Operations Highlights

Description Highlights of Operations System Performance. A high-level summary of notable events and update of important operation information not otherwise covered in other Board Agenda items.

Notable Events

Generator Outage Reporting
The Generator Outage Reporting Filing was Accepted and Approved by FERC essentially unchanged. Development of SLIC improvements to handle improved reporting remains on track for completion by end of January 2007, with implementation immediately thereafter.

Scheduling & Tagging –Next Generation (STiNG)
Deployment of the STiNG project, which includes the CAS application (Control Area Scheduler), is scheduled for January 23rd. STiNG is ready to go into production with the ISO's current systems and has successfully completed integration testing with MRTU. The project includes much needed automation and efficiencies, spanning the entire timeline for scheduling energy including Pre-scheduling, Real Time and After the Fact. The application gives ISO Schedulers a situational awareness that will allow more accurate and timely decisions to be made.

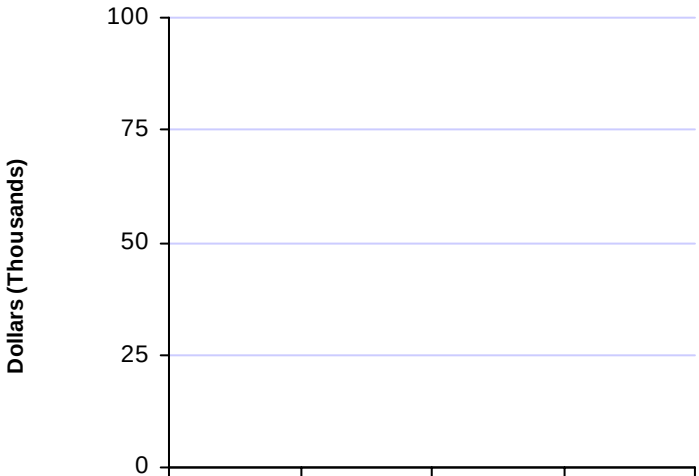
Coordination with Bonneville Power (BPA) and Salt River Project (SRP)
The recent cold spell made all operators across the region snap to attention. In anticipation of the cold spell, we coordinated with the Bonneville Power Administration, Salt River Project ("SRP") and others throughout the region to ensure that we could provide assistance to one another if needed. While we were able to weather the spell, we did stand ready and provided emergency assistance power to SRP for a short duration on Monday, January 15th.

Operations Performance Scorecard

The Operations Performance graphs briefly explain the monthly year-to-date (YTD) results for Operations Performance. This section includes: WECC Monetary Sanctions, Control Performance Standards 1 and 2, Operating Transfer Capability Violations, ISO Control Area Frequency and Generation Outage Summary. Definitions of the Performance Standards are included in Appendix A.

WECC Monetary Sanctions (Figure A)

The WECC Monetary Sanctions graph shows the quarterly and YTD number of violations of the WECC's Reliability Management System (RMS) criteria.

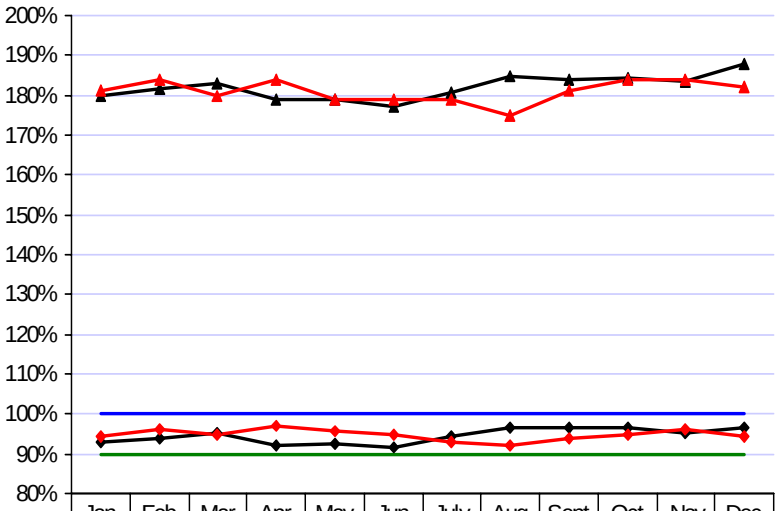


	P1: 1st Quarter '06	P2: 2nd Quarter '06	P3: 3rd Quarter '06	P4: 4th Quarter '06
ISO Qtr Monetary Sanctions	0	0	0	0
ISO YTD Monetary Sanctions	0	0	0	0
Total WECC YTD Monetary Sanctions**	2	24	35	39
YTD ISO % of WECC Monetary Sanctions	0.0%	0.0%	0.0%	0.0%

Figure A
As of the report date listed –January 3, 2007.

Control Performance Standards 1 & 2 (Figure B)

The Control Performance Standards graph shows the number of monthly and YTD system disturbances through Control Performance Standard 1 (CPS1) and Control Performance Standard 2 (CPS). WECC Minimum Operating Reliability Criteria for CPS1 is 100%. The CPS1 Target and Stretch Goal is to attain a score of 100% 12 of 12 months during the calendar year. WECC Minimum Operating Reliability Criteria for CPS2 is 90%. The CPS2 Target and Stretch Goal are to attain a score of 90% 12 of 12 months during the calendar year. Our YTD results meet the Stretch objective of attaining a score of 100% for CPS1 and 90% for CPS2 12 of 12 months for 2006.

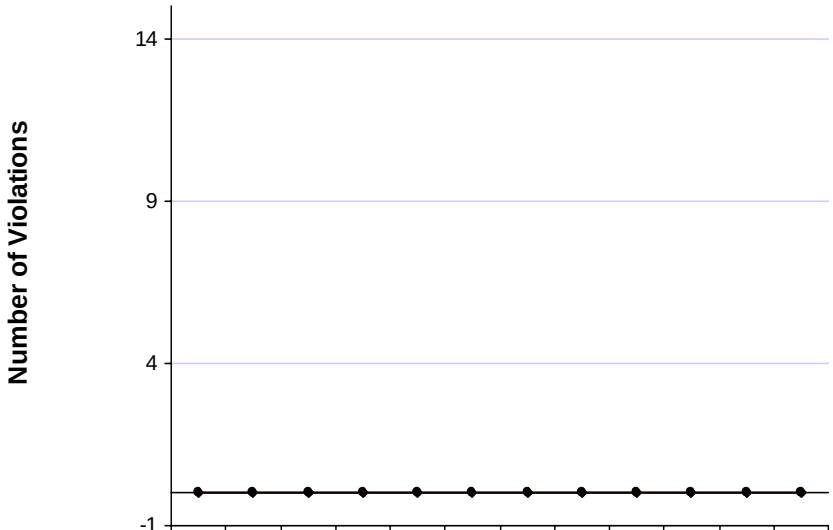


	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec
'06 CPS 1	180%	182%	183%	179%	179%	177%	181%	185%	184%	184%	183%	188%
'06 CPS 2	92.94	93.88	95.20	92.05	92.74	91.45	94.18	96.59	96.68	96.42	95.33	96.55
'05 CSP 1	181%	184%	180%	184%	179%	179%	179%	175%	181%	184%	184%	182%
'05 CPS 2	94.28	96.28	94.91	97.05	95.54	94.70	93.13	91.98	93.71	94.69	95.97	94.28
CPS1 Min Req	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
CPS2 Min Req	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%

Figure B

Operating Transfer Capability Violations (OTC)
(Figure C)

The Operating Transfer Capability graph reports the number of monthly, YTD OTC Violations, and their duration. OTC violations are one category of the four-category corporate goal to meet or exceed NERC operating standards. OTC Violations are defined as path overloads that exceed WECC allowable time limits for both stability-rated and thermally rated paths. The OTC Violation Target Goal is not to exceed 2 violations, with the Stretch goal of zero violations for the calendar year. Our YTD results meet the Stretch objective to have zero OTC Violations for 2006.



	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec
'06 Violations	0	0	0	0	0	0	0	0	0	0	0	0
'06 YTD Violations	0	0	0	0	0	0	0	0	0	0	0	0
'05 YTD Violations	0	0	0	0	0	0	0	0	0	0	0	0
'05 Violations	0	0	0	0	0	0	0	0	0	0	0	0

Figure C

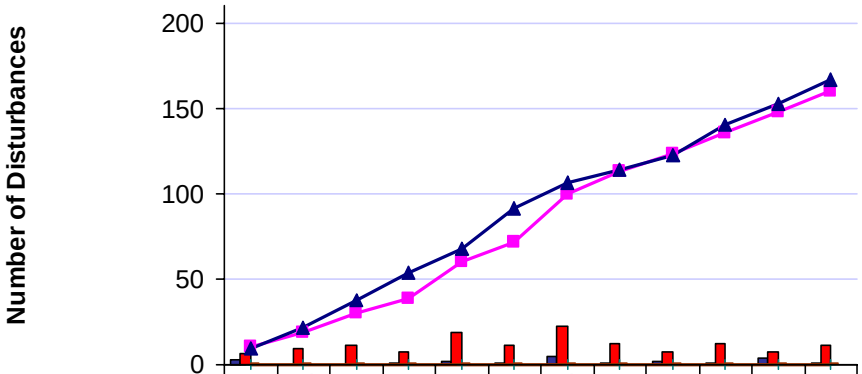
ISO Control Area Frequency (Figure D)

The Control Area Frequency graph reports monthly and YTD totals of qualifying disturbances that represent the number of contingencies that meet Disturbance Control Standard (DCS) criteria. Frequency Disturbances are results of a sudden loss of load or generation.

DCS violations are one category of the four category corporate goal to meet or exceed WECC and NERC operating standards**.**

The DCS Violation Target Goal is not to exceed 2 violations, with the Stretch goal of zero violations for the calendar year. Our YTD results meet the Stretch objective to have zero DCS Violations for 2006.

Figure D

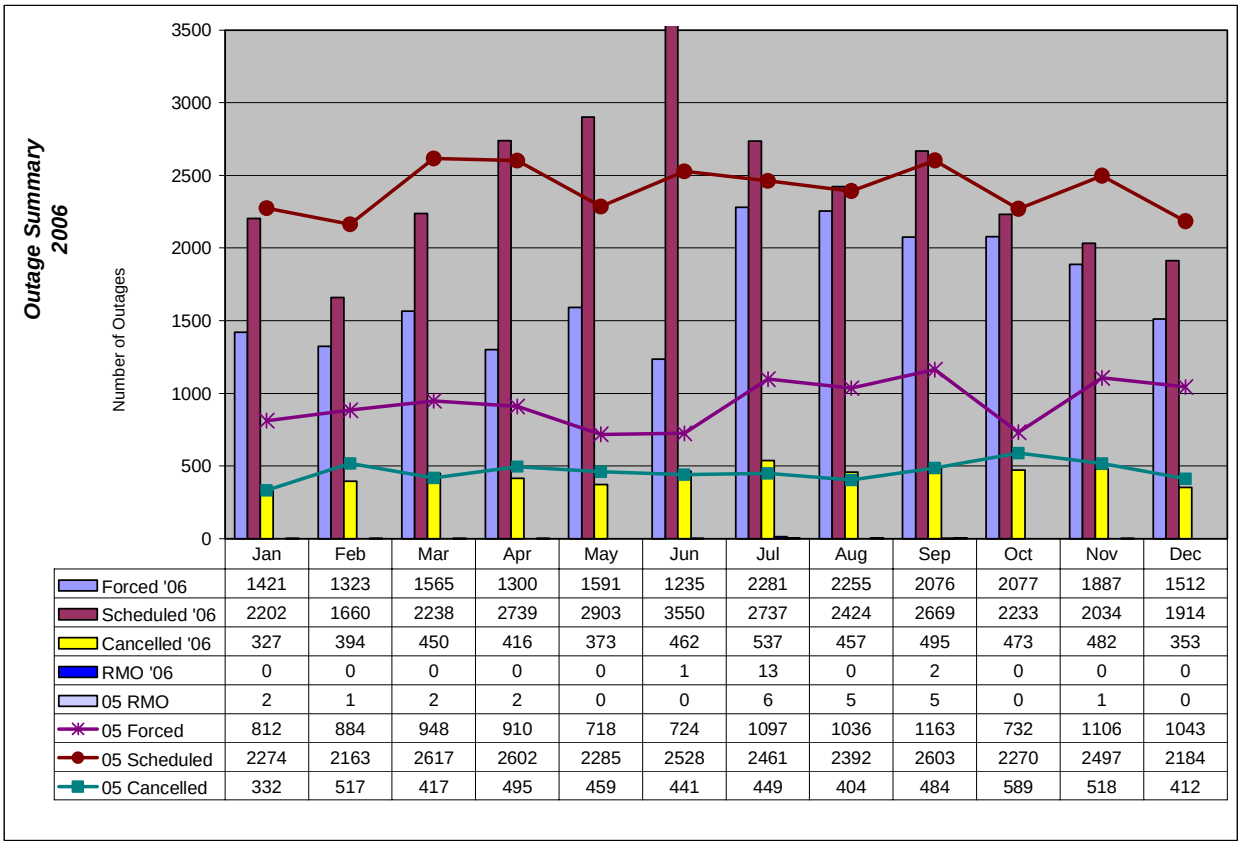


	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Inside ISO '06	3	0	0	1	2	1	5	1	2	1	4	1
Outside ISO '06	7	9	11	8	19	11	23	12	8	12	8	11
Inside ISO '05	1	2	0	0	1	0	0	0	0	2	1	0
Outside ISO '05	8	11	16	16	13	23	15	8	8	16	12	14
'06 YTD Total	10	19	30	39	60	72	100	113	123	136	148	160
'05 YTD Total	9	22	38	54	68	91	106	114	122	140	153	167
ISO DCS Violations '06	0	0	0	0	0	0	0	0	0	0	0	0
ISO DCS Violations '05	0	0	0	0	0	0	0	0	0	0	0	0

Outage Activity Summary (Figure E)

The Outage Activity Summary graph shows the number forced, scheduled, and cancelled generation and transmission outages processed per month by the Outage Coordination office. Included in the graph is the number of Restricted Maintenance Operations (RMO), which was previously referred to as No Touch Days. RMO accommodates additional transmission or other maintenance on the grid.

Since 2001, Outage Coordination has investigated all forced generation outages. To date, there have been no concerns over the generation forced outage rate.



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Forced '06	1421	1323	1565	1300	1591	1235	2281	2255	2076	2077	1887	1512
Scheduled '06	2202	1660	2238	2739	2903	3550	2737	2424	2669	2233	2034	1914
Cancelled '06	327	394	450	416	373	462	537	457	495	473	482	353
RMO '06	0	0	0	0	0	1	13	0	2	0	0	0
05 RMO	2	1	2	2	0	0	6	5	5	0	1	0
05 Forced	812	884	948	910	718	724	1097	1036	1163	732	1106	1043
05 Scheduled	2274	2163	2617	2602	2285	2528	2461	2392	2603	2270	2497	2184
05 Cancelled	332	517	417	495	459	441	449	404	484	589	518	412

Figure E

Real Time Bias
(Figure F)

The following is the monthly average percent bias for November and December 2006. Bias numbers continued to exceed stretch goals for the last three months of 2007. Bias numbers for the months of October, November, and December were 8%, 12% and 11% respectively.
Yearly recap: the bias was approximately 24%, exceeding the stretch goal of 30%. The year 2006 saw a big improvement in bias performance compared to 2005. Although bias numbers started out in the 40% range in the first two months, they started to come down in March as a result of close cooperation between Grid Operations and Market Services. The two departments isolated many of the root causes of bias and worked together to fix them. The results of this cooperation were even more apparent later in the year as the bias numbers dropped below 20% for each of the last six months

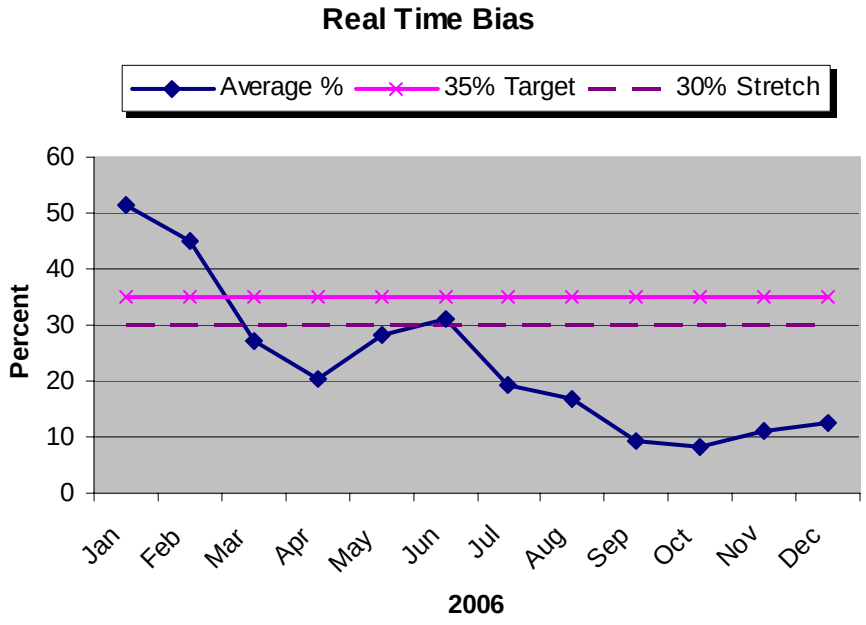


Figure F

Market Services Highlights

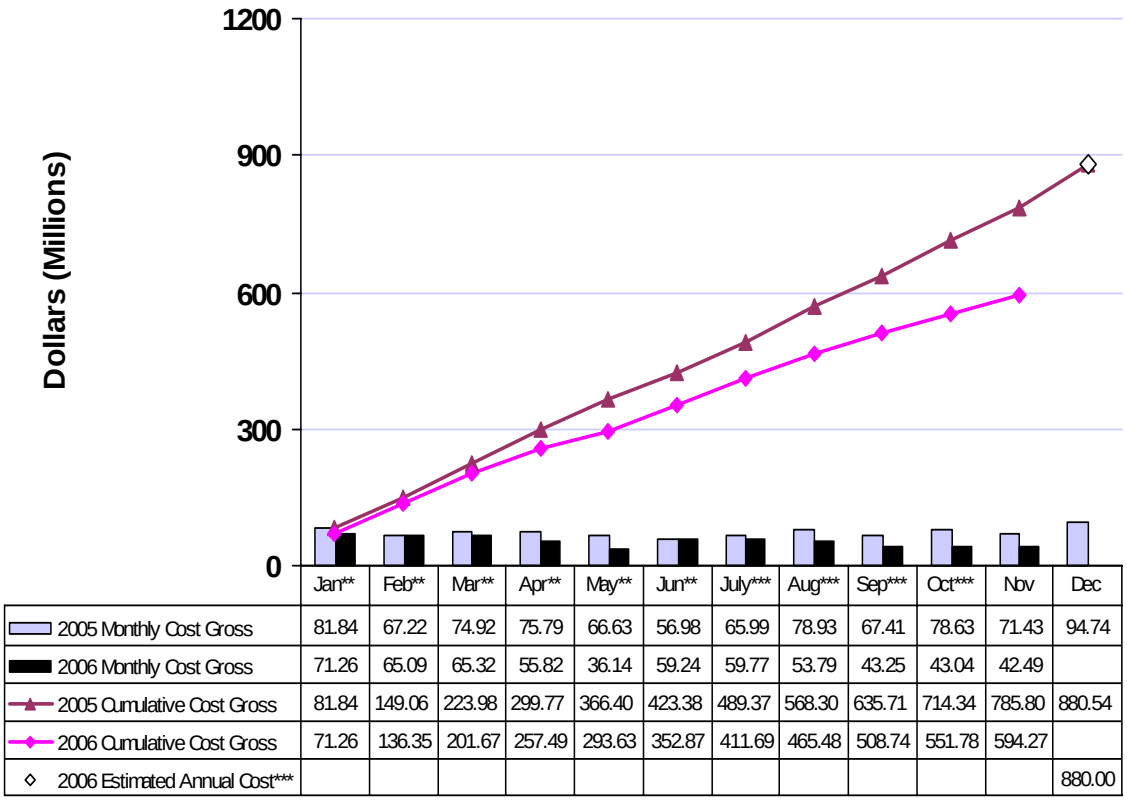
Description Highlights of the Market Services system status, activities, and anomalies relating to Market applications and systems. It is intended that additional graphs will be added to the Market Services Highlights as deemed relevant.

System Status Core Market Systems availability times are reported quarterly. The Corporate goals for system availability are: Threshold of 99.8%, Target of 99.9% and Stretch of 99.99%.
Q4 2005 Overall Availability: 99.99% (Q4 2004 Overall Availability: 99.94%)
The following are the year-to-date totals:

Market Application	% Availability Q1	% Availability Q2	% Availability Q3	% Availability Q4
Scheduling Infrastructure (SI)	99.99%	100%	100%	99.97%
Scheduling Application (SA)	100%	100%	100%	99.97%
Real Time Market Application (RTMA)	99.86%	100%	99.99%	99.97%
Automated Dispatch System (ADS)	99.96%	99.99%	100%	100%
Interchange Transaction System (BITS)	99.98%	99.96%	100%	100%
OASIS (Information System)	100%	100%	100%	100%
Vitria (Integration Software)	99.95%	100%	100%	100%

Settlements Reliability Must Run (RMR)
(Figure G)

The following graph shows the monthly and annual cost of Reliability Must Run resources. The graph also indicates cumulative gross costs and the 2006 annual cost estimate.



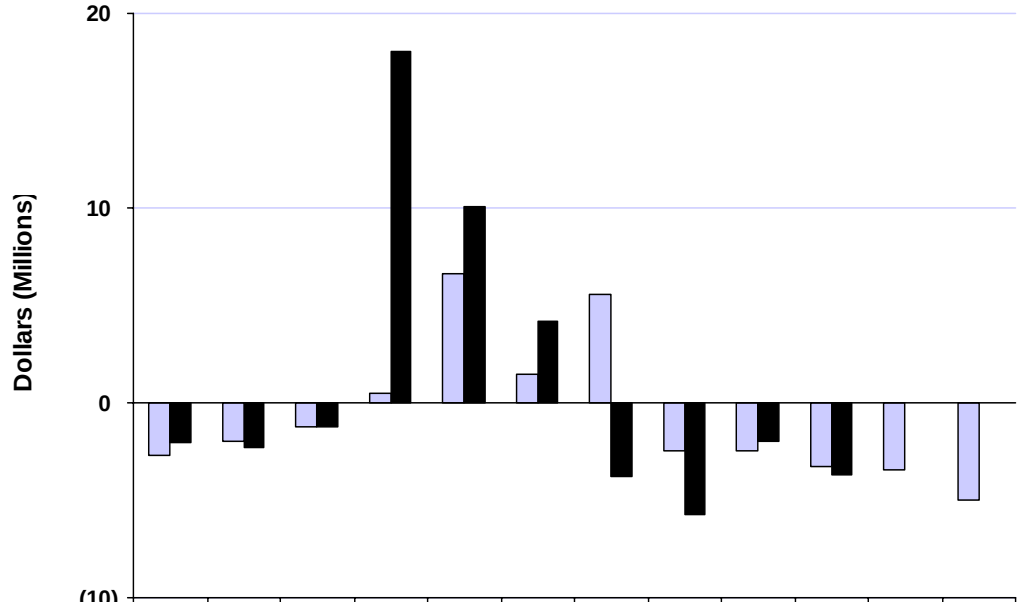
	Jan**	Feb**	Mar**	Apr**	May**	Jun**	July***	Aug***	Sep***	Oct***	Nov	Dec
2005 Monthly Cost Gross	81.84	67.22	74.92	75.79	66.63	56.98	65.99	78.93	67.41	78.63	71.43	94.74
2006 Monthly Cost Gross	71.26	65.09	65.32	55.82	36.14	59.24	59.77	53.79	43.25	43.04	42.49	
2005 Cumulative Cost Gross	81.84	149.06	223.98	299.77	366.40	423.38	489.37	568.30	635.71	714.34	785.80	880.54
2006 Cumulative Cost Gross	71.26	136.35	201.67	257.49	293.63	352.87	411.69	465.48	508.74	551.78	594.27	
◇ 2006 Estimated Annual Cost***												880.00

Figure G

Please note: * There is a 120 day lag time before final actual RMR data becomes available.
** January thru Oct. 2006 RMR has not yet received Adjusted invoices for Border, El Cajon, Enterprise and VacaDixon.
***Aug. thru Nov. RMR has not received 'Estimated' invoices for Enterprise, Border, and El Cajon. Aug. thru Nov. 2006 Month Cost for the listed facilities are based on an average of the previous two months' data.

Settlements Neutrality (Figure H)

The graph below shows the monthly settlement neutrality amounts. Current settlement timeline estimates the Neutrality for August Final and September Preliminary 2006. Settlement charges for Instructed, Uninstructed, and Unaccounted for Energy, Unscheduled RMR Energy, and Transmission Loss Obligation are expected to balance out for each settlement interval, resulting in revenue neutrality for the ISO. However, revenue neutrality may not always occur due to certain operational realities such as interchange inadvertent flows and zonal price differences. The Imbalance Energy Offset settlement account (CT 1401) serves as the adjustment account used by the ISO to offset balances related to the aforementioned settlement charges.



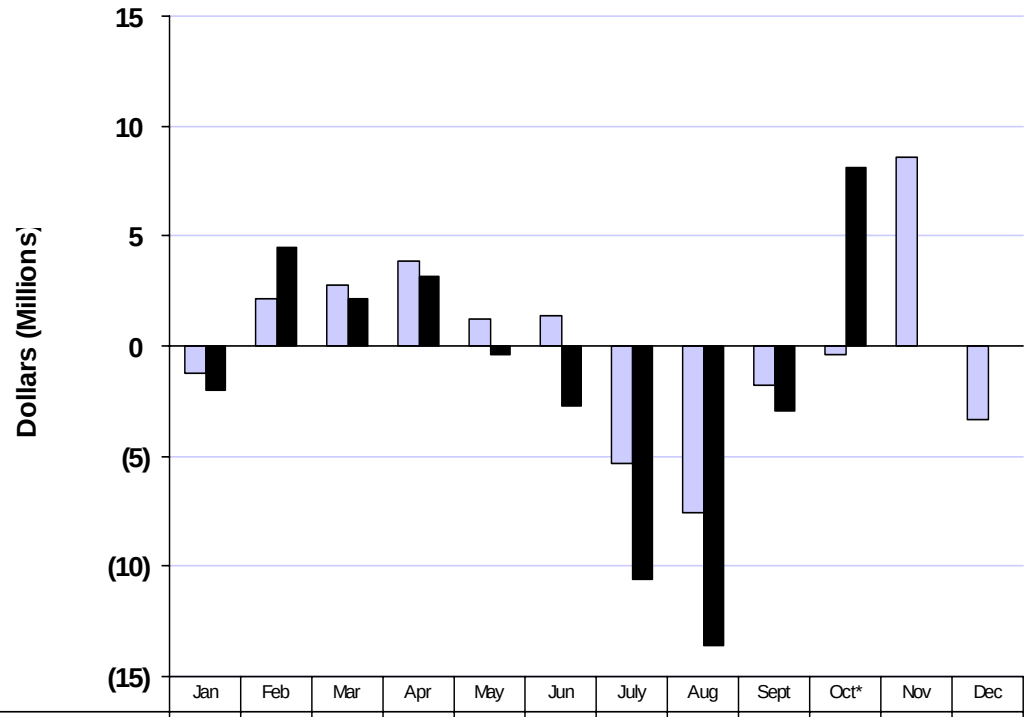
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct*	Nov	Dec
2005 Monthly Amount	-2.7	-2.0	-1.2	0.5	6.6	1.5	5.6	-2.4	-2.5	-3.3	-3.4	-5.0
2006 Monthly Amount	-2.1	-2.3	-1.2	18.0	10.1	4.2	-3.8	-5.7	-2.0	-3.7		

Figure H

Neutrality number includes both the Neutrality Adjustment (CT-1010, CT-1401) & Existing Contract Charge/Adjustment (CT-1210).
* There is a 75-day time lag before actual UFE data becomes available.

System Unaccounted For Energy (UFE)
(Figure I)

Operations Support continues to monitor changes in trends (both positive and negative) of Unaccounted for Energy (UFE) prior to and after Preliminary Settlement Statements. For the month of September, Operations Support has not identified any outstanding issues. However, high pricing has contributed to the increase in UFE dollars. The following graph shows the amount of system Unaccounted for Energy.



	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct*	Nov	Dec
2005 UFE Dollars	-1.2	2.2	2.8	3.9	1.2	1.4	-5.3	-7.6	-1.8	-0.4	8.6	-3.3
2006 UFE Dollars	-2.0	4.5	2.2	3.2	-0.4	-2.7	-10.6	-13.6	-2.9	8.1		
2005 Control Area UFE %	-0.52%	-0.02%	0.01%	0.20%	-0.19%	-0.26%	-0.54%	-0.72%	-0.35%	-0.24%	0.43%	0.22%
2006 Control Area UFE %	-0.64%	0.30%	-0.11%	-0.19%	-0.65%	-0.81%	-0.64%	-1.23%	-0.38%	1.00%		

Figure I

*Amounts estimated for October 2006. There is a 75-day time lag before actual UFE data becomes available. This chart represents the total UFE Dollars in a given month, which is calculated on a settlement interval basis and the overall average of UFE for that given month

Operations Support Highlights

Description Highlights of the operational compliance for Regulation, Ancillary Services, Rescinded Payments, and Settlement Dispute Trend.

Regulation Performance Monitoring (Figure J)

Operations Support monitors suppliers of Regulation to ensure that the Regulation capacity scheduled in the ISO markets is available in real-time. In September 2006, 99 percent of scheduled Regulation was available and capable of performing. The following graph compares the monthly amount of unavailable Regulation capacity (MW) for September 2005 through September 2006, with the 2005 monthly average.

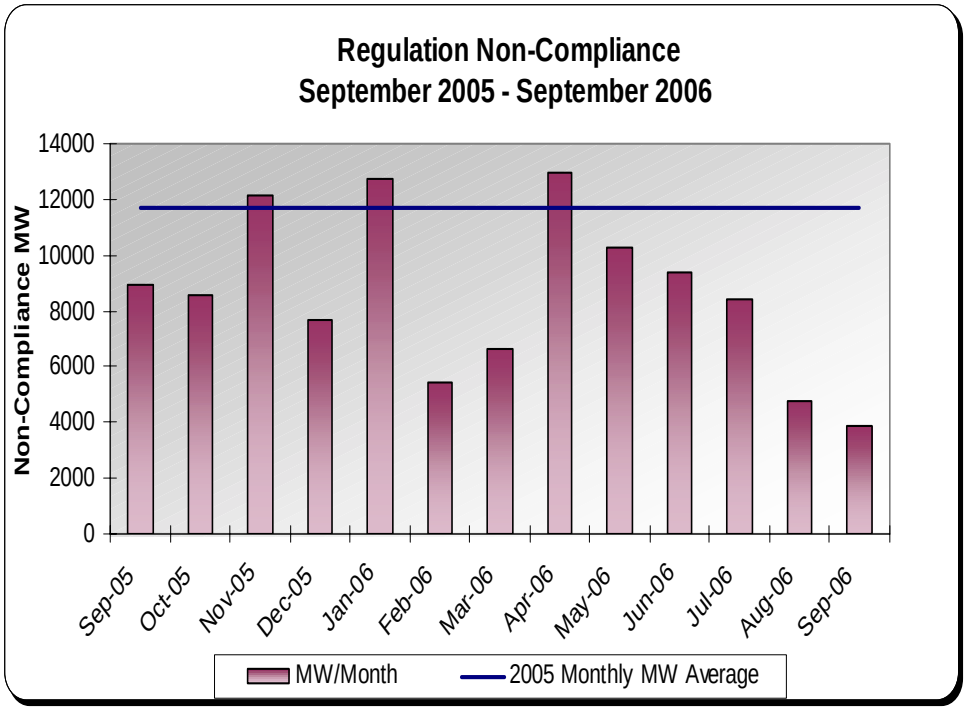


Figure J

Please note: There is a 75-day time lag before actual data becomes available.

No Pay Capacity (Figure K)

Suppliers of Ancillary Services are monitored by the "No Pay" software to ensure that Ancillary Service capacity awarded in the ISO markets is available in real-time. In September 2006, 94 percent of scheduled Spinning Reserve and Non-Spinning Reserve were available and capable of performing. The following graph compares the monthly totals of non-compliant Ancillary Service capacity (MW) from No Pay for twelve months with the monthly average from 2005.

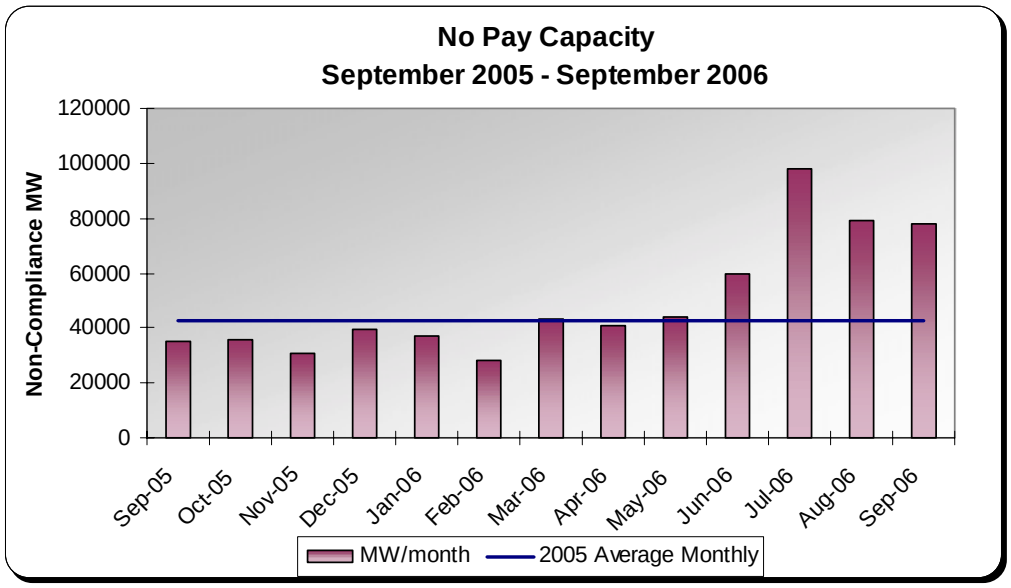


Figure K

Please note: There is a 75-day time lag before actual data becomes available.

Summary of Payments Rescinded (Figure L)

The following graph summarizes the settlement adjustments for twelve months under the No Pay and the Regulation Performance Monitoring programs. The total value of rescinded payments was approximately $276,671 for September 2006.

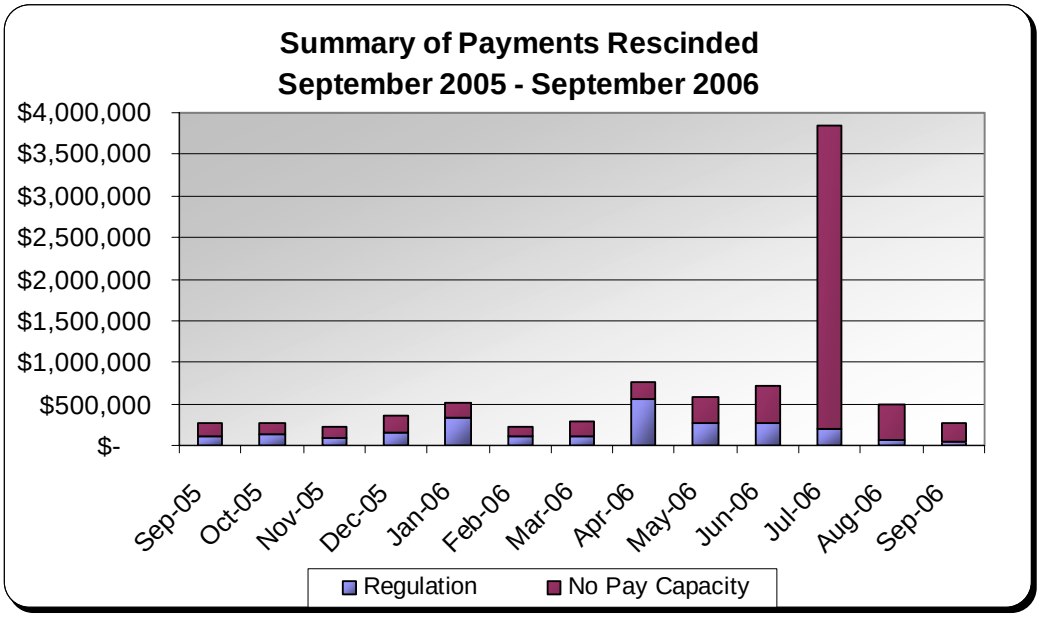


Figure L

Please note: There is a 75-day time lag before actual data becomes available.

Dispute Trend
(Figure M)

The graph below shows the volume of disputes from February 1999 through December 2006. It also shows the running average of disputes over a seven year time period, which incorporates a peak volume in April 2002 of 2107 disputes.

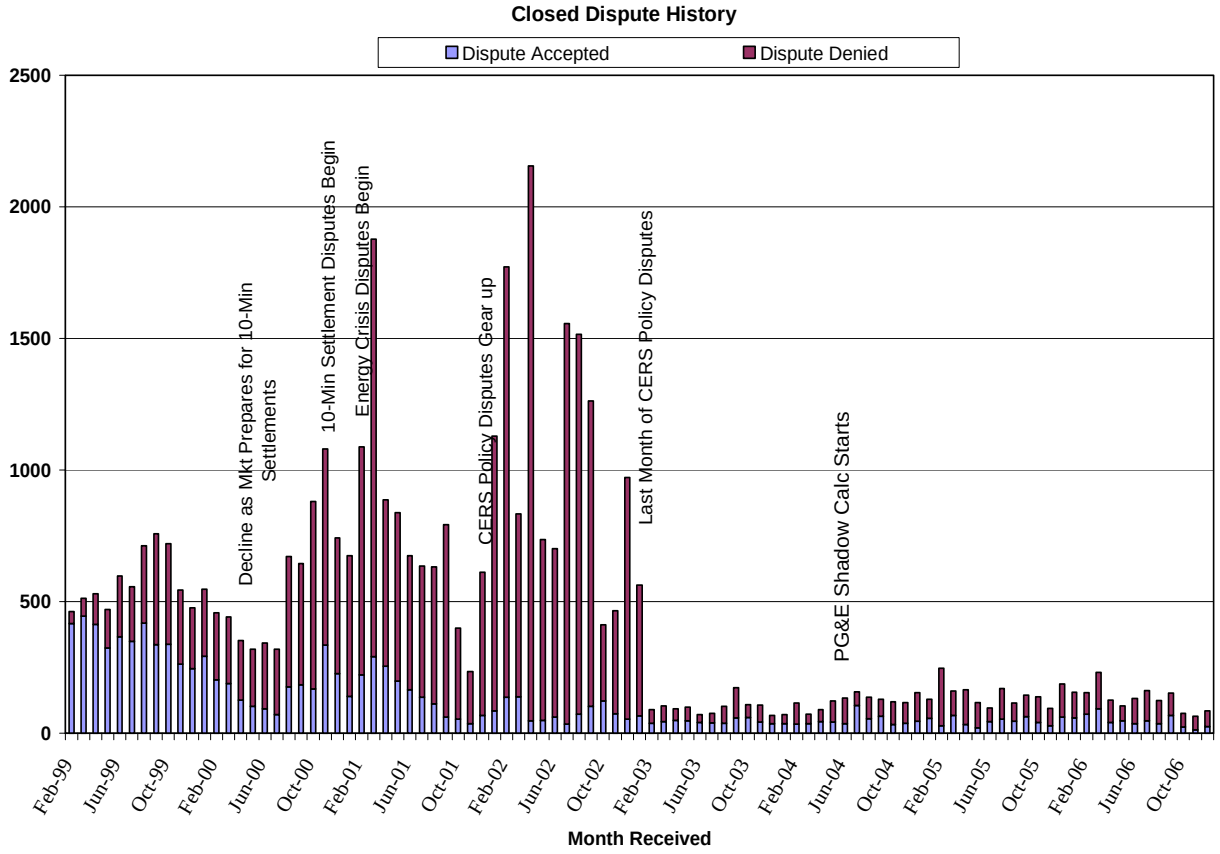


Figure M

Appendix A

Definitions The following are definitions of the items and or systems covered in the Operations Performance Scorecard section of this report:

Operations Performance Scorecard:

WECC Monetary Sanctions (Figure A)- Measures through WECC's Reliability Management System (RMS) criteria. The RMS criteria include items such as Operating Reserve (OR), Operational Transfer Capability (OTC), Disturbance Control Standard (DCS), System Operator certification, and compliance with the WECC Unscheduled Flow Reduction Procedure. The ISO's goal is to have zero monetary sanctions per quarter.

Control Performance Standards 1 & 2. **(Figure B)-** Control Performance Standard 1 (CPS1) is intended to provide a control area with a frequency sensitive evaluation of how well it is meeting its demand requirements. CPS1 is a statistical measure of Area Control Error (ACE) variability. Control Performance Standard 2 (CPS2) is a statistical measure of ACE magnitude. It is designed to limit a Control Area's unscheduled (or inadvertent) power flows that could result from large ACE values.

Operating Transfer Capability Violations (Figure C)- OTC Violations are defined as those transmission path overloads that exceed WECC allowable time limits for stability rated (20 min.) and thermally rated (30 min.) paths.

ISO Control Area Frequency (Figure D)- The ISO Control Area Frequency figures report internal and external system disturbances and include violations of the Disturbance Control Standard (DCS) resulting from ISO Control Area internal disturbances, such as loss of a large generating unit or transmission line. WECC allowable time limit for disturbance recovery is 15 minutes. Per WECC criteria, qualifying disturbances are defined as those greater than 35% of our maximum generation loss from our most severe single contingency. The California ISO's most severe single generation contingency is a nuclear unit with maximum generation output 1120 MW, 35% of which is the 392 MW thresholds used herein.

Real Time Bias (Figure F)- The number entered manually by the ISO operator into Real Time Market application (RTMA) to adjust for the energy deviation between RTMA and the Energy Management System (EMS).