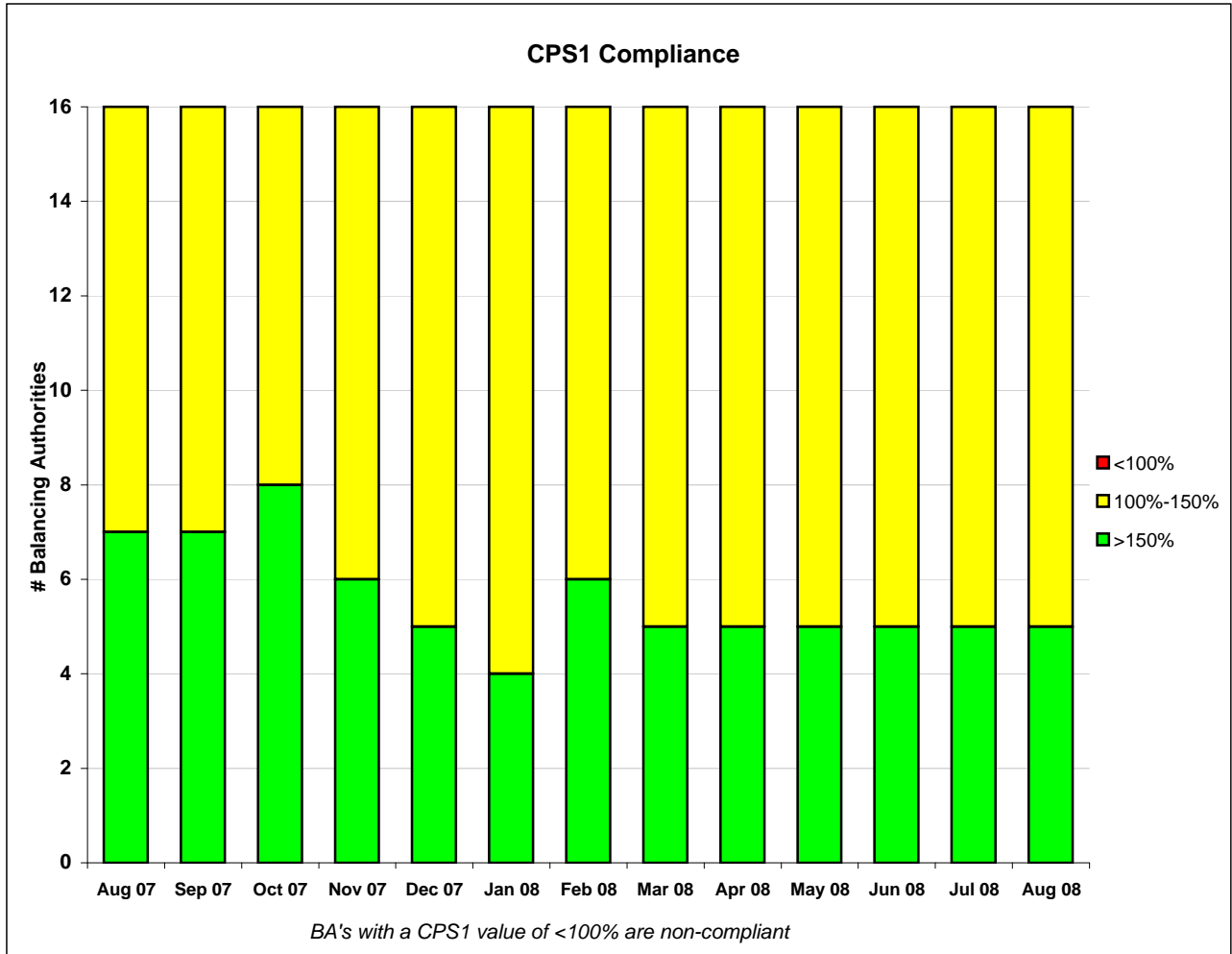


	Aug 07	Sep 07	Oct 07	Nov 07	Dec 07	Jan 08	Feb 08	Mar 08	Apr 08	May 08	Jun 08	Jul 08	Aug 08
% of Binding Dispatch Intervals	61%	60%	60%	61%	44%	25%	23%	72%	72%	48%	70%	77%	68%
% of Breached Dispatch Intervals	17%	13%	2%	3%	1%	3%	4%	2%	3%	7%	11%	13%	10%
% of Congested Dispatch Intervals	67%	67%	62%	62%	45%	28%	26%	74%	74%	52%	73%	80%	72%



<i>in hours</i>	Aug 07	Sep 07	Oct 07	Nov 07	Dec 07	Jan 08	Feb 08	Mar 08	Apr 08	May 08	Jun 08	Jul 08	Aug 08
TLR Time	2661	1714	1011	1221	807	646	766	1207	1125	1603	2297	3209	2511
Binding & Breached Time	826	704	486	581	402	216	202	655	641	527	826	1213	878
Over Limit Time	48	58	59	50	37	15	9	14	14	6	14	21	19

## 2. Regional Control Performance

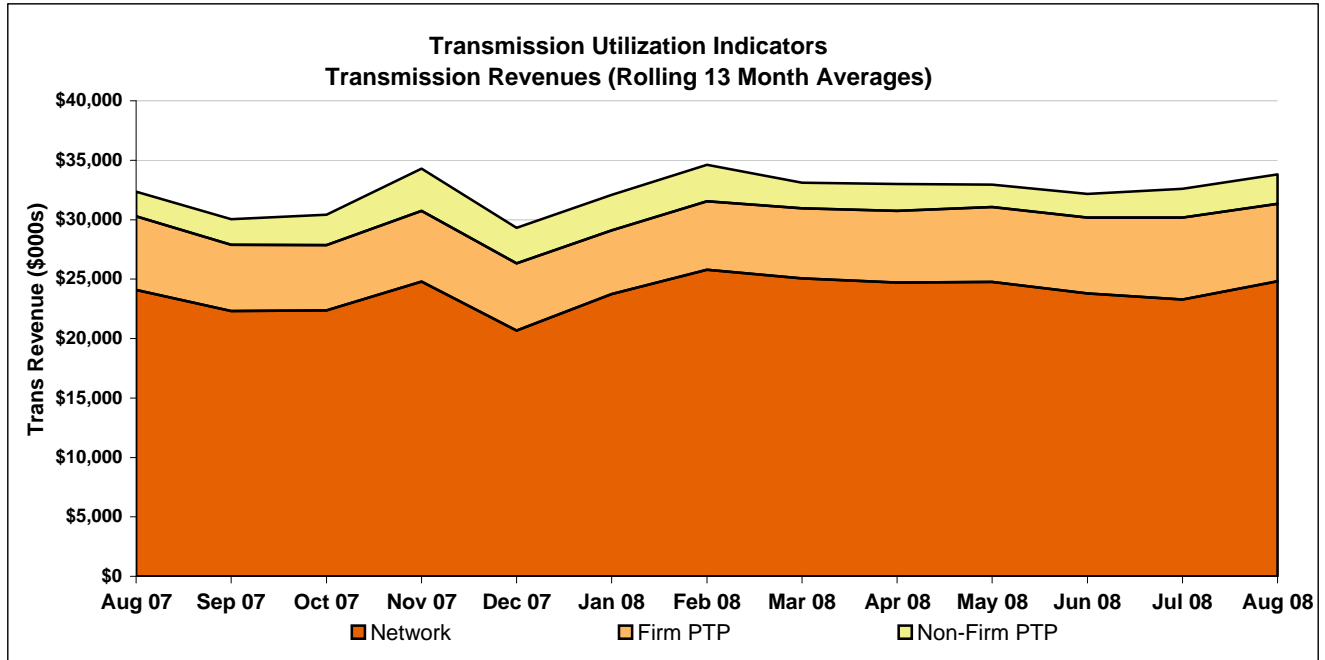


CPS1	Aug 07	Sep 07	Oct 07	Nov 07	Dec 07	Jan 08	Feb 08	Mar 08	Apr 08	May 08	Jun 08	Jul 08	Aug 08
>150%	7	7	8	6	5	4	6	5	5	5	5	5	5
100%-150%	9	9	8	10	11	12	10	11	11	11	11	11	11
<100%	0	0	0	0	0	0	0	0	0	0	0	0	0

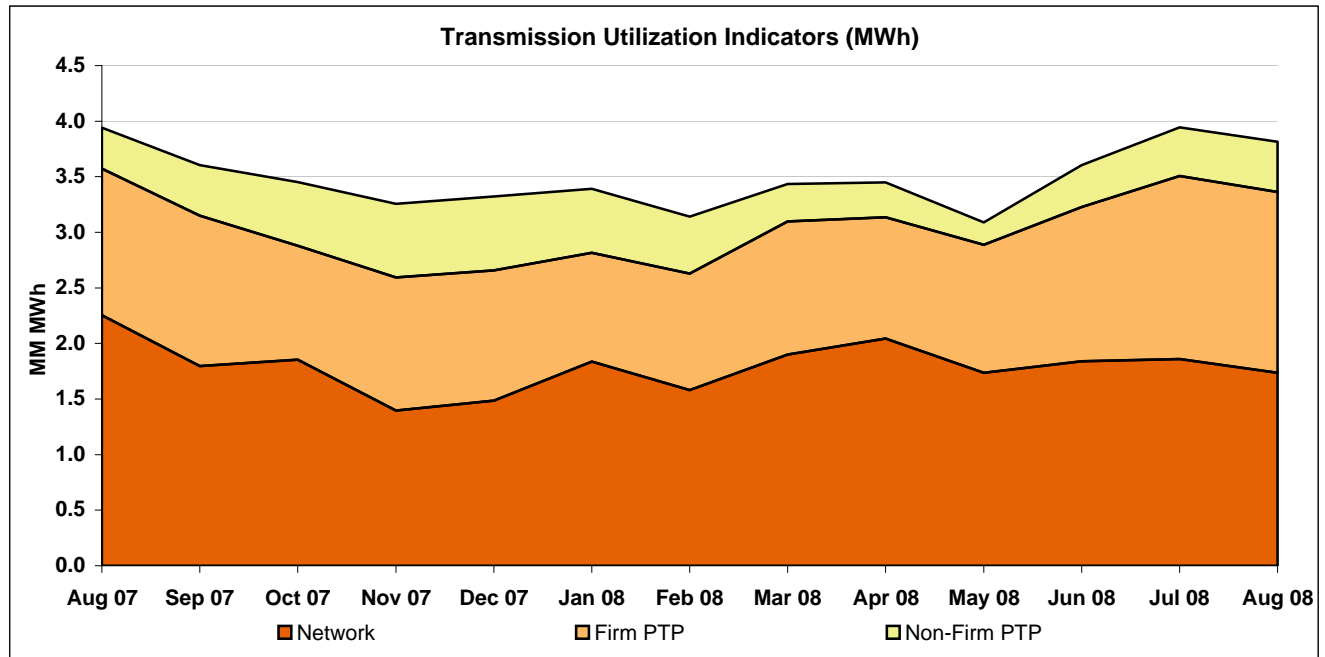
Violation if any 1 Balancing Authority has a violation in a 12 month period.



### 3. Transmission Utilization Proxy

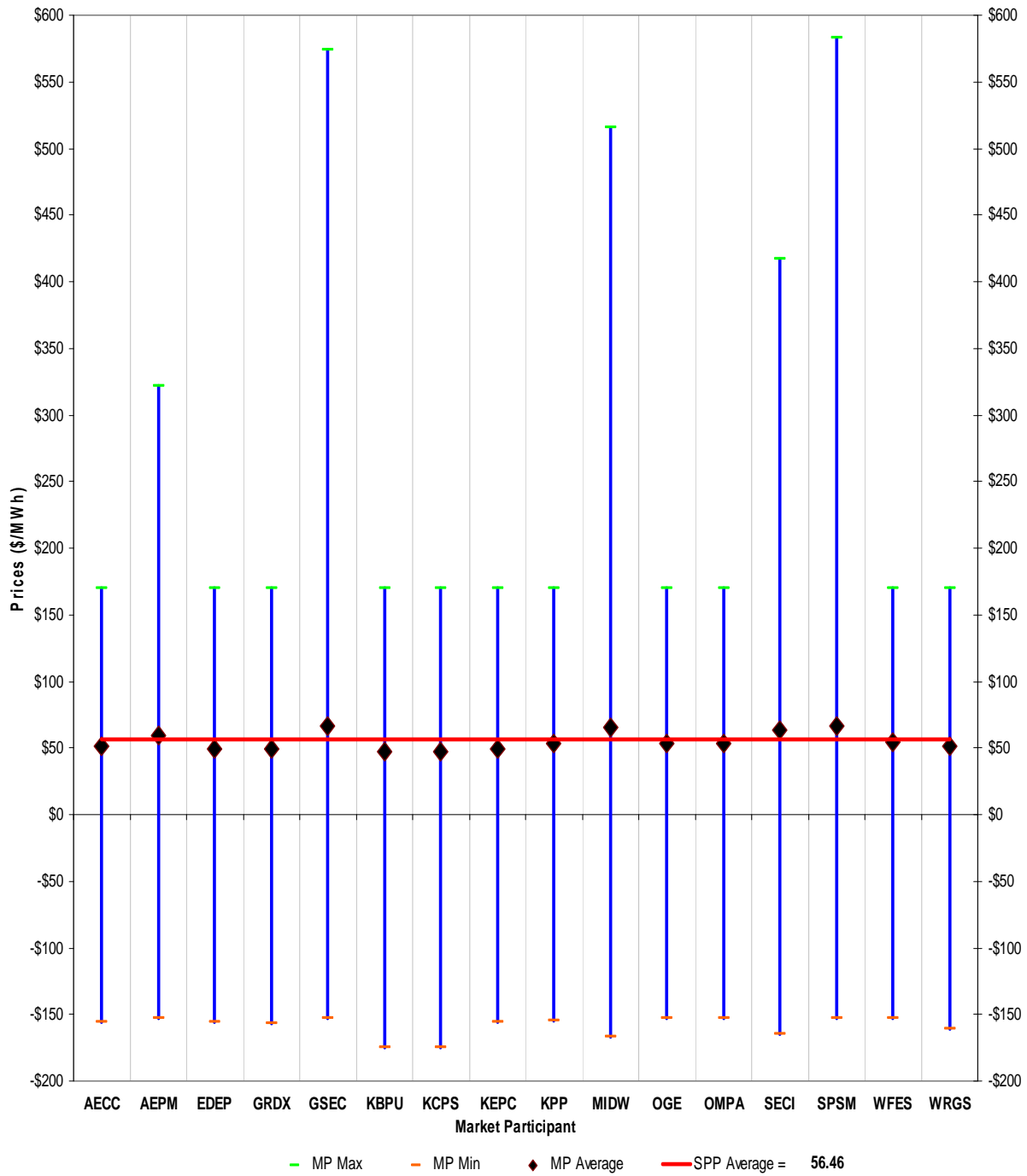


Type	Aug 07	Sep 07	Oct 07	Nov 07	Dec 07	Jan 08	Feb 08	Mar 08	Apr 08	May 08	Jun 08	Jul 08	Aug 08
Network (\$000)	\$24,094	\$22,308	\$22,356	\$24,798	\$20,672	\$23,732	\$25,798	\$25,068	\$24,701	\$24,756	\$23,804	\$23,284	\$24,820
Firm PTP (\$000)	\$6,192	\$5,589	\$5,509	\$5,951	\$5,657	\$5,357	\$5,752	\$5,877	\$6,033	\$6,308	\$6,363	\$6,889	\$6,506
Non-Firm PTP (\$000)	\$2,081	\$2,142	\$2,557	\$3,539	\$2,996	\$3,007	\$3,055	\$2,175	\$2,261	\$1,876	\$2,010	\$2,415	\$2,473



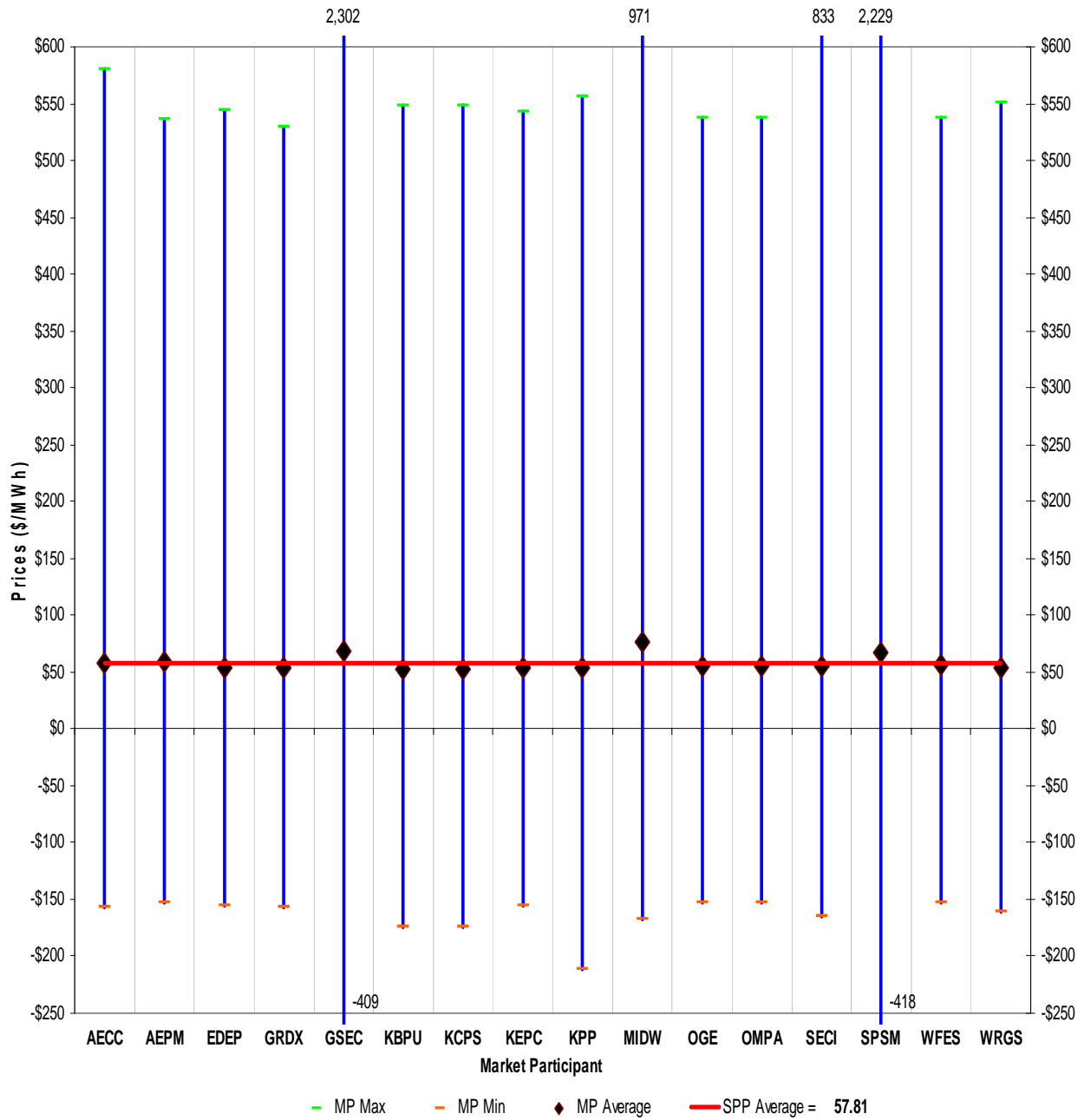
Type	Aug 07	Sep 07	Oct 07	Nov 07	Dec 07	Jan 08	Feb 08	Mar 08	Apr 08	May 08	Jun 08	Jul 08	Aug 08
Network (MM MWh)	2.25	1.80	1.85	1.40	1.48	1.84	1.58	1.90	2.05	1.74	1.84	1.86	1.74
Firm PTP (MM MWh)	1.32	1.35	1.02	1.20	1.17	0.98	1.05	1.20	1.09	1.15	1.39	1.65	1.63
Non-Firm PTP (MM MWh)	0.37	0.45	0.57	0.66	0.67	0.57	0.51	0.34	0.31	0.20	0.38	0.44	0.45
Current Year Total	3.94	3.60	3.45	3.26	3.32	3.39	3.14	3.44	3.45	3.09	3.60	3.94	3.82

#### 4. EIS Prices and Price Range



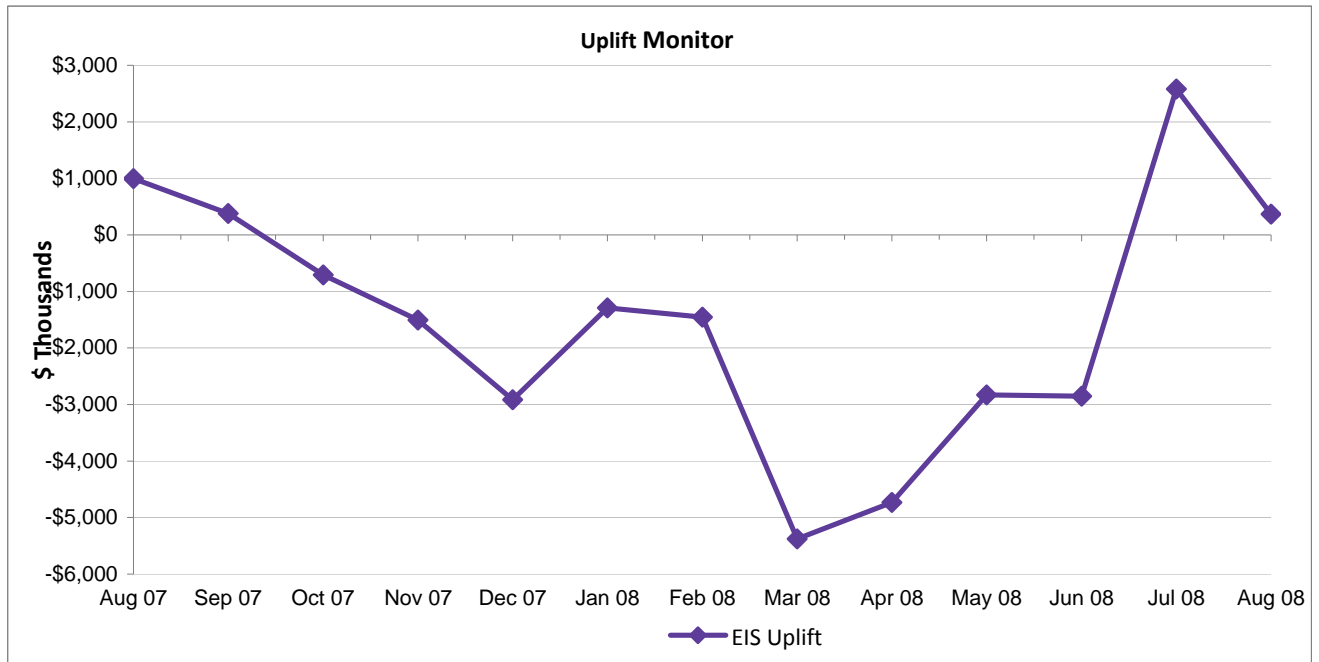
	AECC	AEPM	EDEP	GRDX	GSEC	KBPU	KCPS	KEPC	KPP	MIDW	OGE	OMPA	SECI	SPSM	WFES	WRGS
<b>MP Max</b>	169	322	169	169	574	169	169	169	169	516	169	169	417	583	169	169
<b>MP Avg</b>	51	59	49	49	67	48	48	49	53	65	53	53	63	66	54	51
<b>MP Min</b>	-156	-153	-155	-157	-153	-175	-175	-156	-155	-167	-153	-153	-164	-153	-153	-161

#### 4. EIS Prices and Price Range



	AECC	AEPM	EDEP	GRDX	GSEC	KBPU	KCPS	KEPC	KPP	MIDW	OGE	OMPA	SECI	SPSM	WFES	WRGS
<b>MP Max</b>	580	536	544	530	2302	548	548	543	556	971	537	537	833	2229	537	551
<b>MP Avg</b>	58	59	54	54	68	52	52	54	53	77	55	56	55	67	56	53
<b>MP Min</b>	-156	-153	-155	-157	-409	-175	-175	-156	-211	-167	-153	-153	-165	-418	-153	-161

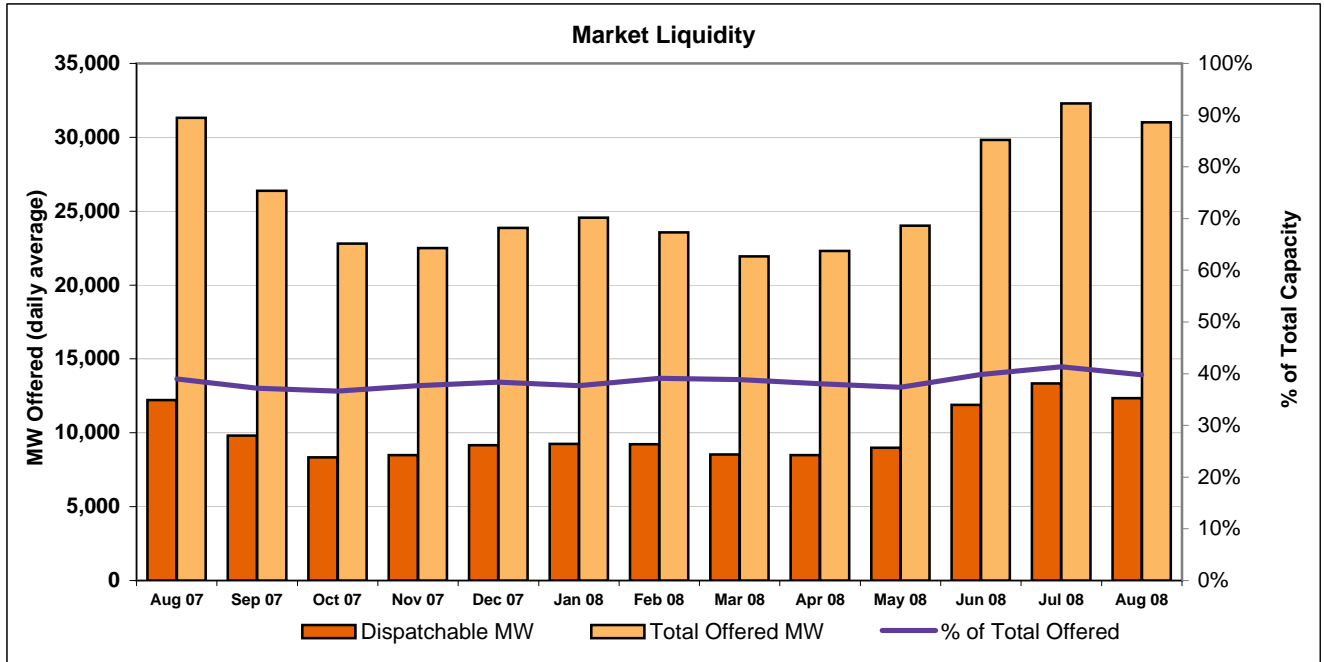
### 5. Congestion - Uplift



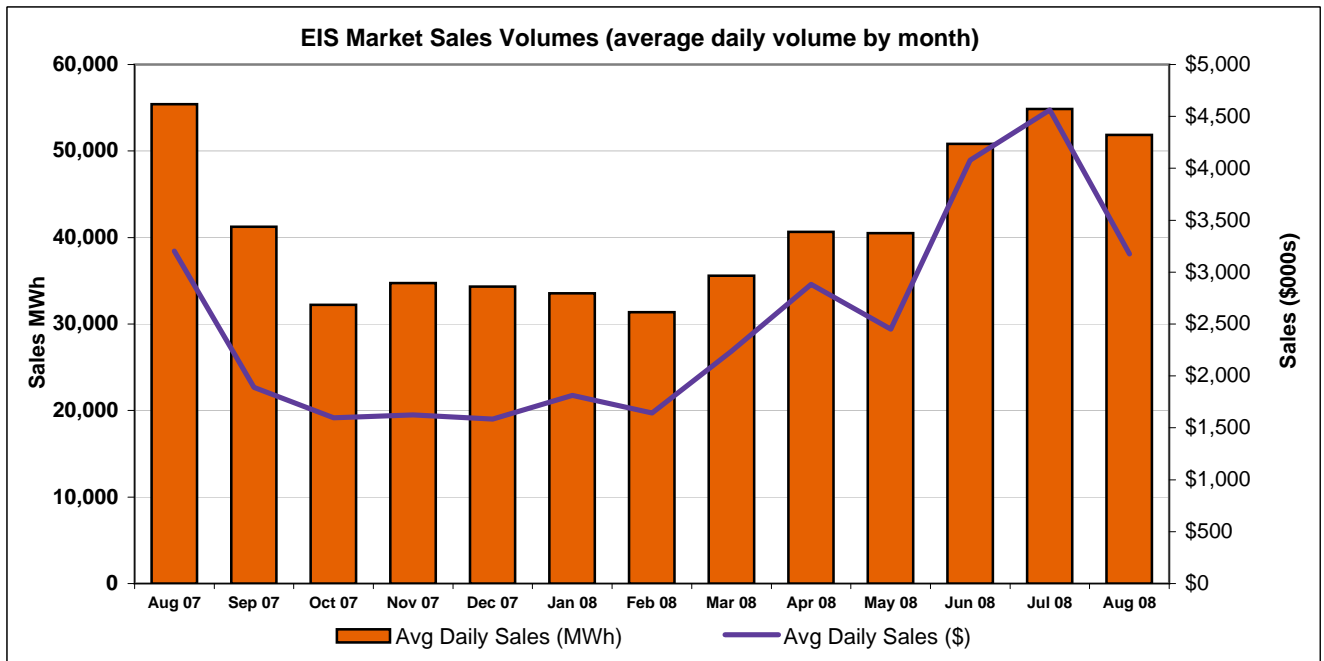
	Aug 07	Sep 07	Oct 07	Nov 07	Dec 07	Jan 08	Feb 08	Mar 08	Apr 08	May 08	Jun 08	Jul 08	Aug 08
EIS Uplift (\$000's)	998	377	-709	-1,506	-2,914	-1,289	-1,455	-5,376	-4,731	-2,829	-2,852	2,582	366

*The RNU Task Force has been re-convened and is studying the reasons, and possible solutions, for the wide variation in RNU. The Task Force will also establish appropriate target ranges for RNU.*

## 6. Market Liquidity

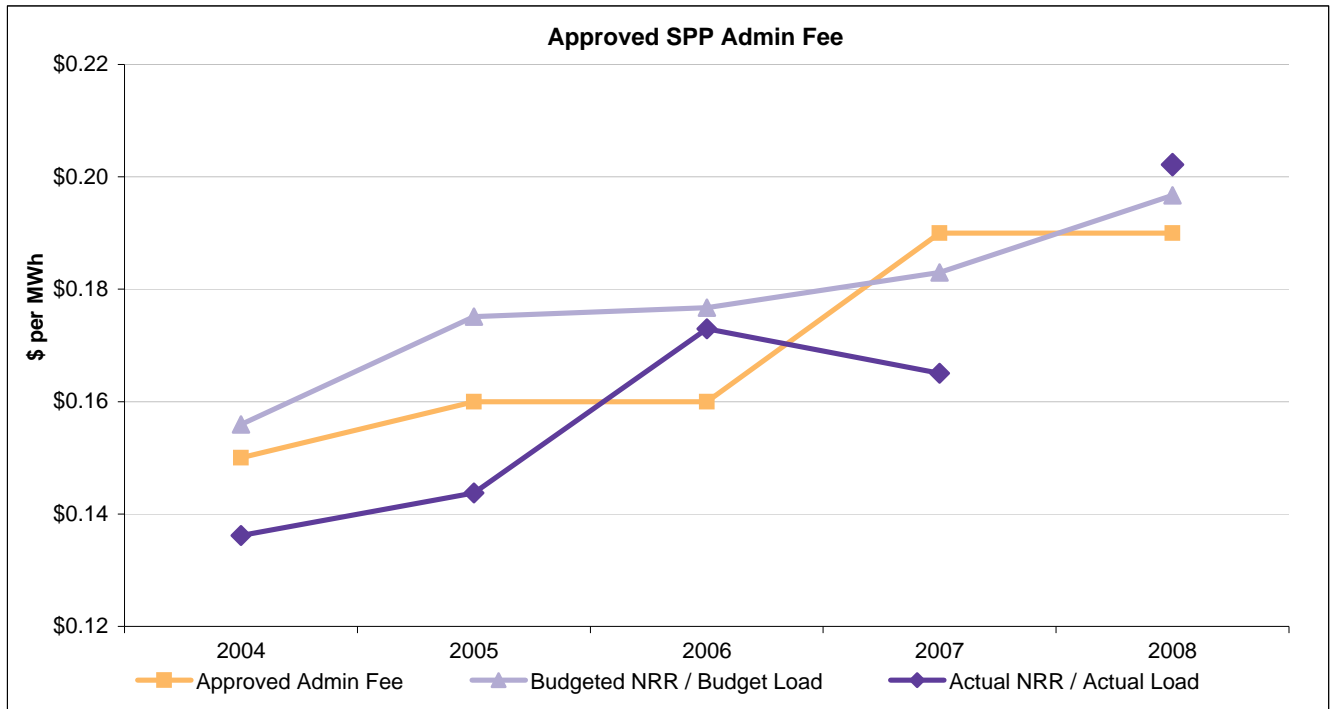


	Aug 07	Sep 07	Oct 07	Nov 07	Dec 07	Jan 08	Feb 08	Mar 08	Apr 08	May 08	Jun 08	Jul 08	Aug 08
Dispatchable MW	12,205	9,802	8,349	8,482	9,151	9,255	9,222	8,527	8,495	8,980	11,884	13,348	12,340
Total Offered MW	31,326	26,375	22,809	22,495	23,864	24,564	23,566	21,950	22,304	24,015	29,833	32,283	31,009
% of Total Offered	39%	37%	37%	38%	38%	38%	39%	39%	38%	37%	40%	41%	40%



	Aug 07	Sep 07	Oct 07	Nov 07	Dec 07	Jan 08	Feb 08	Mar 08	Apr 08	May 08	Jun 08	Jul 08	Aug 08
Avg Daily Sales (MWh)	55,410	41,230	32,204	34,747	34,325	33,541	31,372	35,581	40,661	40,499	50,812	54,867	51,848
Avg Daily Sales (\$)	3,203	1,889	1,595	1,623	1,585	1,813	1,644	2,237	2,883	2,451	4,078	4,561	3,176

## 7. SPP Admin Fee Performance



Financial Metrics

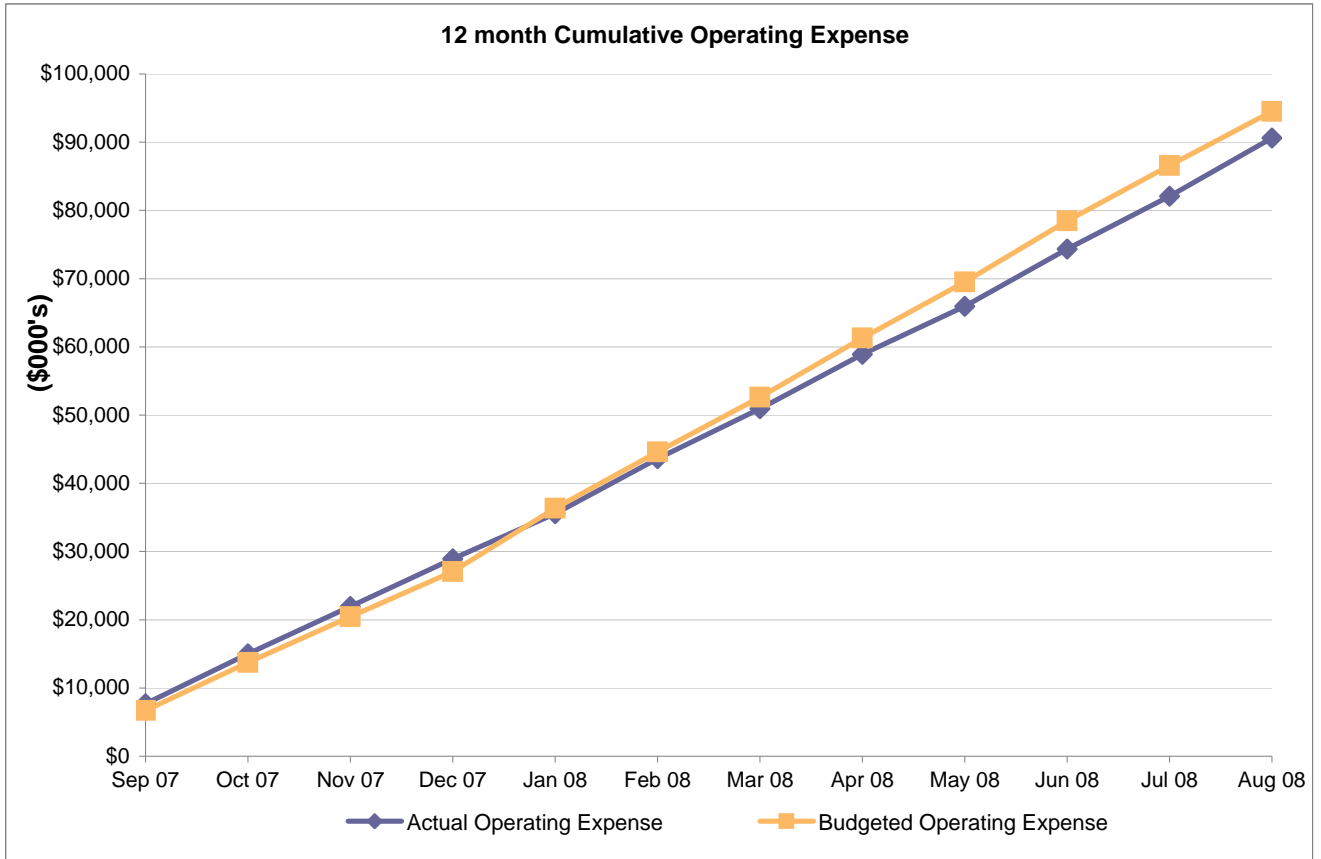
	2004	2005	2006	2007	2008
Budgeted Net Revenue Required (\$000's)	\$ 38,322	\$ 44,391	\$ 45,688	\$ 52,819	\$ 61,462
Budgeted Load (000's)	245,776	253,489	258,556	288,649	312,496
Budgeted NRR / Budget Load	\$ 0.156	\$ 0.175	\$ 0.177	\$ 0.183	\$ 0.197
Approved Admin Fee	0.15	0.16	0.16	0.19	0.19
Actual Net Revenue Required (\$000's)	\$ 33,443	\$ 38,415	\$ 49,549	\$ 49,691	\$ 39,675
Actual Load (000's)	245,571	267,239	286,446	301,053	196,253
Actual NRR / Actual Load	\$ 0.136	\$ 0.144	\$ 0.173	\$ 0.165	\$ 0.202
EIA-411 Load Growth Forecast	-0.37%	3.05%	-0.60%	1.80%	2.10%
Actual Load Growth	-1.60%	8.82%	7.19%	5.10%	

Note 1: Budgeted 2008 figures cover the entire 2008 calendar year, while actual 2008 figures cover the period through August 31, 2008.

Note 2: Actual load growth for 2008 will not be calculated until year end.

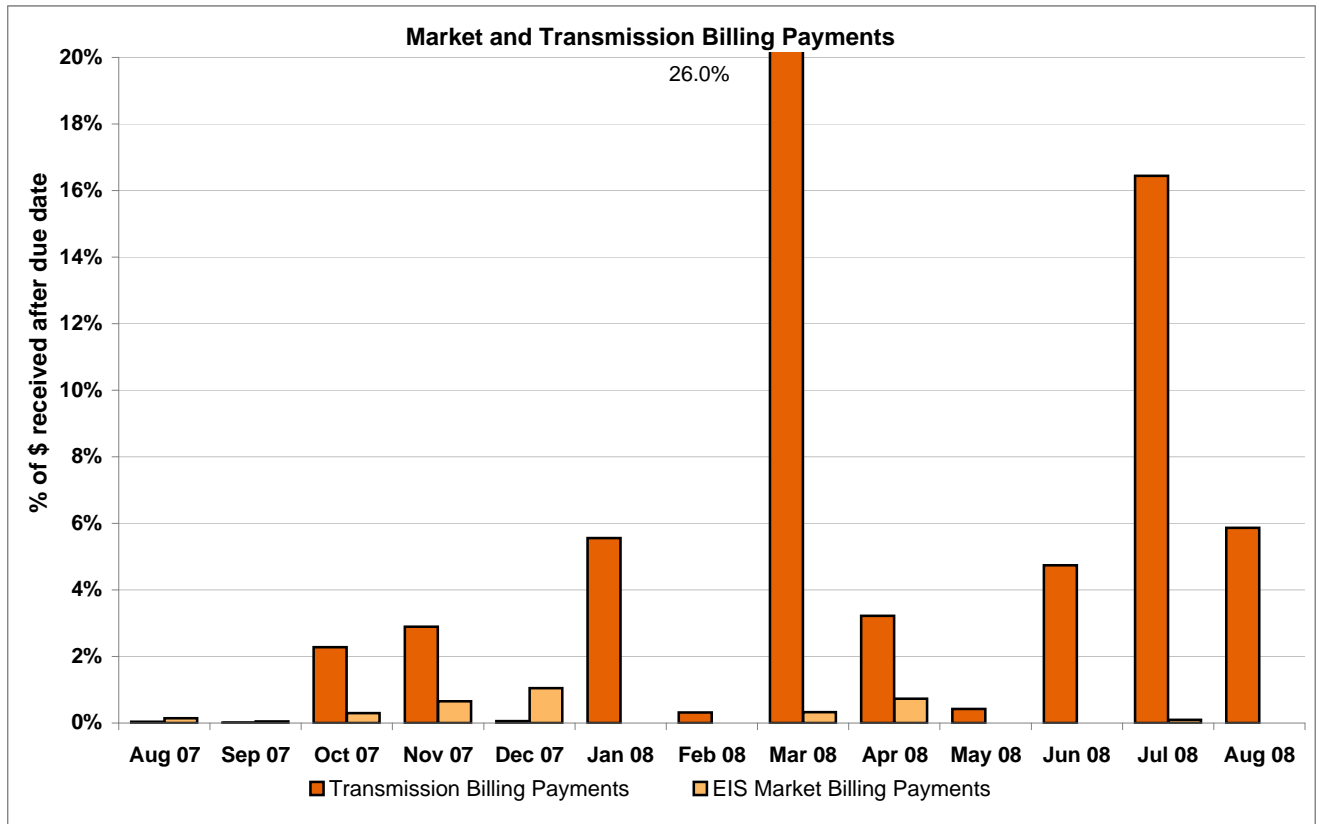
## 8. Budget Performance Monitor

Financial Metrics



<b>Cumulative</b>	<b>Sep 07</b>	<b>Oct 07</b>	<b>Nov 07</b>	<b>Dec 07</b>	<b>Jan 08</b>	<b>Feb 08</b>	<b>Mar 08</b>	<b>Apr 08</b>	<b>May 08</b>	<b>Jun 08</b>	<b>Jul 08</b>	<b>Aug 08</b>
Actual Operating Expense (\$000's)	7,691	14,990	21,946	28,924	35,549	43,627	50,916	58,914	65,959	74,324	82,069	90,597
Budgeted Operating Expense (\$000's)	6,723	13,729	20,472	27,077	36,355	44,622	52,642	61,288	69,529	78,459	86,591	94,523
Variance: Fav / (Unf)	(968)	(1,261)	(1,474)	(1,847)	806	995	1,726	2,374	3,570	4,135	4,522	3,926
% of Variance	-14%	-9%	-7%	-7%	2%	2%	3%	4%	5%	5%	5%	4%

## 9. Financial Settlement Index

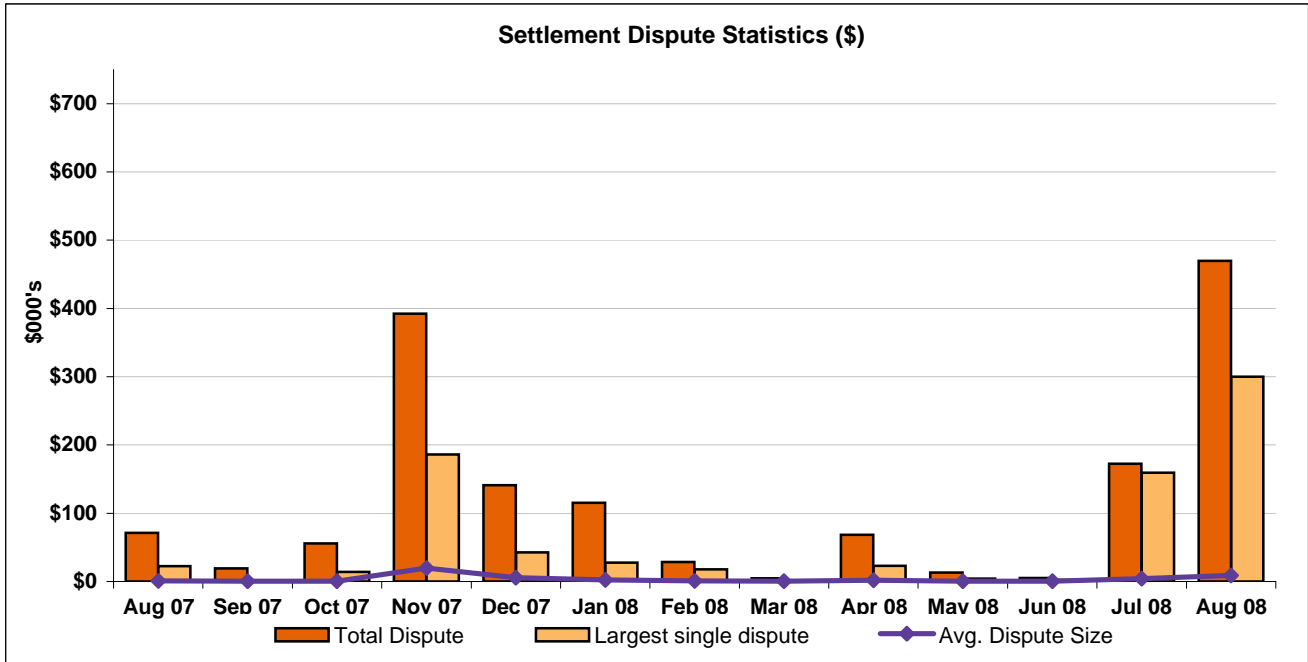


	Aug 07	Sep 07	Oct 07	Nov 07	Dec 07	Jan 08	Feb 08	Mar 08	Apr 08	May 08	Jun 08	Jul 08	Aug 08
% of Transmission Payment \$ Received After the Due Date	0.0%	0.0%	2.3%	2.9%	0.1%	5.6%	0.3%	26.0%	3.2%	0.4%	4.7%	16.4%	5.9%
% of Market Payment \$ Received After the Due Date	0.1%	0.0%	0.3%	0.7%	1.0%	0.0%	0.0%	0.3%	0.7%	0.0%	0.0%	0.1%	0.0%

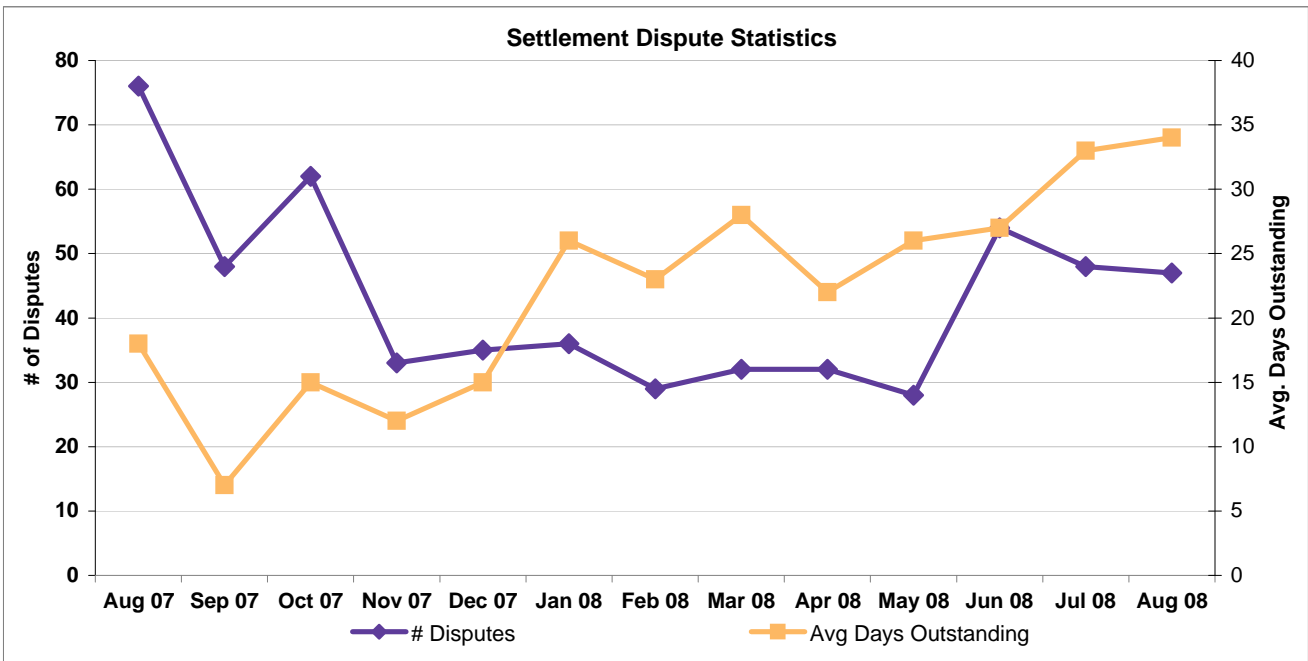
Note 1: The chart above has been modified from previous versions and now shows payments received after the due date rather than on or before the due date.

Note 2: Transmission payment data for August 2008 will not be available until after 9/26/08.

## 10. Financial Disputes Index

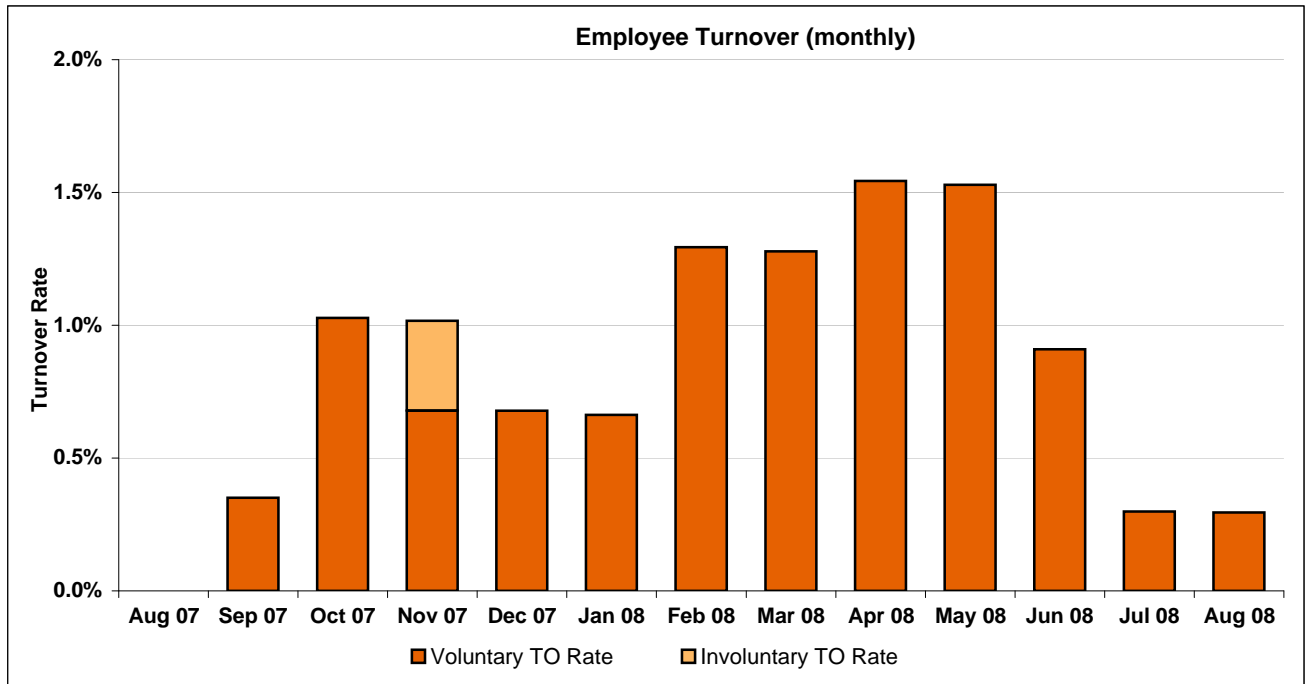


(Figures in \$000's)	Aug 07	Sep 07	Oct 07	Nov 07	Dec 07	Jan 08	Feb 08	Mar 08	Apr 08	May 08	Jun 08	Jul 08	Aug 08
Total Dispute	\$71.2	\$19.0	\$55.7	\$392.4	\$141.2	\$115.3	\$28.6	\$4.7	\$68.7	\$13.0	\$5.0	\$172.5	\$469.7
Avg. Dispute Size	\$1.0	\$0.4	\$0.7	\$19.6	\$5.4	\$2.5	\$1.0	\$0.4	\$2.0	\$0.4	\$0.3	\$4.0	\$8.9
Largest single dispute	\$22.4	\$1.3	\$14.1	\$186.0	\$42.5	\$27.6	\$18.0	\$1.2	\$23.0	\$4.4	\$2.1	\$159.2	\$300.0

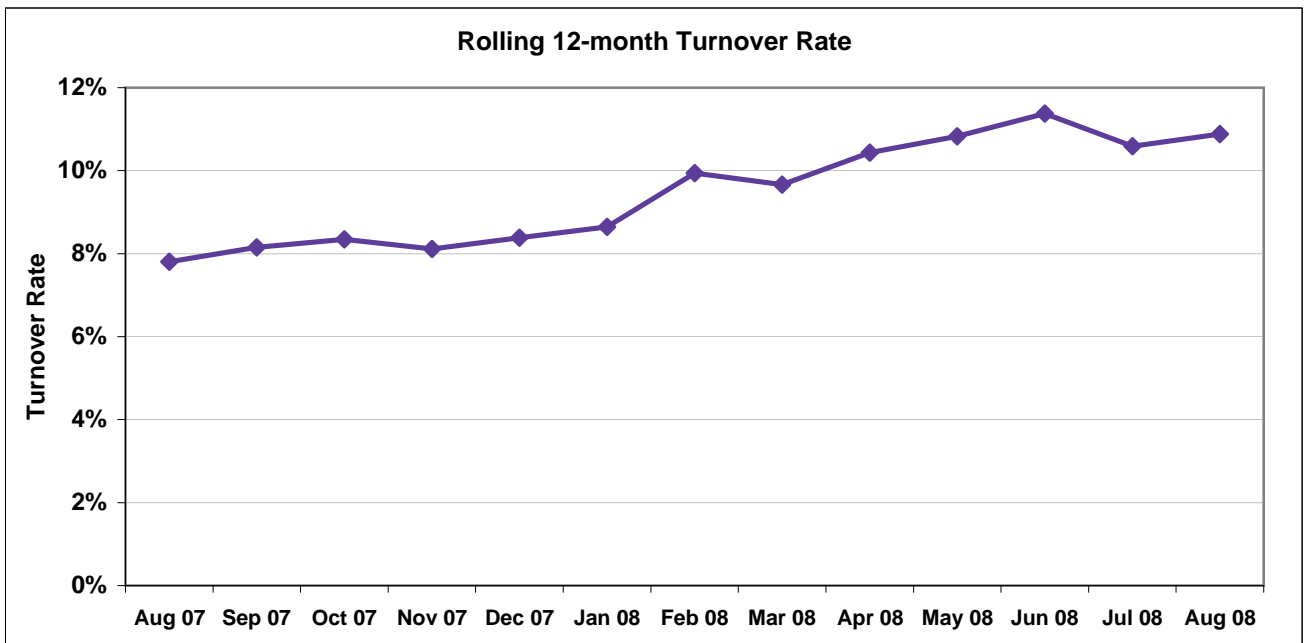


	Aug 07	Sep 07	Oct 07	Nov 07	Dec 07	Jan 08	Feb 08	Mar 08	Apr 08	May 08	Jun 08	Jul 08	Aug 08
# Disputes	76	48	62	33	35	36	29	32	32	28	54	48	47
Avg Days Outstanding	18	7	15	12	15	26	23	28	22	26	27	33	34

### 11. Employee Turnover

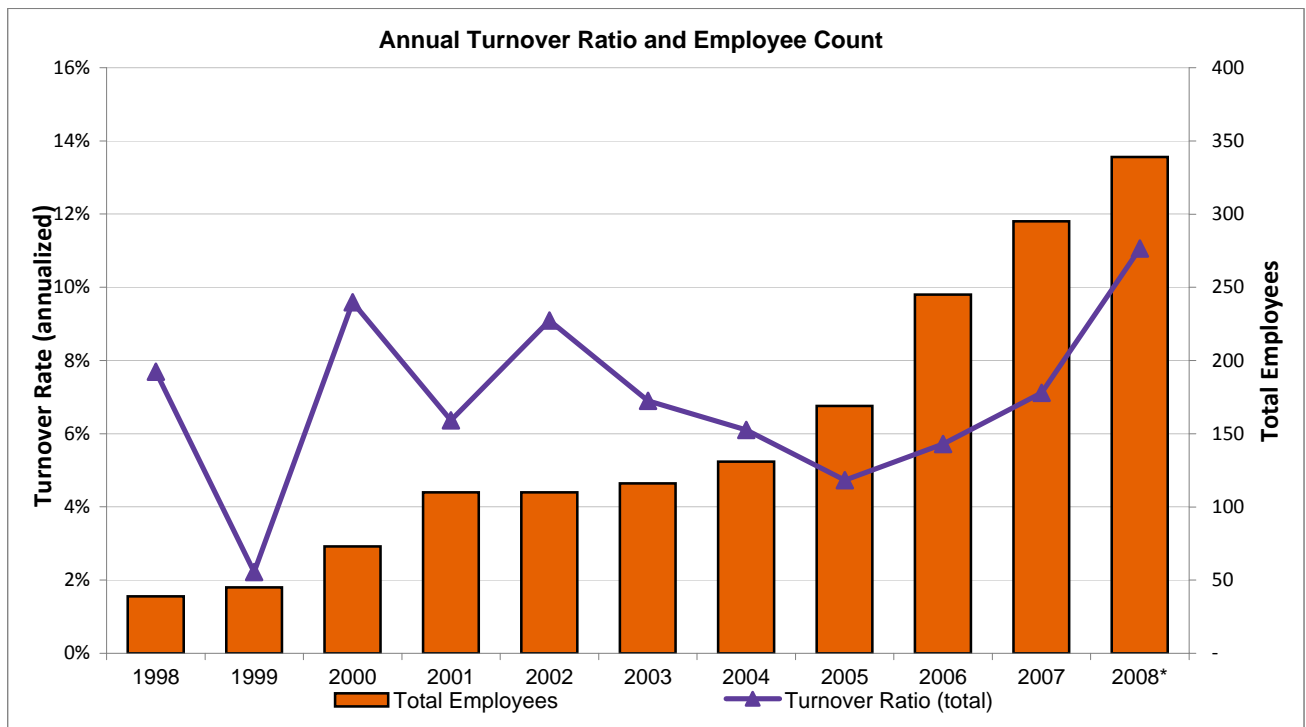


	Aug 07	Sep 07	Oct 07	Nov 07	Dec 07	Jan 08	Feb 08	Mar 08	Apr 08	May 08	Jun 08	Jul 08	Aug 08
Voluntary TO Rate	0.0%	0.4%	1.0%	0.7%	0.7%	0.7%	1.3%	1.3%	1.5%	1.5%	0.9%	0.3%	0.3%
Involuntary TO Rate	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Turnover (# of employees)	0	1	3	3	2	2	4	4	5	5	3	1	1



	Aug 07	Sep 07	Oct 07	Nov 07	Dec 07	Jan 08	Feb 08	Mar 08	Apr 08	May 08	Jun 08	Jul 08	Aug 08
Rolling 12-month Turnover Rate	7.8%	8.2%	8.3%	8.1%	8.4%	8.6%	9.9%	9.7%	10.4%	10.8%	11.4%	10.6%	10.9%

## 11. Employee Turnover



	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008*
Total Turnover	3	1	7	7	10	8	8	8	14	21	25
Total Employees	39	45	73	110	110	116	131	169	245	295	339
Turnover Ratio (total)	7.7%	2.2%	9.6%	6.4%	9.1%	6.9%	6.1%	4.7%	5.7%	7.1%	11.1%

*Note 1: Total Turnover only includes voluntary and involuntary separations; retirements and interns are not used in the calculation.*

\* 2008 figures are as of the end of the reported month, and extrapolated to a full-year equivalent.

**12. Compliance with NERC Standards****SPP RTO Compliance**

	Aug 07	Sep 07	Oct 07	Nov 07	Dec 07	Jan 08	Feb 08	Mar 08	Apr 08	May 08	Jun 08	Jul 08	Aug 08
# Confirmed Violations	0	0	0	0	0	0	0	0	0	0	0	0	0

**SPP Registered Entity Compliance**

	Aug 07	Sep 07	Oct 07	Nov 07	Dec 07	Jan 08	Feb 08	Mar 08	Apr 08	May 08	Jun 08	Jul 08	Aug 08
# Confirmed Violations	0	0	0	0	0	0	0	0	0	0	5	0	0

### 13. IT System Performance

#### System Availability for August 2008

System	Unplanned Outages	Minutes	Target Uptime	Actual Uptime	Resulting Market Outage	Comments
Market System (MOS)	0	0	99.98	100.00	N	
Market Portal	0	0	99.98	100.00	N	
Reliability (EMS)	0	0	99.98	100.00	N	
Reliability (ICCP)	0	0	99.98	100.00	N	
Tariff Admin (OASIS)	0	0	99.98	100.00	N	
Scheduling (RTO_SS)	0	0	99.98	100.00	N	

\* Target Uptime is calculated to be not more than 10 minutes of unplanned outages per month.

Overall EIS Market Status	<b>NO UNPLANNED MARKET OUTAGES FOR AUGUST 2008</b>	
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Performance

### 13. IT System Performance

#### System Availability Trends

System	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08
Market System (MOS)	100.00	100.00	99.92	99.92	100.00	99.28	100.00	99.90	100.00	100.00	100.00	100.00	100.00
Market Portal	99.83	100.00	100.00	99.97	100.00	100.00	100.00	100.00	100.00	100.00	98.47	100.00	100.00
Reliability (EMS)	100.00	99.99	99.90	99.80	99.81	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Reliability (ICCP)	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.92	100.00	100.00	100.00	100.00	100.00
Tariff Admin (OASIS)	100.00	100.00	100.00	99.99	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Scheduling (RTO_SS)	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00



No unplanned outages



less than 10 minutes unplanned outages



10 minutes or more unplanned outages

*Historical data prior to July 2007 is not available.*

Performance

# Southwest Power Pool Metrics Definitions

## Summary of Regional Operational Performance Indicators

Two groups of metrics will be monitored to provide an overall health indication of the regional transmission system and market. There are two primary areas of interest:

- Reliability Performance Indicators, which focus on the actual operations of the transmission system and whether or not it was operated within expected limits and standards.
- Market Performance Indicators, which focus on the performance of the market in terms of overall volume, prices and level of participation.

The intent is to monitor the trends in these areas over time to identify any unexpected performance in an area. Specific performance targets may be established in the future as experience is gained with the information.

## Purpose of Reliability Performance Indicators

This sub-group of metrics is designed to measure the operations of the transmission system from a reliability perspective in the prior 12 month period. Together, they form an aggregate representation to answer the following questions:

- Were any operating limits violated in the period? (see Congestion)
- Was the system operated in compliance with the relevant control performance standards? (see Regional Control Performance)

Transmission & Market Indicators

### 1. Congestion

Provides a set of measures on the number of minutes control actions are taken to reduce the flow on one or more facilities below its System Operating Limit (SOL) or IROL limit.

- Percent of intervals binding (flow = SOL), breached (flow >SOL) and congested (either binding or breached) during the month.
- Time (in hours) during the month that flowgates were in TLR, Congested or Over the Limit.  
TLR Time is the total period of time that the Reliability Coordinator (RC) issued a Transmission Loading Relief (TLR).

Binding/Breached Time is the the total period of time that the Security Constrained Economic Dispatch (SCED) engine was redispatching out of its normal economic order to relieve constraints on the system.

Over Limit Time is the total period of time that any real-time post-contingent flowgate flow was over the set rating of the flowgate.

- Figures will be reported on a rolling thirteen month basis to allow comparison to prior seasons and similar months.

### 2. Regional Control Performance

Measures the aggregate performance to the NERC CPS (Control Performance Standards) of the Balancing Authorities in the region. This indicator is set based on the number of BAs within region that are in compliance with the NERC real time control performance standards (known as BAL-001 – Real Power Balancing Control Performance and BAL-002 – Disturbance Control Performance).

- CPS1 requires BAs to be in compliance for 100% of the periods measured within the month; and CPS2 requires BAs to be in compliance for 90% of the periods measured within the month.
- For the CPS1 standard, each BA's rolling 12 month performance is grouped into one of three performance bands (<100% [red], 100-150% [yellow], >150% [green]).
- The number of BA's whose CPS1 score falls into these bands is shown; with below 100% meaning non-compliant with the standard.
- CPS2 performance is depicted in the appropriate bands (<90% [red], 90-95% [yellow], >95% [green]) based on the monthly CPS2 score rather than a rolling 12 month average.

This sub-group of indicators provides a view of the effectiveness of the EIS market in the context of answering the following questions:

- What was the value of transmission services used in the month? (see Transmission Utilization)
- What was the average wholesale price paid in the region and what was its volatility? (see Price and Price Range)
- How much of the total congestion could be resolved through market mechanisms? (see Congestion Resolved by Market)
- What was the level of available generation offered to the market and EIS related energy sales in the month? (see Market Liquidity)

**3. Transmission Utilization**

Measures the volume of transmission service scheduled in the month in terms of the transmission service revenues paid by both Network Customers and Point-to-Point customers.

- The revenues paid by transmission customers are directly related to the amount of transactions scheduled on the transmission system and therefore provide a proxy as to the utilization of the transmission system in the period.
- The figure reported will be a simple sum of the transmission service revenues paid for Network Service, Firm Point-to-Point, and Non-Firm Point-to-Point transmission service.
- Figures will be reported on a rolling thirteen month basis to allow comparison to prior seasons and similar months.

**4. Price and Price Ranges**

Shows the EIS market prices for each market participant within the footprint on both a 12-month rolling average and for the previous month. It provides a summary of the average, high and low prices in each period.

**5. Congestion - Uplift**

Tracks amount of RNU (Revenue Neutrality Uplift) charged or credited to market participants during the month. RNU ensures settlement payments/receipts for each hourly settlement interval equal zero.

- Positive RNU - SPP receives insufficient revenue and "owes" market participants.
- Negative RNU - SPP receives excess revenue, which must be credited back to market participants.
- RNU Task Force has been re-convened to look at wide variation in monthly RNU.

**6. Market Liquidity**

Measures the average daily MW capacity offered to the EIS market (dispatchable generation); presented as a percent of daily average capacity available in the hour.

- Data was taken from the Resource Plans.
- Average daily MWh sales into the EIS Market and their dollar value are shown as well.
- Although no specific performance targets have been set, the intent is to monitor the trend of this index to identify significant deviations from average.

***Purpose of Financial Metrics***

This group of metrics provides a view of the organization's overall financial situation in terms of both the operating costs and settlement functions carried out.

**7. SPP Admin Fee Performance (Rolling)**

Measures actual costs incurred by SPP on an annual basis and compares this to the approved Admin Fee and Budgeted Net Revenue Requirement (NRR).

<b>Financial Metrics</b>	<b>8 Budget Performance Monitor</b>	Measures the total actual operating expenses against the total budgeted operating expenses across the organization.
	<b>9 Financial Settlement Index</b>	Metric measures the timeliness of the financial settlements for both transmission billing and EIS market billing and provides a proxy for the strength of the organization's cash flow.
	<b>10 Financial Disputes Index</b>	Measures the number and value of disputes made with regards to the financial settlements of the markets. The objective in this area is twofold: (1) minimize the time to clear disputes; and (2) minimize the total value of dollars in dispute. The monthly indicators are the following three variables: Total number of disputes Total dollars in dispute Average # days to resolve disputes

<b>Learning &amp; Growth</b>	<b><i>Purpose of Learning &amp; Growth Metrics</i></b>	
	These indicators provide insights to the organization's success in maintaining and supporting its desired staffing levels and employee growth plans.	
	<b>11. Employee Turnover</b>	Measures both involuntary and voluntary turnover rates in the organization. Monthly turnover is charted on a rolling 12 month basis, while annual turnover ratio and number of employees is provided for historical purposes.

<b>Performance</b>	<b><i>Purpose of Performance Metrics</i></b>	
	These Performance Metrics are divided into two categories, quarterly and annual, which describe the frequency with which they will be monitored. The metrics in this group focus on compliance and achievement of major initiatives. Only the NERC Compliance and IT System Availability metrics are reported as part of the Metrics Report document. The other measures in this category will be reported on a periodic basis in separate reports.	
	<b>12. NERC Compliance</b>	Measures SPP's compliance with all NERC standards. Status is green unless there is a self-reported violation of any criteria during the period. This metric excludes the control performance standards which are included in the Regional Control Performance metric.
	<b>13 IT System Availability</b>	Measures availability of SPP IT Systems. Target uptime for all systems is calculated to be not more than 10 minutes of unplanned outage per month. However, 100% availability is always the ultimate goal. Boxes showing green represent 100% actual uptime; yellow represents less than 100% uptime but under 10 minutes of unplanned outage; while red represents 10 minutes or more of unplanned outage.