State of the Market Report 2007

MRC

March 19, 2008

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Market Monitor

- Independent Market Monitoring
  - Independent from Market Participants
  - Independent from RTO management
  - Independent from RTO board of directors
- MMU Accountability
  - To FERC (per FERC MMU Orders and MM Plan).
  - To PJM markets.

- Market monitoring is required by FPA/FERC Orders
- Role of competition under the FPA
  - Mechanism to regulate prices
  - Competitive outcome = just and reasonable
- Relevant model of competition is not laissez faire
- Competitive outcomes are not automatic
- Detailed rules required – like other markets/exchanges
- Detailed monitoring required to ensure competitive outcomes:
  - Of participants
  - Of RTO
  - Of rules

Role of Market Monitoring

- Market monitoring is primarily analytical
  - Adequacy of market rules
  - Compliance with market rules
  - Exercise of market power
- Market monitoring provides information
  - To FERC
  - To state regulators
  - To market participants
  - To RTO
- FERC has enforcement authority

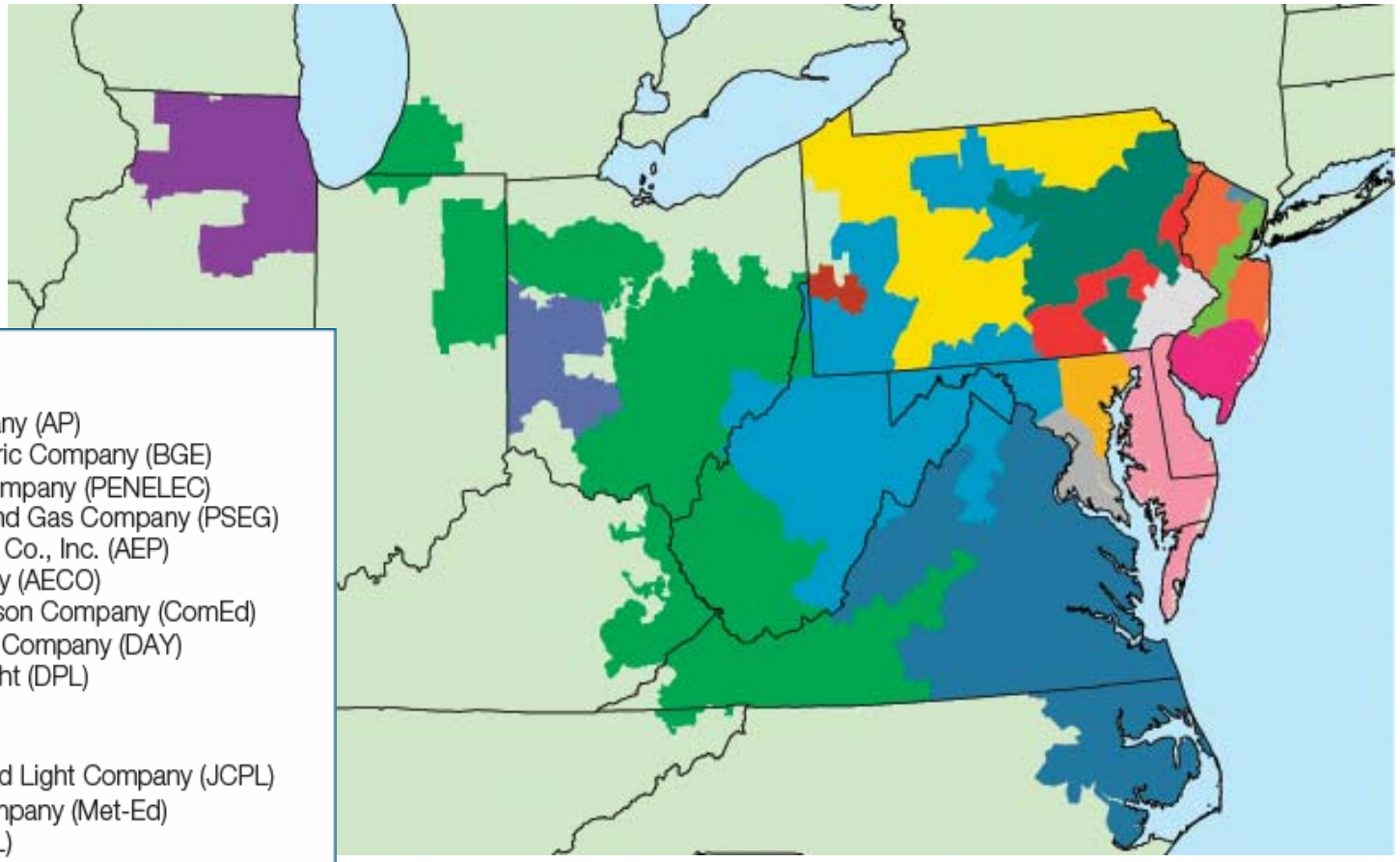
- Energy Market results were competitive
- Capacity Market results were competitive
- Regulation Market results cannot be determined to have been competitive or to have been noncompetitive
- Spinning Market results were competitive
- FTR Market results were competitive

- Retention and application of the improved local market power mitigation rules
- Retention of the $1,000 per MWh offer cap in the PJM Energy Market and other rules that limit incentives to exercise market power
- Retention of the rules included in PJM's Reliability Pricing Model (RPM) Tariff
- Implementation of enhancements to PJM's rules governing operating reserve credits

- Continued enhancements to the cost-benefit analysis of congestion and transmission investments.
- Modification of rules governing demand-side programs to ensure accurate measurement, verification and payment.
- Provision of data for external control areas to PJM to enable improved analysis of loop flows in order to enhance the efficiency of PJM markets.
- Continued enhancement of mechanisms used to manage flows at interfaces with external areas.

- Enhancements to PJM's scarcity pricing rules
- Implementation of targeted, flexible real-time market power mitigation in the Regulation Market.
- Consistent application of local market power rules to all constraints.
- Consistent application of local market power rules to all units, including those currently exempt from offer capping.

Figure A-1 PJM's footprint and its zones



Legend

- Allegheny Power Company (AP)
- Baltimore Gas and Electric Company (BGE)
- Pennsylvania Electric Company (PENELEC)
- Public Service Electric and Gas Company (PSEG)
- American Electric Power Co., Inc. (AEP)
- Atlantic Electric Company (AECO)
- The Commonwealth Edison Company (ComEd)
- Dayton Power and Light Company (DAY)
- Delmarva Power and Light (DPL)
- Dominion
- Duquesne Light (DLCO)
- Jersey Central Power and Light Company (JCPL)
- Metropolitan Edison Company (Met-Ed)
- PPL Electric Utilities (PPL)
- PECO Energy (PECO)
- Potomac Electric Power Company (PEPCO)
- Rockland Electric Company (RECO)

Figure 2-1 Average PJM aggregate supply curves: Summers 2006 and 2007

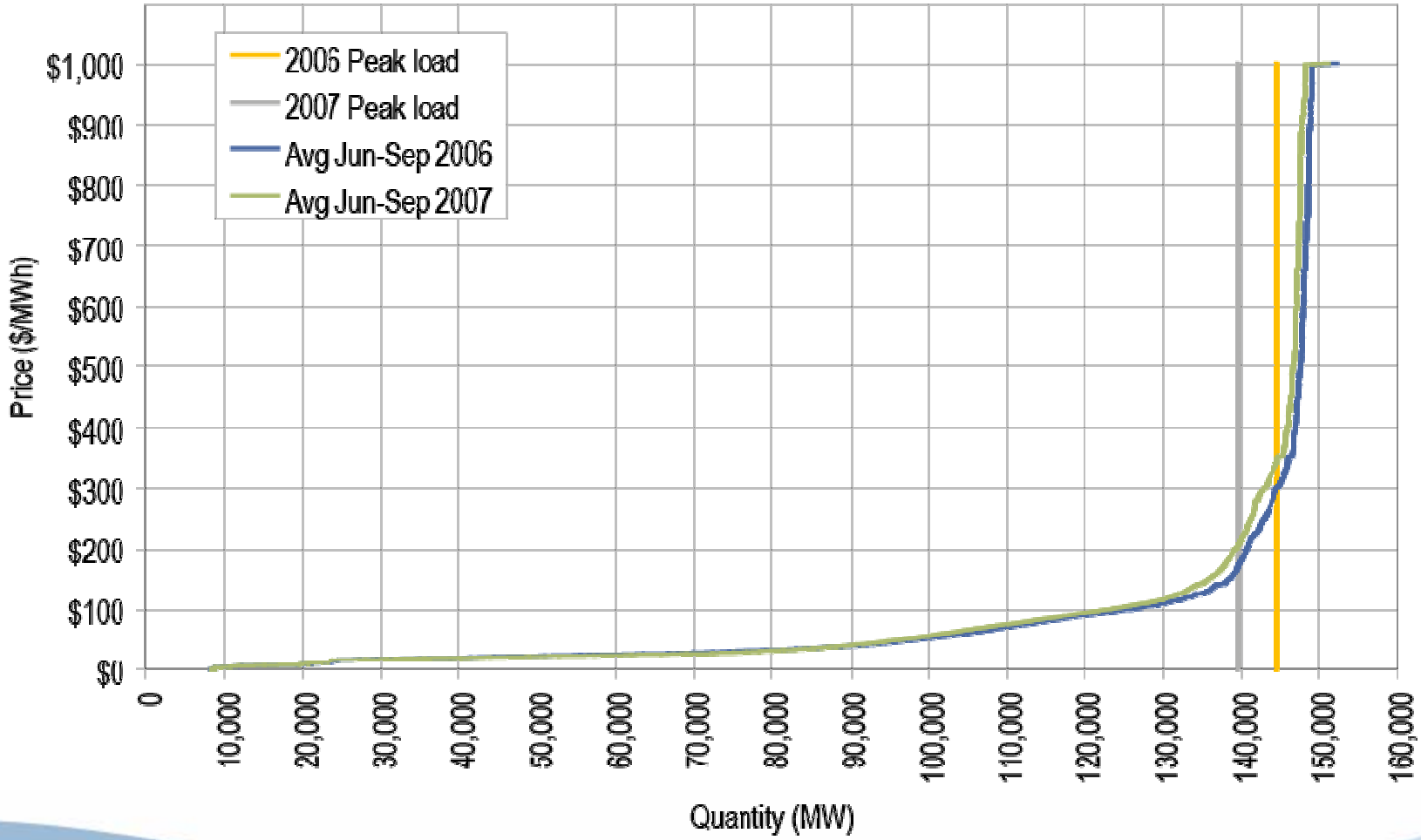


Table 3-30 PJM installed capacity (By fuel source): January 1, May 31, June 1, and December 31, 2007

	1-Jan-07		31-May-07		1-Jun-07		31-Dec-07	
	MW	Percent	MW	Percent	MW	Percent	MW	Percent
Coal	66,613.5	40.9%	66,418.9	41.0%	66,546.0	40.7%	66,286.0	40.5%
Oil	10,771.1	6.6%	10,657.5	6.6%	10,645.0	6.5%	10,640.0	6.5%
Gas	47,528.0	29.2%	46,955.9	29.0%	47,557.0	29.1%	47,599.4	29.1%
Nuclear	30,056.8	18.5%	30,056.8	18.5%	30,880.8	18.9%	30,883.8	18.9%
Solid waste	719.6	0.4%	719.6	0.4%	714.6	0.4%	712.6	0.4%
Hydroelectric	7,122.9	4.4%	7,193.9	4.4%	7,287.2	4.5%	7,311.2	4.5%
Wind	28.8	0.0%	34.0	0.0%	28.8	0.0%	65.4	0.0%
Total	162,840.7	100.0%	162,036.6	100.0%	163,659.4	100.0%	163,498.4	100.0%

Table 3-31 PJM generation (By fuel source (GWh)): Calendar year 2007

	GWh	Percent
Coal	416,180.7	55.3%
Oil	3,728.1	0.5%
Gas	57,825.8	7.7%
Nuclear	255,040.1	33.9%
Solid waste	4,896.0	0.7%
Hydroelectric	13,080.6	1.7%
Wind	1,345.8	0.2%
Total	752,097.2	100.0%

Table 2-2 Actual PJM footprint summer peak loads: 1999 to 2007

Year	Date	Hour Ending (EPT)	PJM Load (MW)	Difference (MW)
1999	06-Jul-99	1400	59,365	NA
2000	26-Jun-00	1600	56,727	(2,638)
2001	09-Aug-01	1500	54,015	(2,712)
2002	14-Aug-02	1600	63,762	9,747
2003	22-Aug-03	1600	61,500	(2,262)
2004	03-Aug-04	1700	77,887	16,387
2005	26-Jul-05	1600	133,763	55,876
2006	02-Aug-06	1700	144,644	10,881
2007	08-Aug-07	1600	139,428	(5,216)

Figure 2-2 PJM summer peak-load comparison: Wednesday, August 2, 2006, and Wednesday, August 8, 2007

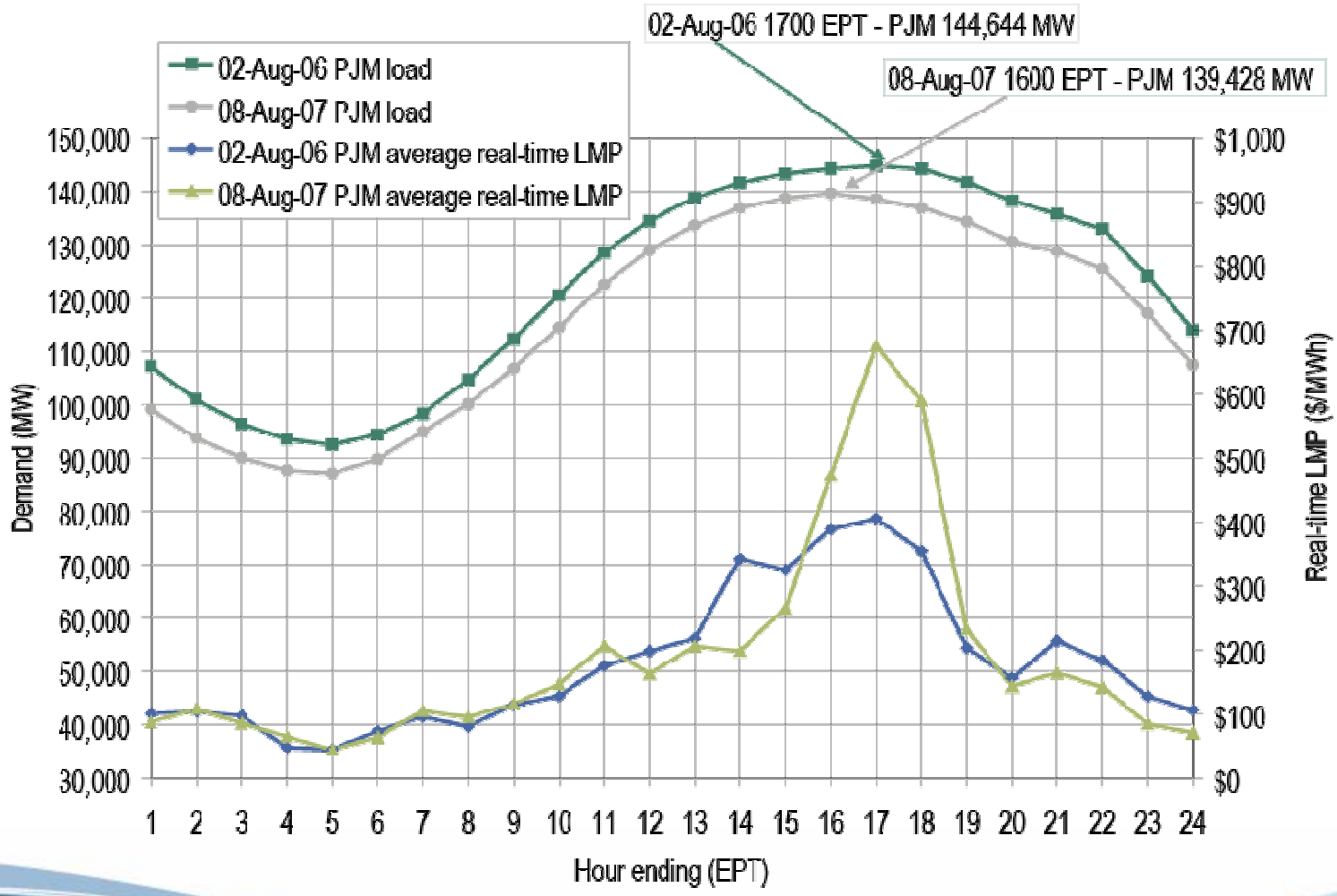


Figure 2-7 PJM real-time average load: Calendar years 2006 to 2007

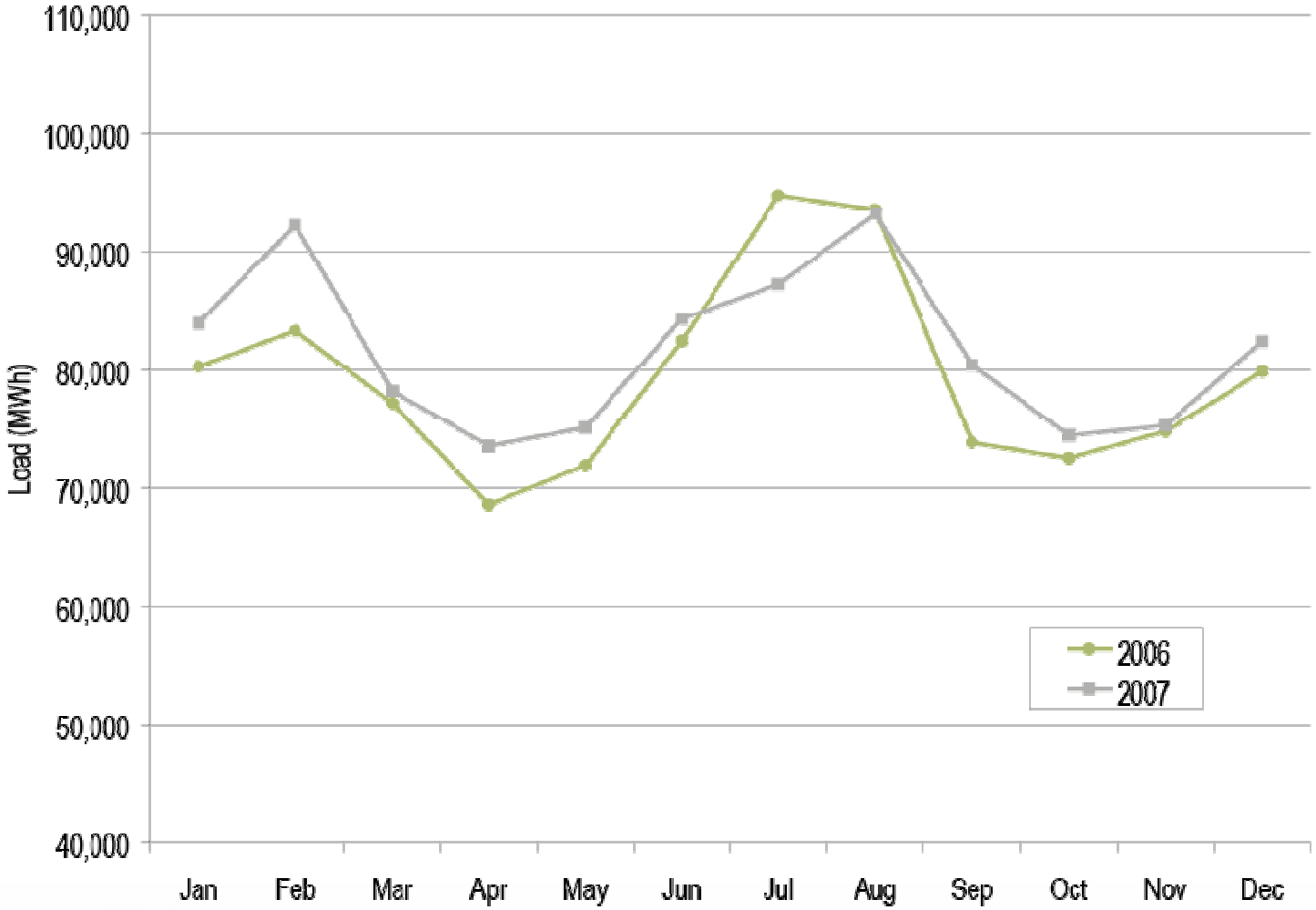


Table 2-48 PJM real-time, simple average LMP (Dollars per MWh): Calendar years 1998 to 2007

	Real-Time LMP			Year-to-Year Change		
	Average	Median	Standard Deviation	Average	Median	Standard Deviation
1998	$21.72	$16.60	$31.45	NA	NA	NA
1999	$28.32	$17.88	$72.42	30.4%	7.7%	130.3%
2000	$28.14	$19.11	$25.69	(0.6%)	6.9%	(64.5%)
2001	$32.38	$22.98	$45.03	15.1%	20.3%	75.3%
2002	$28.30	$21.08	$22.40	(12.6%)	(8.3%)	(50.3%)
2003	$38.27	$30.79	$24.71	35.2%	46.1%	10.3%
2004	$42.40	$38.30	$21.12	10.8%	24.4%	(14.5%)
2005	$58.08	$47.18	$35.91	37.0%	23.2%	70.0%
2006	$49.27	$41.45	$32.71	(15.2%)	(12.1%)	(8.9%)
2007	$57.58	$49.92	$34.60	16.9%	20.4%	5.8%

Table 2-52 PJM real-time, annual, load-weighted, average LMP (Dollars per MWh): Calendar years 1998 to 2007

	Real-Time, Load-Weighted, Average LMP			Year-to-Year Change		
	Average	Median	Standard Deviation	Average	Median	Standard Deviation
1998	$24.16	$17.60	$39.29	NA	NA	NA
1999	$34.07	$19.02	$91.49	41.0%	8.1%	132.9%
2000	$30.72	$20.51	$28.38	(9.8%)	7.8%	(69.0%)
2001	$36.65	$25.08	$57.26	19.3%	22.3%	101.8%
2002	$31.58	$23.40	$26.73	(13.8%)	(6.7%)	(53.3%)
2003	$41.23	$34.95	$25.40	30.6%	49.4%	(5.0%)
2004	$44.34	$40.16	$21.25	7.5%	14.9%	(16.3%)
2005	$63.46	$52.93	$38.10	43.1%	31.8%	79.3%
2006	$53.35	$44.40	$37.81	(15.9%)	(16.1%)	(0.8%)
2007	$61.66	$54.66	$36.94	15.6%	23.1%	(2.3%)

Figure 2-13 PJM real-time, monthly, load-weighted, average LMP: Calendar years 2003 to 2007

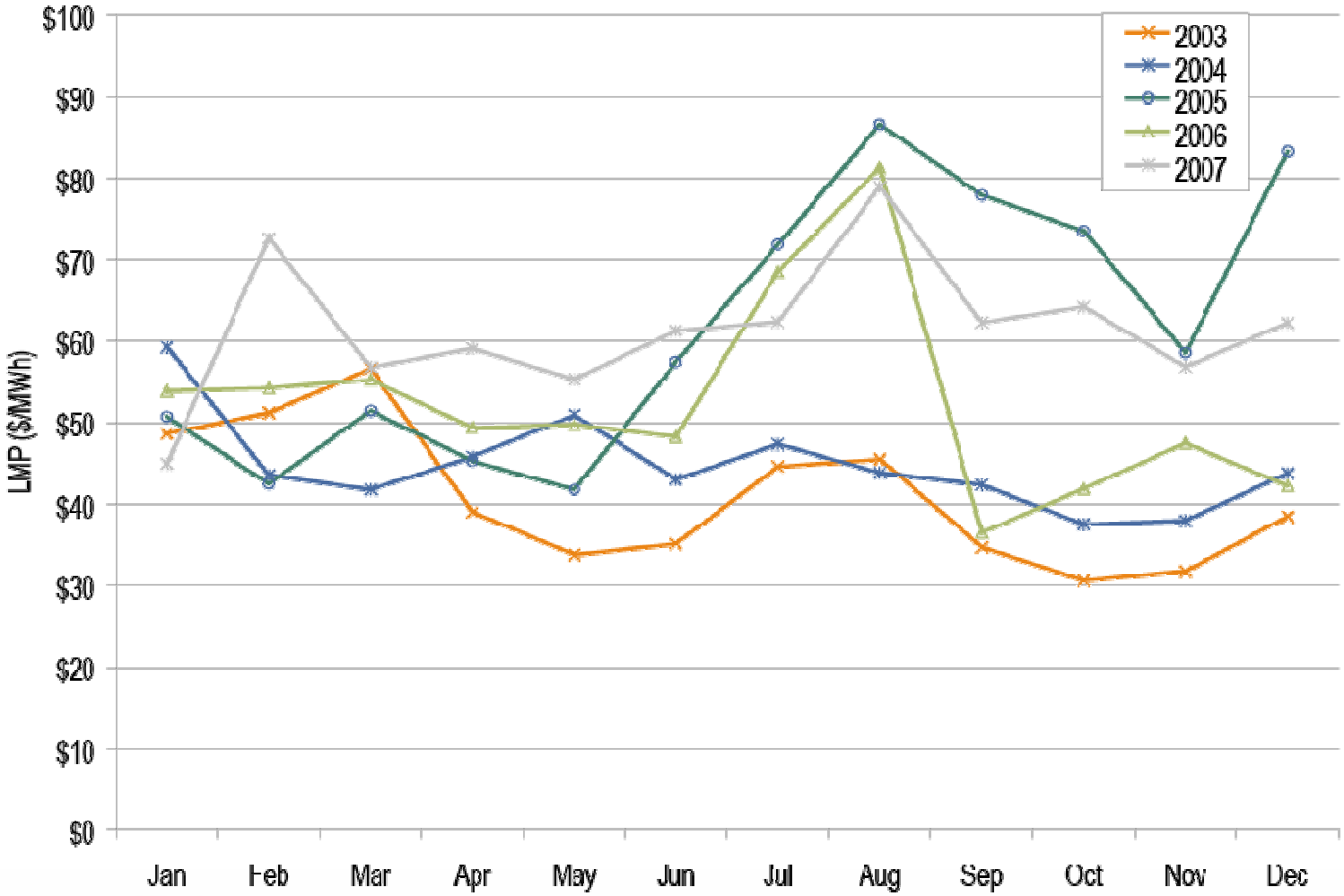


Table 2-67 Zonal real-time, simple average LMP components (Dollars per MWh): Calendar years 2006 and 2007.

	2006				2007			
	Real-Time LMP	Energy Component	Congestion Component	Loss Component	Real-Time LMP	Energy Component	Congestion Component	Loss Component
AECO	$55.53	$47.19	$8.34	$0.0	$65.02	$56.56	$6.42	$2.04
AEP	$42.24	$47.19	($4.95)	$0.0	$46.55	$56.56	($8.80)	($1.21)
AP	$48.71	$47.19	$1.52	$0.0	$57.45	$56.56	$1.33	($0.44)
BGE	$57.40	$47.19	$10.21	$0.0	$69.79	$56.56	$12.08	$1.15
ComEd	$41.52	$47.19	($5.67)	$0.0	$45.71	$56.56	($9.42)	($1.43)
DAY	$41.21	$47.19	($5.98)	$0.0	$46.47	$56.56	($9.54)	($0.55)
Dominion	$56.44	$47.19	$9.25	$0.0	$66.75	$56.56	$9.89	$0.30
DPL	$53.09	$47.19	$5.90	$0.0	$64.15	$56.56	$6.09	$1.50
DLCO	$39.34	$47.19	($7.85)	$0.0	$43.93	$56.56	($11.13)	($1.50)
JCPL	$51.80	$47.19	$4.61	$0.0	$65.74	$56.56	$7.36	$1.82
Met-Ed	$52.66	$47.19	$5.47	$0.0	$64.57	$56.56	$7.32	$0.69
PECO	$52.40	$47.19	$5.21	$0.0	$62.60	$56.56	$4.82	$1.22
PENELEC	$46.64	$47.19	($0.55)	$0.0	$54.80	$56.56	($1.46)	($0.30)
Pepco	$58.85	$47.19	$11.66	$0.0	$70.33	$56.56	$13.00	$0.77
PPL	$51.52	$47.19	$4.33	$0.0	$62.02	$56.56	$4.89	$0.57
PSEG	$54.57	$47.19	$7.38	$0.0	$65.92	$56.56	$7.43	$1.93
RECO	$53.88	$47.19	$6.69	$0.0	$64.85	$56.56	$6.50	$1.79

Table 7-1 Total annual PJM congestion [Dollars (Millions)]: Calendar years 2003 to 2007

	Congestion Charges	Percent Change	Total PJM Billing	Percent of PJM Billing
2003	$464	NA	$6,900	7%
2004	$750	62%	$8,700	9%
2005	$2,092	179%	$22,630	9%
2006	$1,603	(23%)	$20,945	8%
2007	$1,845	15%	$30,556	6%
Total	$6,754		$89,731	8%

Table 7-13 Regional constraints summary (By facility): Calendar year 2007

			Congestion Costs (Millions)										
			Day Ahead				Balancing					Event Hours	
Constraint	Type	Location	Load Payments	Generation Credits	Explicit	Total	Load Payments	Generation Credits	Explicit	Total	Grand Total	Day Ahead	Real Time
Bedington - Black Oak	Interface	500	$466.3	($227.9)	$43.4	$737.6	$523.6	$531.0	($16.2)	($23.5)	$714.0	5,493	1,836
5004/5005 Interface	Interface	500	$3.4	($111.9)	$5.7	$121.0	($33.9)	($29.6)	($0.3)	($4.6)	$116.5	1,512	386
AP South	Interface	500	$36.9	($57.1)	$4.3	$98.4	$12.5	$10.4	$1.0	$3.1	$101.5	706	133
Kammer	Transformer	500	$31.3	($16.3)	$11.6	$59.2	($39.8)	($48.6)	($3.7)	$5.1	$64.3	2,005	947
Central	Interface	500	($43.7)	($73.5)	$2.5	$32.4	($2.0)	($2.1)	$0.0	$0.0	$32.4	1,334	25
East	Interface	500	($25.2)	($41.9)	$0.8	$17.5	($0.4)	($0.4)	($0.0)	($0.0)	$17.4	304	5
West	Interface	500	$4.1	($13.3)	$2.0	$19.4	($27.0)	($22.3)	($3.6)	($8.4)	$11.0	359	338
Conemaugh - Hunterstown	Line	500	$0.0	$0.0	$0.0	$0.0	($1.5)	($0.9)	($0.0)	($0.7)	($0.7)	0	9
MAAC - Scarcity	Interface	500	$0.0	$0.0	$0.0	$0.0	($5.5)	($4.3)	$1.0	($0.1)	($0.1)	0	3
Alburtis - Branchburg	Line	500	$0.0	$0.0	$0.0	$0.0	($0.1)	($0.1)	$0.0	$0.1	$0.1	0	4
Doubs - Mount Storm	Line	500	$0.0	$0.0	$0.0	$0.0	($0.1)	($0.1)	($0.0)	($0.1)	($0.1)	0	4
Harrison - Pruntytown	Line	500	$0.0	$0.0	$0.0	$0.0	($0.1)	($0.1)	($0.0)	$0.0	$0.0	0	3
Harrison Tap - Kammer	Line	500	$0.0	$0.0	$0.0	$0.0	($0.0)	($0.0)	($0.0)	($0.0)	($0.0)	0	2

Figure 2-14 Spot average fuel price comparison: Calendar years 2006 to 2007

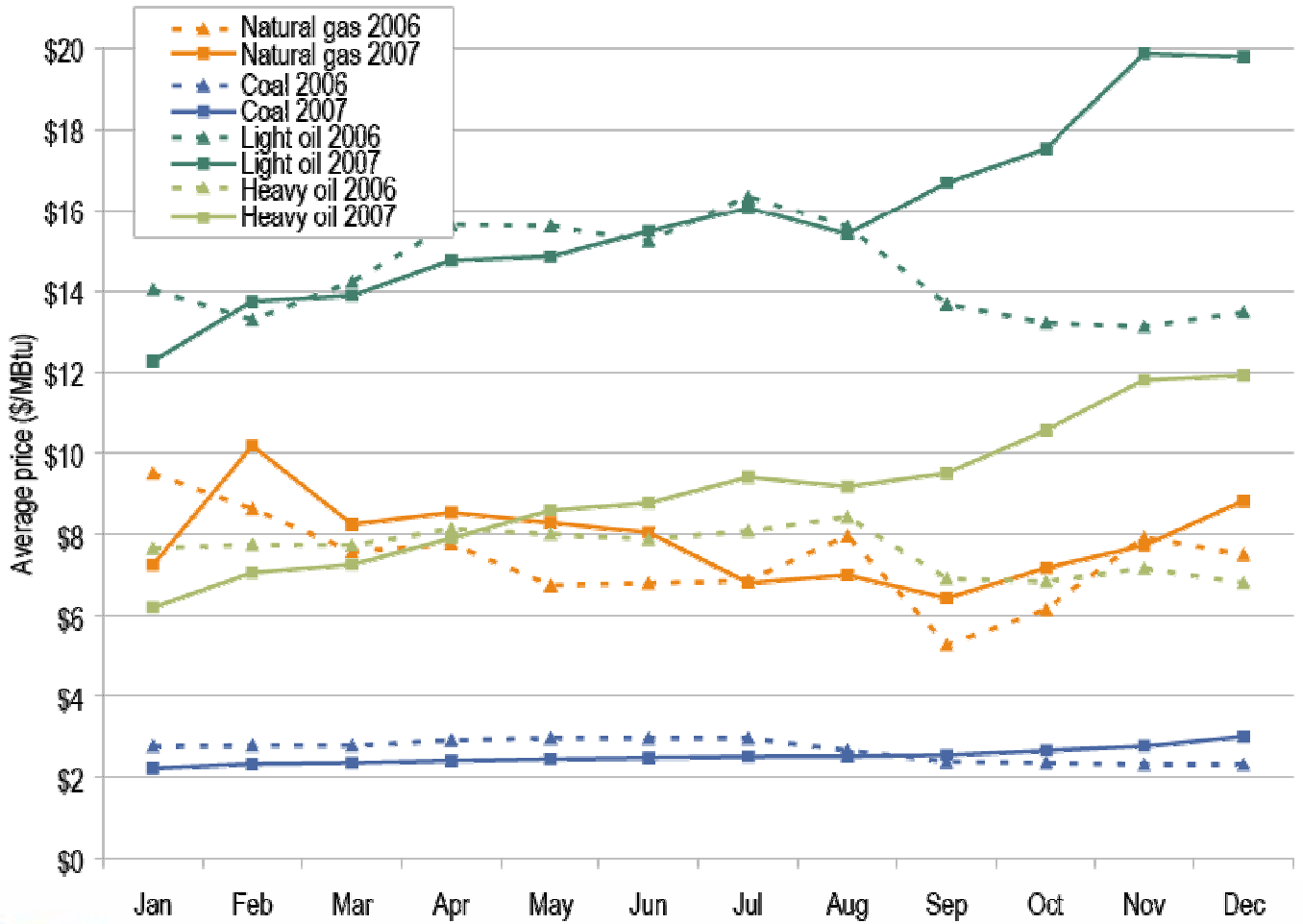


Figure 2-15 Spot average emission price comparison: Calendar years 2006 to 2007

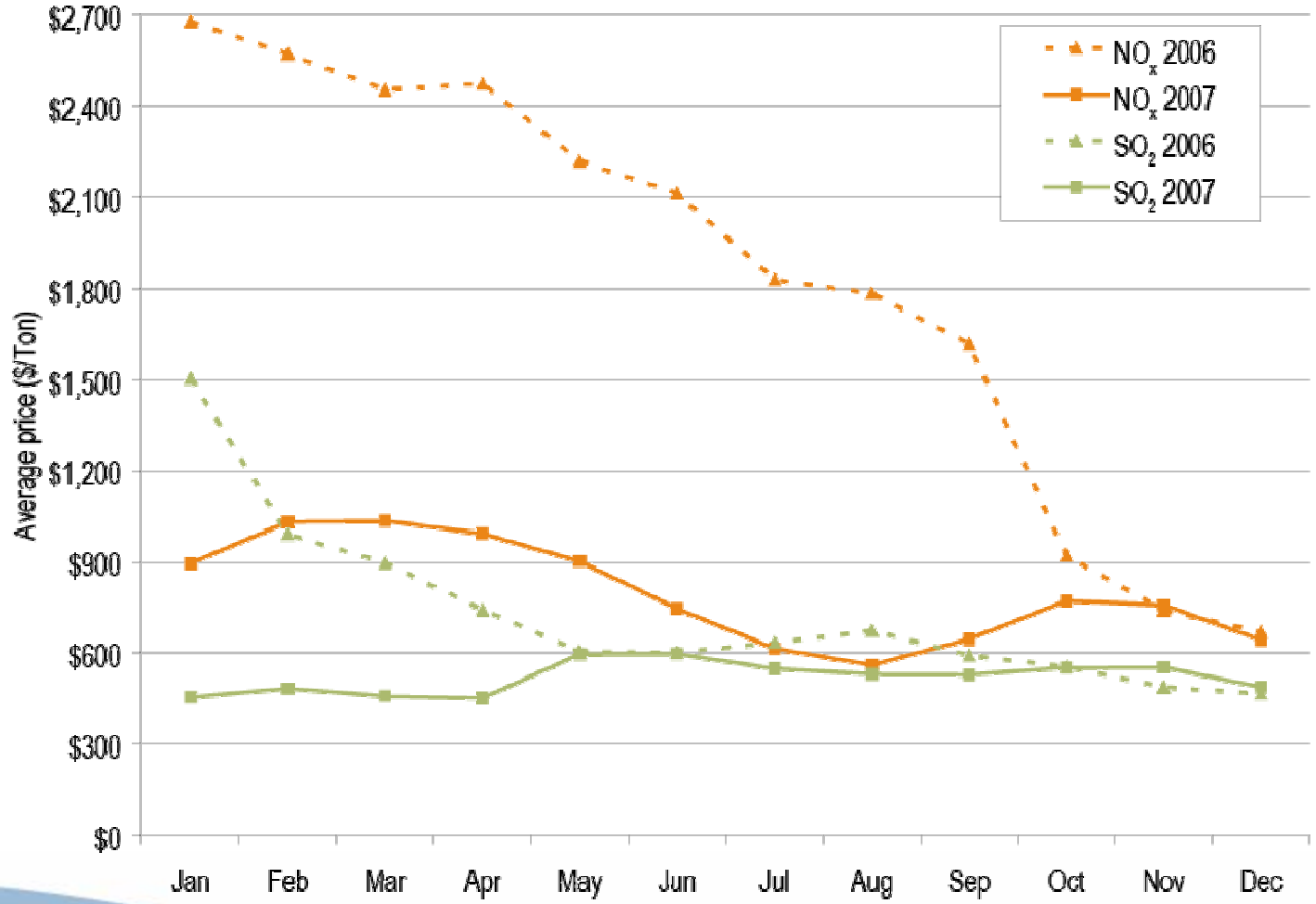


Table 2-55 PJM annual, fuel-cost-adjusted, load-weighted LMP (Dollars per MWh): Year-over-year method

	2006 Load-Weighted LMP	2007 Fuel-Cost-Adjusted, Load-Weighted LMP	Change
Average	$53.35	$63.00	18.1%
Median	$44.40	$54.55	22.9%
Standard deviation	$37.81	$35.36	(6.5%)

Table 2-32 Type of fuel used (By marginal units): Calendar years 2005 to 2007

Fuel Type	2005	2006	2007
Coal	69%	70%	70%
Misc	1%	1%	2%
Natural gas	23%	25%	24%
Nuclear	0%	0%	0%
Petroleum	8%	5%	5%

Table 2-59 Components of PJM annual, load-weighted, average LMP: Calendar year 2007

Element	Contribution to LMP	Percent
Coal	$21.57	35.0%
Gas	$17.50	28.4%
Oil	$3.97	6.4%
Wind	$0.01	0.0%
SO_2	$4.33	7.0%
VOM	$4.16	6.7%
Markup	$5.86	9.5%
Constrained off	$3.13	5.1%
NO_x	$0.74	1.2%
NA	$0.39	0.6%

Figure 2-4 Load-weighted unit markup index: Calendar years 2006 to 2007

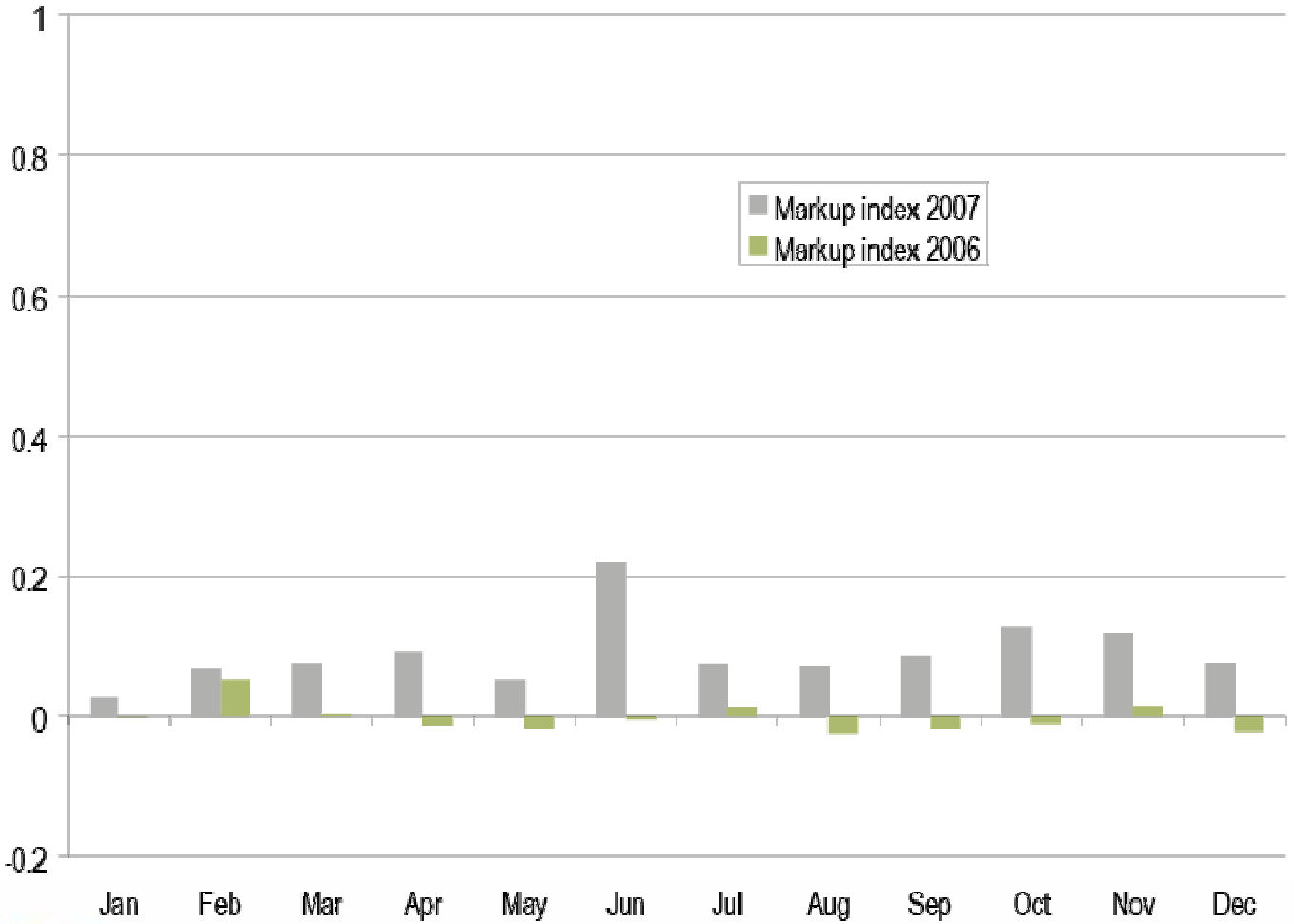


Table 2-38 Comparison of exempt and non-exempt markup component: Calendar year 2007

	Units Marginal	Markup Component
Non-exempt units	684	$4.52
Exempt units	44	$1.34

Table 2-42 Markup contribution of exempt and non-exempt units: Calendar year 2007

	Exempt Markup Component	Non-Exempt Markup Component	Total
High-load days	$0.25	$0.32	$0.57
Balance of year	$1.09	$4.20	$5.29
Total	$1.34	$4.52	$5.86

Table 2-8 Three pivotal supplier test details for regional constraints: Calendar year 2007

Constraint	Period	Average Constraint Relief (MW)	Average Effective Supply (MW)	Average Number Owners	Average Number Owners Passing	Average Number Owners Failing
5004/5005 Interface	Peak	109	424	21	18	3
	Off peak	96	356	17	14	3
AP South	Peak	96	306	17	10	7
	Off peak	91	301	17	10	7
Bedington - Black Oak	Peak	62	234	13	10	3
	Off peak	63	240	11	9	2
Kammer	Peak	87	377	20	17	3
	Off peak	72	307	16	12	3
West	Peak	158	758	20	19	1
	Off peak	146	716	18	17	1

Table 2-9 Three pivotal supplier results summary for the East and Central interfaces: Calendar year 2007

Constraint	Period	Total Tests Applied	Tests with One or More Passing Owners	Percent Tests with One or More Passing Owners	Tests with One or More Failing Owners	Percent Tests with One or More Failing Owners
Central	Peak	28	24	86%	5	18%
	Off peak	29	28	97%	4	14%
East	Peak	9	5	56%	7	78%
	Off peak	1	0	0%	1	100%

Table 2-28 Three pivotal supplier test details for constraints located in the AECO Control Zone: Calendar year 2007

Constraint	Period	Average Constraint Relief (MW)	Average Effective Supply (MW)	Average Number Owners	Average Number Owners Passing	Average Number Owners Failing
Beckett - Paulsboro	Peak	5	5	1	0	1
	Off peak	2	6	1	0	1
Churchtown	Peak	28	22	1	0	1
	Off peak	3	26	1	0	1

Table 2-5 Annual offer-capping statistics: Calendar years 2003 to 2007

	Real Time		Day Ahead	
	Unit Hours Capped	MW Capped	Unit Hours Capped	MW Capped
2003	1.1%	0.3%	0.4%	0.2%
2004	1.3%	0.4%	0.6%	0.2%
2005	1.8%	0.4%	0.2%	0.1%
2006	1.0%	0.2%	0.4%	0.1%
2007	1.1%	0.2%	0.2%	0.0%

Table 2-6 Offer-capped unit statistics: Calendar year 2007

Run Hours Offer-Capped, Percent Greater Than Or Equal To:	2007 Offer-Capped Hours					
	Hours ≥ 500	Hours ≥ 400 and < 500	Hours ≥ 300 and < 400	Hours ≥ 200 and < 300	Hours ≥ 100 and < 200	Hours ≥ 1 and < 100
90%	2	1	3	2	6	0
80% and < 90%	15	3	0	14	13	6
75% and < 80%	0	0	0	0	2	4
70% and < 75%	0	0	2	0	1	3
60% and < 70%	0	0	0	1	3	24
50% and < 60%	1	0	0	0	0	21
25% and < 50%	0	0	0	0	0	51
10% and < 25%	0	0	0	3	12	37

Table 2-82 Monthly average percentage of real-time self-supply load, bilateral-supply load and spot-supply load based on billing organizations: Calendar years 2006 to 2007

	2006			2007			Difference in Percentage Points		
	Bilateral Contract	Spot	Self-Supply	Bilateral Contract	Spot	Self-Supply	Bilateral Contract	Spot	Self-Supply
Jan	92.4%	6.5%	1.0%	94.9%	4.5%	0.6%	2.5%	(2.0%)	(0.4%)
Feb	92.5%	6.5%	1.0%	95.3%	4.5%	0.1%	2.8%	(2.0%)	(0.9%)
Mar	92.6%	6.4%	1.0%	95.3%	4.5%	0.2%	2.7%	(1.9%)	(0.8%)
Apr	92.7%	6.2%	1.0%	95.3%	4.5%	0.2%	2.6%	(1.7%)	(0.8%)
May	92.7%	6.2%	1.1%	95.6%	4.2%	0.2%	2.9%	(2.0%)	(0.9%)
Jun	93.2%	5.8%	1.0%	96.1%	3.7%	0.2%	2.9%	(2.1%)	(0.8%)
Jul	93.3%	5.8%	0.9%	96.7%	3.1%	0.2%	3.4%	(2.7%)	(0.7%)
Aug	93.2%	6.0%	0.8%	96.6%	3.3%	0.2%	3.4%	(2.7%)	(0.6%)
Sep	92.8%	6.1%	1.0%	96.5%	3.4%	0.1%	3.7%	(2.7%)	(0.9%)
Oct	92.2%	6.7%	1.1%	96.2%	3.6%	0.2%	4.0%	(3.1%)	(0.9%)
Nov	92.6%	6.3%	1.1%	96.0%	3.8%	0.2%	3.4%	(2.5%)	(0.9%)
Dec	92.6%	6.4%	1.0%	95.9%	3.9%	0.2%	3.3%	(2.5%)	(0.8%)
Annual	92.8%	6.2%	1.0%	95.9%	3.9%	0.2%	3.1%	(2.3%)	(0.8%)

Table 2-83 Monthly average percentage of real-time self-supply load, bilateral supply load and spot supply load based on parent companies: Calendar years 2006 to 2007

	2006			2007			Difference in Percentage Points		
	Bilateral Contract	Spot	Self-Supply	Bilateral Contract	Spot	Self-Supply	Bilateral Contract	Spot	Self-Supply
Jan	19.4%	5.4%	75.2%	22.0%	3.7%	74.4%	2.6%	(1.7%)	(0.8%)
Feb	19.4%	5.1%	75.5%	22.3%	3.8%	73.9%	2.9%	(1.3%)	(1.6%)
Mar	19.9%	5.0%	75.2%	21.6%	4.0%	74.4%	1.7%	(1.0%)	(0.8%)
Apr	20.1%	4.4%	75.5%	22.4%	4.7%	72.9%	2.3%	0.3%	(2.6%)
May	19.9%	4.6%	75.5%	22.4%	3.9%	73.7%	2.5%	(0.7%)	(1.8%)
Jun	20.6%	4.7%	74.8%	22.8%	3.1%	74.0%	2.2%	(1.6%)	(0.8%)
Jul	20.5%	6.3%	73.2%	23.9%	4.3%	71.8%	3.4%	(2.0%)	(1.4%)
Aug	20.6%	5.5%	73.9%	23.8%	3.6%	72.6%	3.2%	(1.9%)	(1.3%)
Sep	20.5%	5.1%	74.4%	23.1%	3.8%	73.2%	2.6%	(1.3%)	(1.2%)
Oct	20.9%	5.5%	73.6%	23.7%	5.5%	70.8%	2.8%	0.0%	(2.8%)
Nov	20.2%	5.4%	74.4%	22.8%	4.3%	73.0%	2.6%	(1.1%)	(1.4%)
Dec	19.6%	5.2%	75.2%	22.3%	2.8%	74.9%	2.7%	(2.4%)	(0.3%)
Annual	20.1%	5.2%	74.6%	22.8%	3.9%	73.3%	2.7%	(1.3%)	(1.3%)

Figure 3-7 High-load day hourly load and summer average hourly load: June 2007 through August 2007

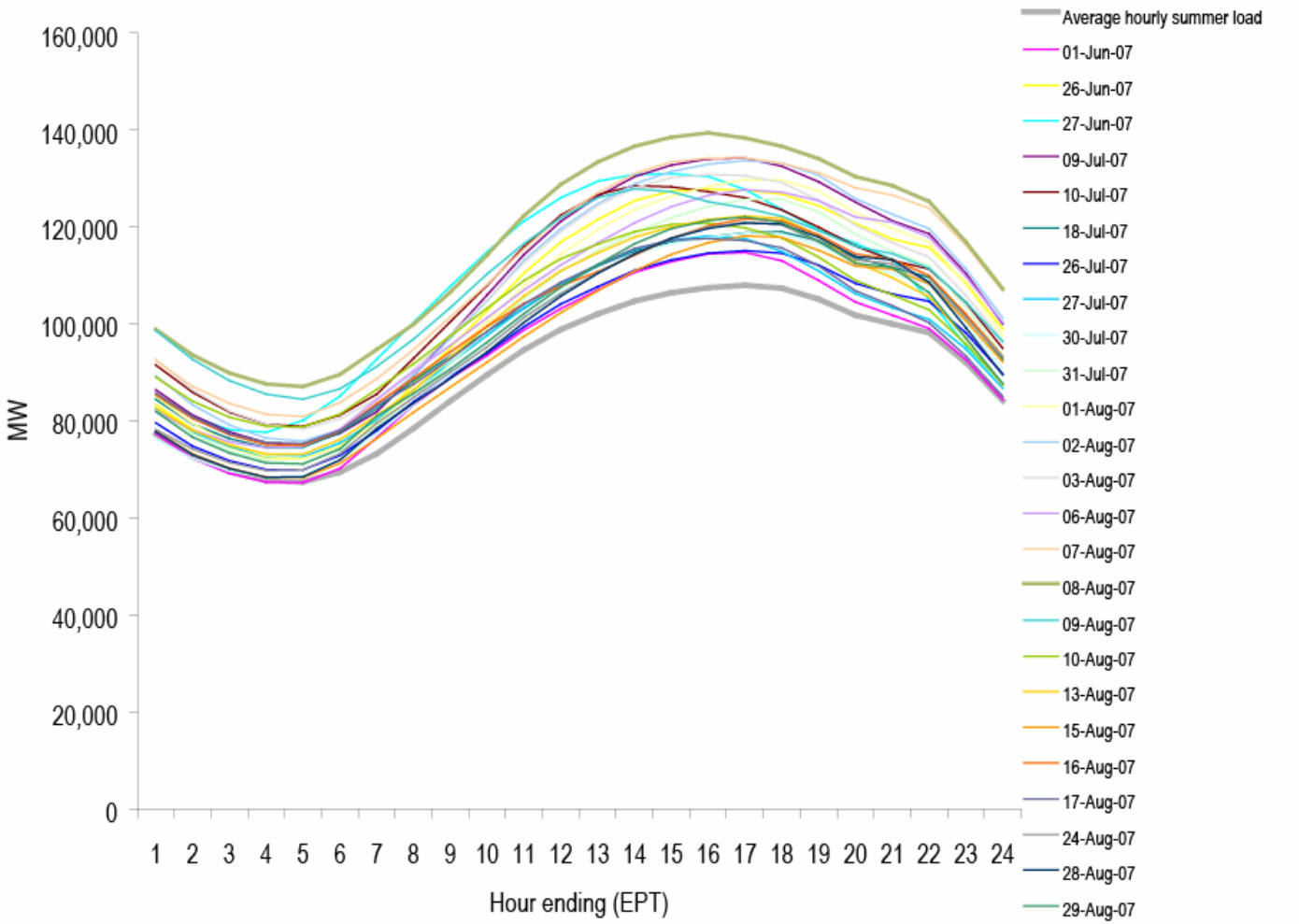


Figure 3-8 Net within-hour resources: June 1, 26, and 27, 2007

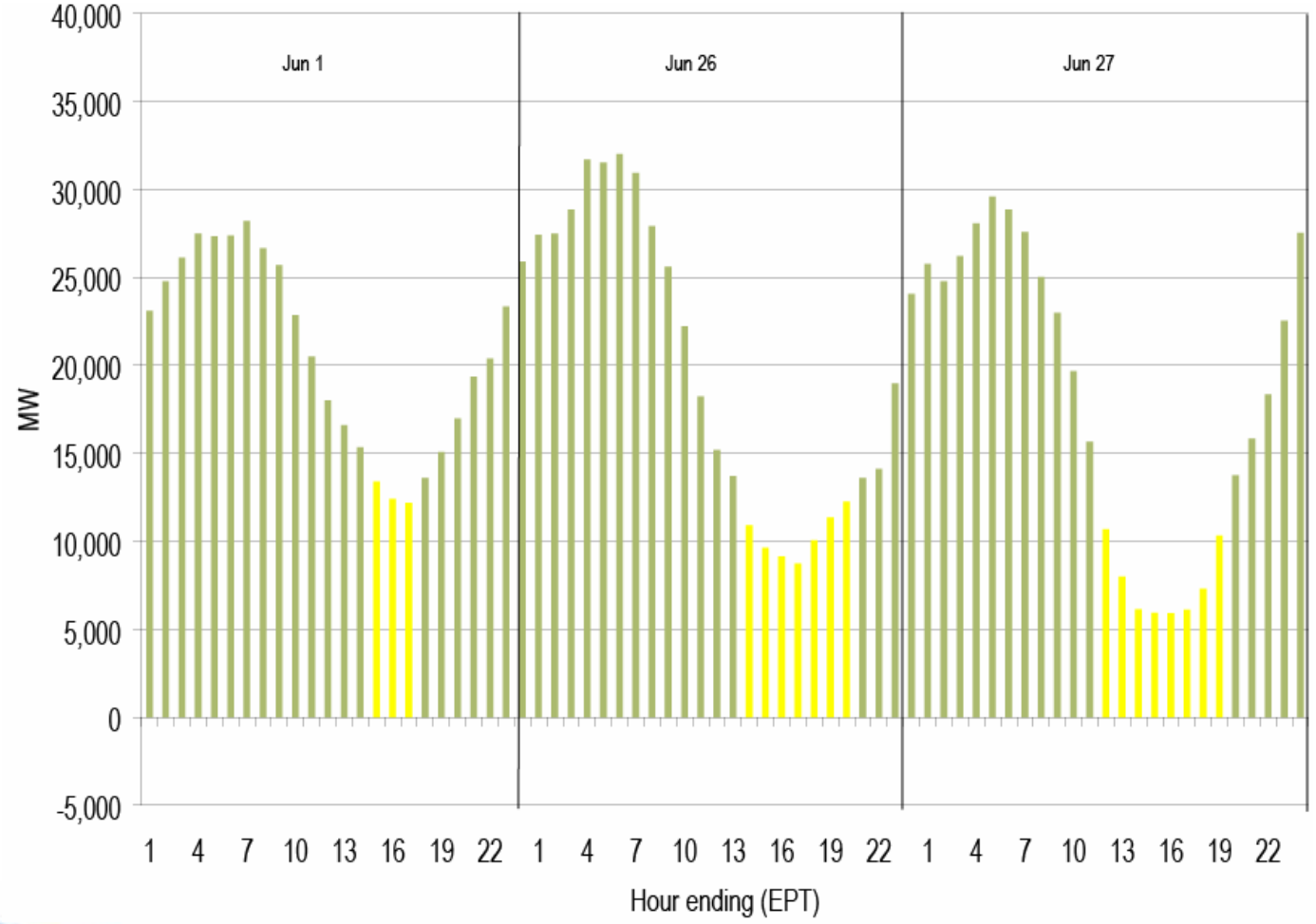


Figure 3-9 Net within-hour resources: July 9, 10, 18, 26, 27, 30, and 31, 2007

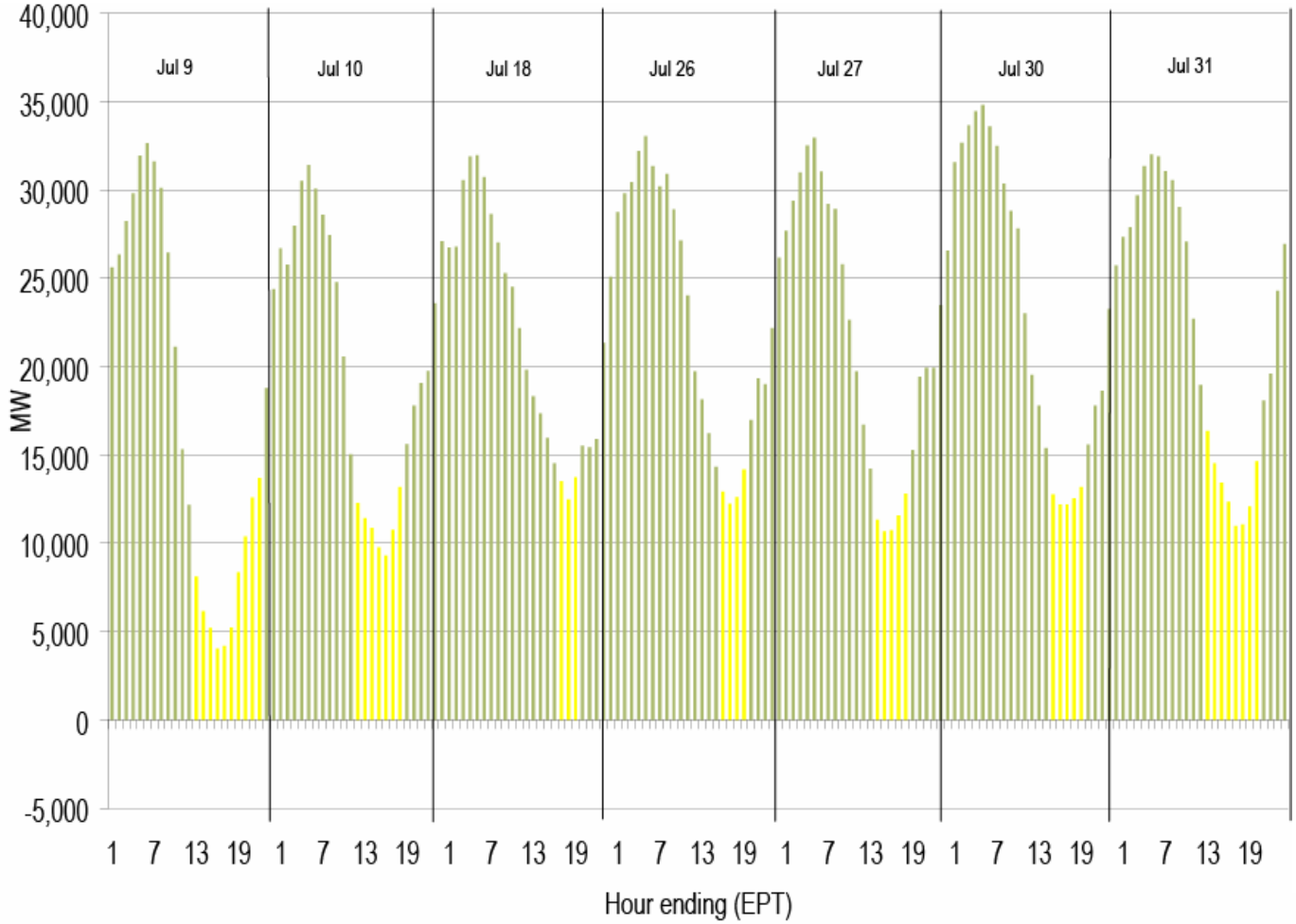


Figure 3-10 Net within-hour resources: August 1 to 3, August 6 to 10, August 13, August 15 to 17, August 24, 28, and 29, 2007

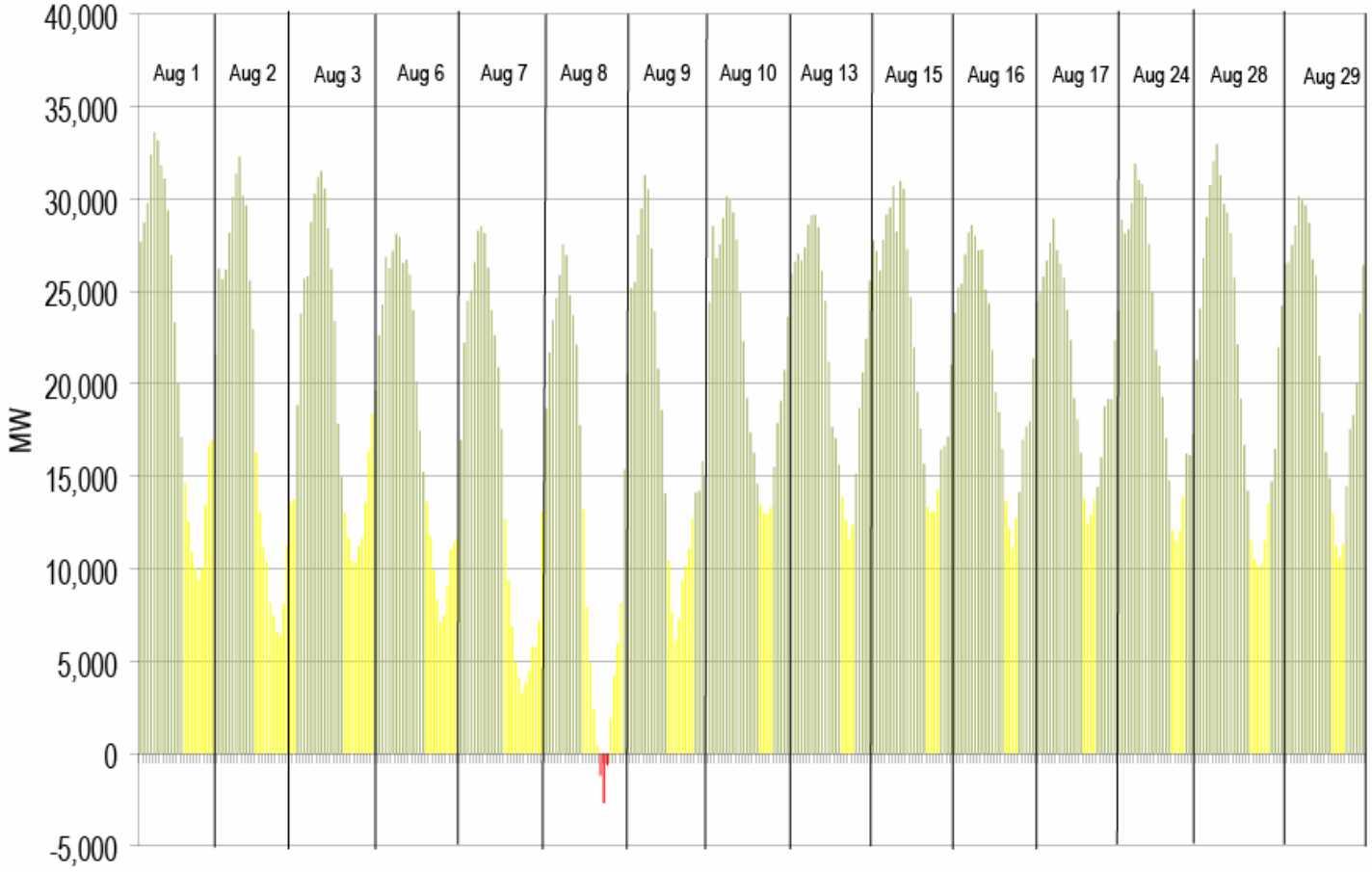


Figure 5-6 PJM Daily and Monthly/Multimonthly CCM performance: June 1999 through May 2007

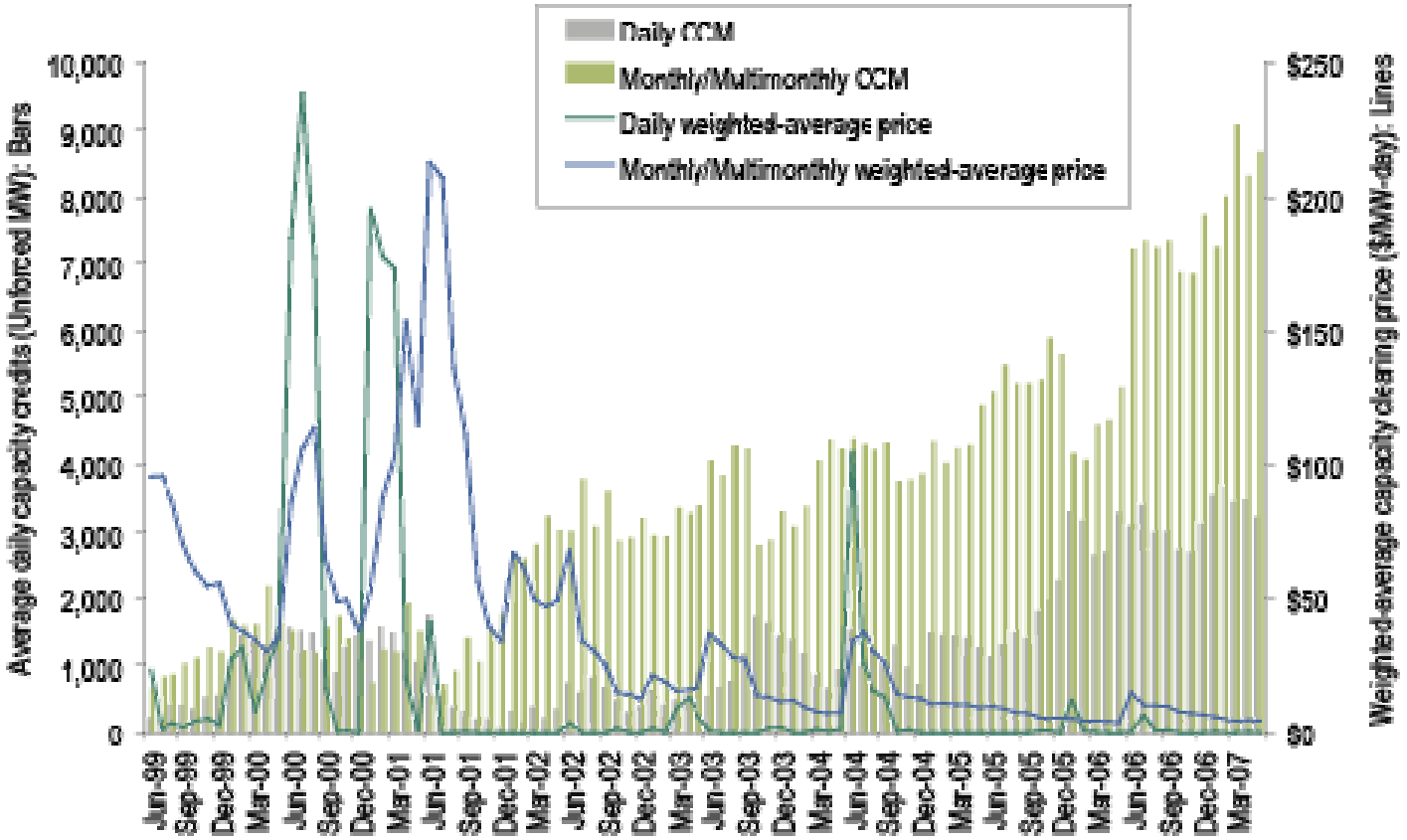


Figure 5-7 RTO market supply/demand curves: 2007/2008 RPM Auction

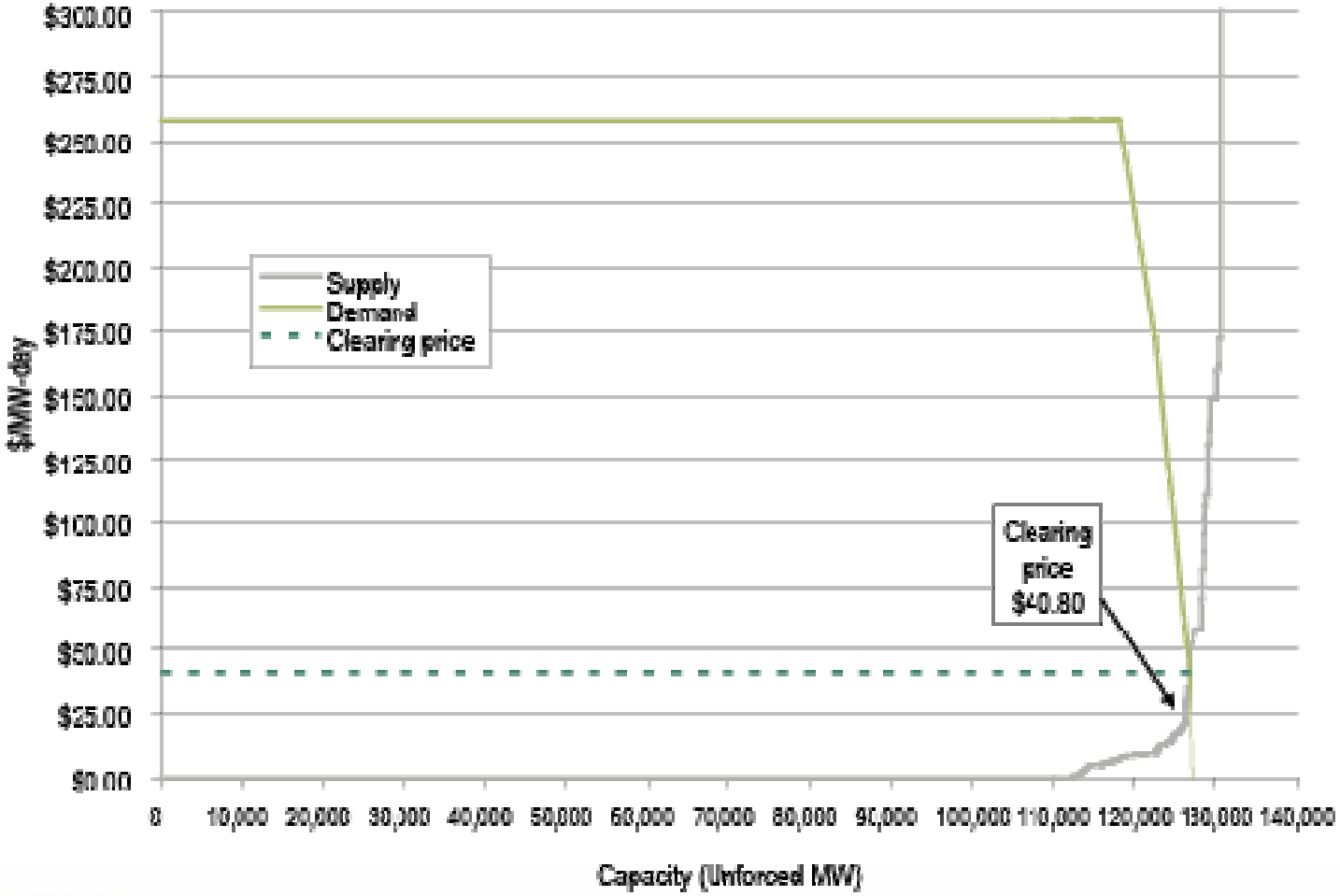


Figure 5-8 EMAAC incremental supply/demand curves: 2007/2008 RPM Auction

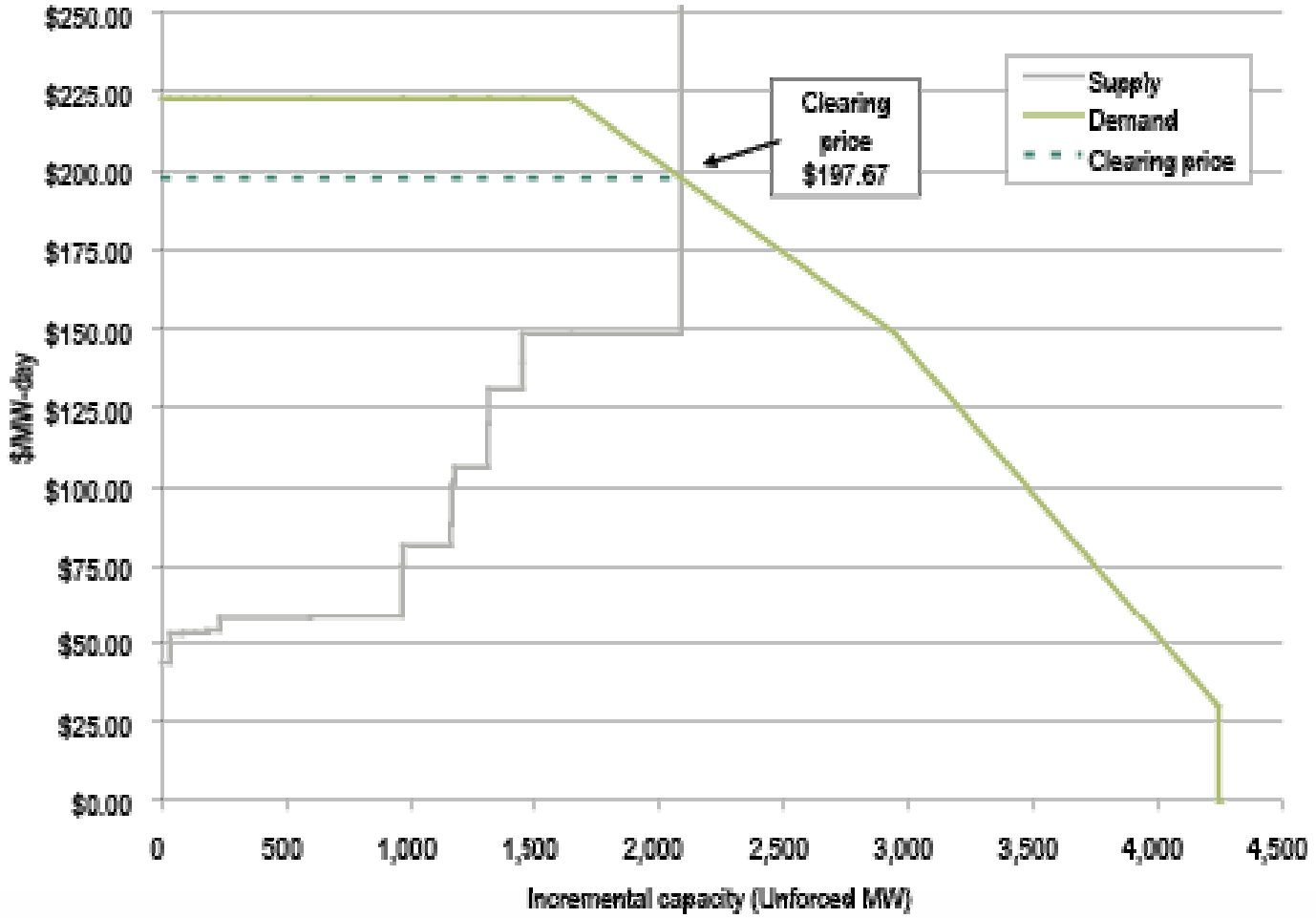


Figure 5-9 SWMAAC incremental supply/demand curves: 2007/2008 RPM Auction

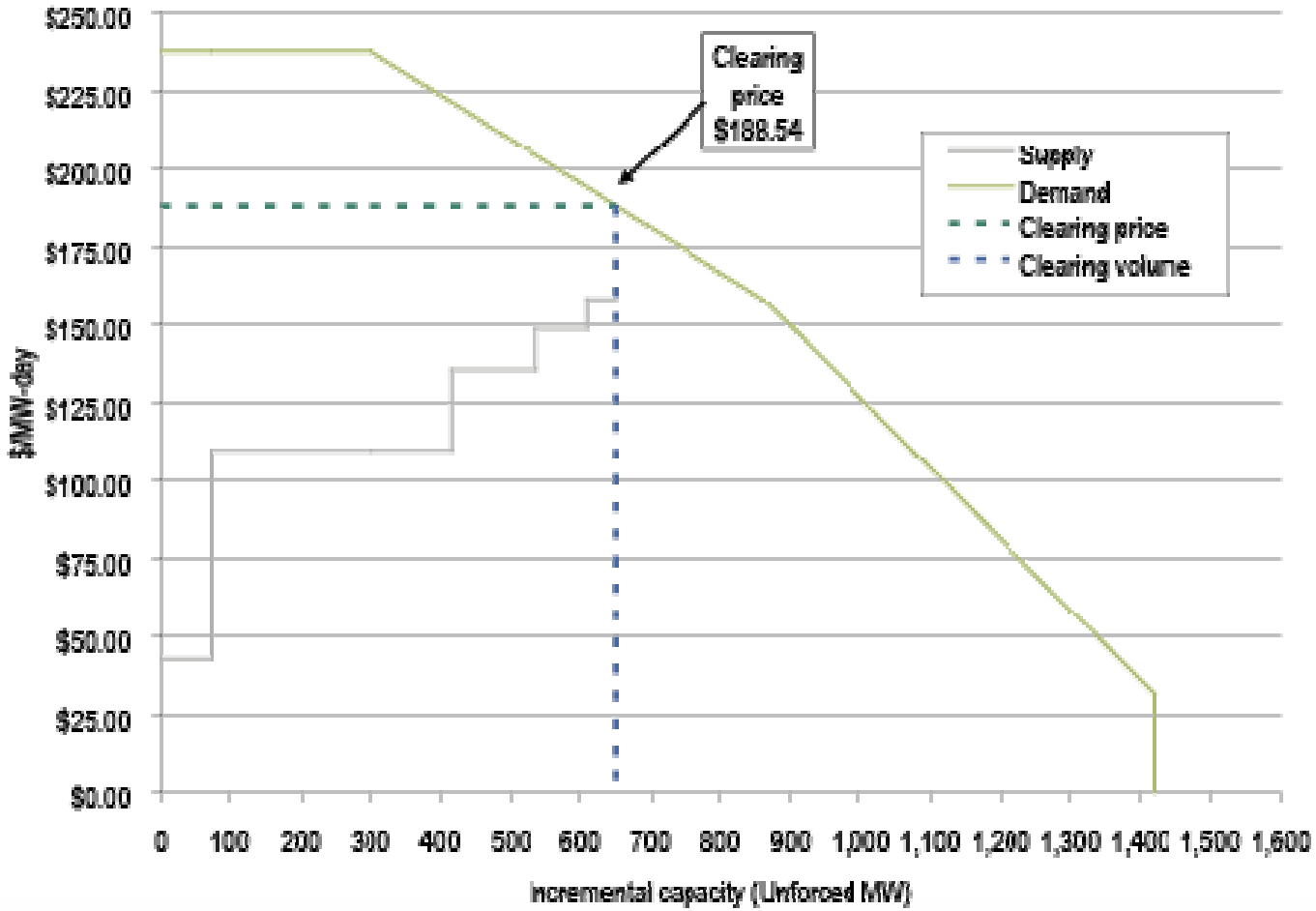


Table 5-19 Capacity prices: January 1, 2007, through May 31, 2010

	CCM Combined Markets Weighted-Average Price ($ per MW-day)	RPM Clearing Price ($ per MW-day)			
		RTO	EMAAC	SWMAAC	MAAC+APS
Jan	$3.83				
Feb	$3.17				
Mar	$3.02				
Apr	$3.06				
May	$3.03				
Jun 07 - May 08		$40.80	$197.67	$188.54	
Jun 08 - May 09		$111.92	$148.80	$210.11	
Jun 09 - May 10		$102.04		$237.33	$191.32
Average	$3.21				
2007 weighted-average CCM/RPM	$88.09				

Table 1-3 Total net revenue and 20-year, levelized fixed cost for new entry CT, CC and CP generators: Economic dispatch assumed

	CT		CC		CP	
	Economic Dispatch Net Revenue	20-Year Levelized Fixed Cost	Economic Dispatch Net Revenue	20-Year Levelized Fixed Cost	Economic Dispatch Net Revenue	20-Year Levelized Fixed Cost
1999	$74,537	$72,207	$100,700	$93,549	$118,022	$208,247
2000	$30,946	$72,207	$47,592	$93,549	$134,564	$208,247
2001	$63,462	$72,207	$86,670	$93,549	$129,271	$208,247
2002	$28,260	$72,207	$52,272	$93,549	$112,131	$208,247
2003	$10,566	$72,207	$35,591	$93,549	$169,509	$208,247
2004	$8,543	$72,207	$35,785	$93,549	$133,124	$208,247
2005	$10,437	$72,207	$40,817	$93,549	$228,430	$208,247
2006	$14,948	$80,315	$49,529	$99,230	$182,461	$267,792
2007	$48,530	$90,656	$100,809	$143,600	$277,284	$359,750
Avg.	$32,248	$75,158	$61,085	$99,741	$164,977	$231,697

Table 3-23 CT 20-year levelized fixed cost vs. real-time economic dispatch net revenue (Dollars per installed MW-year): Calendar years 1999 to 2007

	20-Year Levelized Fixed Cost	Economic Dispatch Net Revenue	Economic Dispatch Percent
1999	$72,207	$74,537	103%
2000	$72,207	$30,946	43%
2001	$72,207	$63,462	88%
2002	$72,207	$28,260	39%
2003	$72,207	$10,566	15%
2004	$72,207	$8,543	12%
2005	$72,207	$10,437	14%
2006	$80,315	$14,948	19%
2007	$90,656	$48,530	54%
Average	$75,158	$32,248	43%

Table 3-24 CT 20-year levelized fixed cost vs. real-time economic dispatch, zonal net revenue (Dollars per installed MW-year): Calendar years 1999 to 2007

	2007			9-Year Average (1999-2007)		
	Net Revenue	20-Year Levelized Cost	Percent Recovered	Net Revenue	20-Year Levelized Cost	Percent Recovered
AECO	$81,801	$90,656	90%	$41,774	$75,158	56%
AEP	$16,230	$90,656	18%	$9,919	$75,158	13%
AP	$27,996	$90,656	31%	$14,283	$75,158	19%
BGE	$94,710	$90,656	104%	$41,434	$75,158	55%
ComEd	$19,542	$90,656	22%	$12,742	$75,158	17%
DAY	$16,047	$90,656	18%	$9,810	$75,158	13%
Dominion	$53,923	$90,656	59%	$42,353	$75,158	56%
DPL	$73,967	$90,656	82%	$40,953	$75,158	54%
DLCO	$20,076	$90,656	22%	$11,465	$75,158	15%
JCPL	$77,652	$90,656	86%	$39,683	$75,158	53%
Met-Ed	$46,663	$90,656	51%	$34,263	$75,158	46%
PECO	$68,376	$90,656	75%	$37,729	$75,158	50%
PENELEC	$21,228	$90,656	23%	$26,506	$75,158	35%
Pepco	$96,913	$90,656	107%	$42,534	$75,158	57%
PPL	$35,743	$90,656	39%	$31,062	$75,158	41%
PSEG	$72,221	$90,656	80%	$39,064	$75,158	52%
RECO	$72,112	$90,656	80%	$26,065	$75,158	35%
PJM	$48,530	$90,656	54%	$32,248	$75,158	43%

Table 3-25 CC 20-year levelized fixed cost vs. real-time economic dispatch net revenue (Dollars per installed MW-year): Calendar years 1999 to 2007

	20-Year Levelized Fixed Cost	Economic Dispatch Net Revenue	Economic Dispatch Percent
1999	$93,549	$100,700	108%
2000	$93,549	$47,592	51%
2001	$93,549	$86,670	93%
2002	$93,549	$52,272	56%
2003	$93,549	$35,591	38%
2004	$93,549	$35,785	38%
2005	$93,549	$40,817	44%
2006	$99,230	$49,529	50%
2007	$143,600	$100,809	70%
Average	$99,741	$61,085	61%

Table 3-26 CC 20-year levelized fixed cost vs. real-time economic dispatch, zonal net revenue (Dollars per installed MW-year): Calendar years 1999 to 2007

	2007			9-Year Average (1999-2007)		
	Net Revenue	20-Year Levelized Cost	Percent Recovered	Net Revenue	20-Year Levelized Cost	Percent Recovered
AECO	$151,617	$143,600	106%	$81,818	$99,741	82%
AEP	$41,958	$143,600	29%	$28,744	$99,741	29%
AP	$77,463	$143,600	54%	$44,664	$99,741	45%
BGE	$173,918	$143,600	121%	$77,719	$99,741	78%
ComEd	$54,257	$143,600	38%	$39,509	$99,741	40%
DAY	$41,992	$143,600	29%	$27,872	$99,741	28%
Dominion	$122,962	$143,600	86%	$103,033	$99,741	103%
DPL	$143,274	$143,600	100%	$77,882	$99,741	78%
DLCO	$44,520	$143,600	31%	$28,081	$99,741	28%
JCPL	$152,934	$143,600	107%	$76,374	$99,741	77%
Met-Ed	$114,824	$143,600	80%	$67,047	$99,741	67%
PECO	$134,069	$143,600	93%	$71,535	$99,741	72%
PENELEC	$63,257	$143,600	44%	$51,661	$99,741	52%
Pepco	$175,698	$143,600	122%	$79,313	$99,741	80%
PPL	$97,918	$143,600	68%	$61,454	$99,741	62%
PSEG	$149,965	$143,600	104%	$80,014	$99,741	80%
RECO	$147,431	$143,600	103%	$75,609	$99,741	76%
PJM	$100,809	$143,600	70%	$61,085	$99,741	61%

Table 3-27 CP 20-year levelized fixed cost vs. real-time economic dispatch net revenue (Dollars per installed MW-year): Calendar years 1999 to 2007

	20-Year Levelized Fixed Cost	Economic Dispatch Net Revenue	Economic Dispatch Percent
1999	$208,247	$118,022	57%
2000	$208,247	$134,564	65%
2001	$208,247	$129,271	62%
2002	$208,247	$112,131	54%
2003	$208,247	$169,509	81%
2004	$208,247	$133,124	64%
2005	$208,247	$228,430	110%
2006	$267,792	$182,461	68%
2007	$359,750	$277,284	77%
Average	$231,697	$164,977	71%

Table 3-28 CP 20-year levelized fixed cost vs. real-time economic dispatch, zonal net revenue (Dollars per installed MW-year): Calendar years 1999 to 2007

	2007			9-Year Average (1999-2007)		
	Net Revenue	20-Year Levelized Cost	Percent Recovered	Net Revenue	20-Year Levelized Cost	Percent Recovered
AECO	$345,738	$359,750	96%	$195,945	$231,697	85%
AEP	$170,532	$359,750	47%	$149,431	$231,697	64%
AP	$255,474	$359,750	71%	$188,443	$231,697	81%
BGE	$380,425	$359,750	106%	$192,225	$231,697	83%
ComEd	$164,740	$359,750	46%	$144,104	$231,697	62%
DAY	$169,420	$359,750	47%	$142,894	$231,697	62%
Dominion	$328,069	$359,750	91%	$284,448	$231,697	123%
DPL	$339,158	$359,750	94%	$193,279	$231,697	83%
DLCO	$157,544	$359,750	44%	$130,780	$231,697	56%
JCPL	$352,520	$359,750	98%	$187,946	$231,697	81%
Met-Ed	$311,759	$359,750	87%	$177,291	$231,697	77%
PECO	$326,717	$359,750	91%	$183,527	$231,697	79%
PENELEC	$234,789	$359,750	65%	$155,139	$231,697	67%
Pepco	$384,940	$359,750	107%	$195,171	$231,697	84%
PPL	$291,701	$359,750	81%	$169,900	$231,697	73%
PSEG	$353,386	$359,750	98%	$198,906	$231,697	86%
RECO	$347,309	$359,750	97%	$244,079	$231,697	105%
PJM	$277,284	$359,750	77%	$164,977	$231,697	71%

Table 3-11 Real-time zonal combined net revenue from all markets for a CT under peak-hour, economic dispatch (Dollars per installed MW-year): Calendar years 1999 to 2007

	1999	2000	2001	2002	2003	2004	2005	2006	2007	Average
AECO	$75,203	$34,525	$74,033	$33,213	$13,077	$14,389	$22,605	$27,117	$81,801	$41,774
AEP	NA	NA	NA	NA	NA	NA	$4,936	$8,590	$16,230	$9,919
AP	NA	NA	NA	NA	$10,800	$8,487	$9,485	$14,647	$27,996	$14,283
BGE	$73,695	$29,641	$56,256	$33,813	$11,998	$10,522	$26,589	$35,678	$94,710	$41,434
ComEd	NA	NA	NA	NA	NA	NA	$7,602	$11,083	$19,542	$12,742
DAY	NA	NA	NA	NA	NA	NA	$5,089	$8,294	$16,047	$9,810
Dominion	NA	NA	NA	NA	NA	NA	NA	$30,782	$53,923	$42,353
DPL	$76,550	$35,160	$83,041	$36,193	$13,389	$10,505	$18,554	$21,217	$73,967	$40,953
DLCO	NA	NA	NA	NA	NA	NA	$4,960	$9,360	$20,076	$11,465
JCPL	$74,871	$32,251	$70,681	$27,697	$10,784	$22,096	$21,229	$19,884	$77,652	$39,683
Met-Ed	$73,923	$30,516	$63,905	$31,136	$11,406	$9,894	$19,469	$21,455	$46,663	$34,263
PECO	$75,434	$34,208	$71,197	$28,525	$12,638	$9,224	$20,409	$19,552	$68,376	$37,729
PENELEC	$73,921	$29,808	$51,345	$25,881	$9,533	$8,887	$7,413	$10,537	$21,228	$26,506
Pepco	$73,480	$29,470	$51,316	$35,788	$12,413	$11,539	$30,135	$41,753	$96,913	$42,534
PPL	$74,229	$30,201	$59,956	$26,353	$10,068	$8,744	$16,699	$17,564	$35,743	$31,062
PSEG	$75,196	$32,618	$70,026	$27,263	$12,357	$20,786	$21,177	$19,933	$72,221	$39,064
RECO	NA	NA	NA	NA	$12,016	$11,373	$17,266	$17,558	$72,112	$26,065
PJM	$74,537	$30,946	$63,462	$28,260	$10,566	$8,543	$10,437	$14,948	$48,530	$32,248

Table 3-13 Real-time zonal combined net revenue from all markets for a CC under peak-hour, economic dispatch (Dollars per installed MW-year): Calendar years 1999 to 2007

	1999	2000	2001	2002	2003	2004	2005	2006	2007	Average
AECO	$101,084	$52,152	$100,786	$59,850	$44,094	$61,021	$82,432	$83,326	$151,617	$81,818
AEP	NA	NA	NA	NA	NA	NA	$17,742	$26,533	$41,958	$28,744
AP	NA	NA	NA	NA	$29,766	$28,560	$40,957	$46,572	$77,463	$44,664
BGE	$98,827	$44,088	$75,039	$58,688	$37,601	$41,935	$80,891	$88,482	$173,918	$77,719
ComEd	NA	NA	NA	NA	NA	NA	$28,702	$35,568	$54,257	$39,509
DAY	NA	NA	NA	NA	NA	NA	$17,081	$24,543	$41,992	$27,872
Dominion	NA	NA	NA	NA	NA	NA	NA	$83,104	$122,962	$103,033
DPL	$103,903	$56,855	$111,972	$62,811	$42,349	$47,487	$66,376	$65,909	$143,274	$77,882
DLCO	NA	NA	NA	NA	NA	NA	$15,990	$23,734	$44,520	$28,081
JCPL	$100,871	$48,623	$93,639	$50,626	$35,391	$71,596	$72,478	$61,205	$152,934	$76,374
Met-Ed	$99,682	$45,793	$85,803	$55,117	$35,810	$39,675	$62,560	$64,155	$114,824	$67,047
PECO	$101,410	$50,808	$93,990	$52,036	$39,925	$42,967	$66,421	$62,187	$134,069	$71,535
PENELEC	$99,875	$45,809	$71,937	$55,718	$31,365	$29,856	$31,820	$35,309	$63,257	$51,661
Pepco	$98,497	$43,663	$69,416	$60,001	$38,350	$44,598	$87,636	$95,957	$175,698	$79,313
PPL	$100,081	$44,920	$80,509	$48,272	$33,714	$33,084	$56,895	$57,695	$97,918	$61,454
PSEG	$102,731	$51,448	$94,932	$51,416	$42,985	$71,972	$83,390	$71,284	$149,965	$80,014
RECO	NA	NA	NA	NA	$42,115	$52,870	$69,280	$66,348	$147,431	$75,609
PJM	$100,700	$47,592	$86,670	$52,272	$35,591	$35,785	$40,817	$49,529	$100,809	$61,085

Table 3-15 Real-time zonal combined net revenue from all markets for a CP under peak-hour, economic dispatch (Dollars per installed MW-year): Calendar years 1999 to 2007

	1999	2000	2001	2002	2003	2004	2005	2006	2007	Average
AECO	$118,254	$137,752	$143,257	$121,784	$179,116	$176,826	$306,995	$233,787	$345,738	$195,945
AEP	NA	NA	NA	NA	NA	NA	$150,175	$127,587	$170,532	$149,431
AP	NA	NA	NA	NA	$152,457	$123,619	$231,962	$178,701	$255,474	$188,443
BGE	$115,925	$124,106	$116,306	$119,714	$173,476	$148,096	$303,218	$248,763	$380,425	$192,225
ComEd	NA	NA	NA	NA	NA	NA	$144,924	$122,647	$164,740	$144,104
DAY	NA	NA	NA	NA	NA	NA	$139,572	$119,691	$169,420	$142,894
Dominion	NA	NA	NA	NA	NA	NA	NA	$240,827	$328,069	$284,448
DPL	$121,871	$149,239	$164,219	$125,338	$179,144	$160,036	$287,242	$213,261	$339,158	$193,279
DLCO	NA	NA	NA	NA	NA	NA	$126,378	$108,417	$157,544	$130,780
JCPL	$117,957	$129,968	$133,853	$110,646	$165,730	$186,316	$290,747	$203,776	$352,520	$187,946
Met-Ed	$116,776	$126,375	$126,885	$115,061	$167,367	$144,385	$276,295	$210,719	$311,759	$177,291
PECO	$118,636	$136,379	$136,046	$112,096	$174,147	$153,658	$285,681	$208,381	$326,717	$183,527
PENELEC	$117,603	$133,724	$118,787	$123,416	$164,692	$123,984	$217,133	$162,124	$234,789	$155,139
Pepco	$115,585	$123,766	$110,089	$121,020	$175,224	$151,666	$314,137	$260,110	$384,940	$195,171
PPL	$117,165	$125,227	$121,146	$105,991	$162,900	$136,364	$267,023	$201,584	$291,701	$169,900
PSEG	$120,910	$145,675	$142,694	$112,409	$184,332	$189,716	$316,131	$224,904	$353,386	$198,906
RECO	NA	NA	NA	NA	$186,859	$168,414	$298,795	$219,016	$347,309	$244,079
PJM	$118,022	$134,564	$129,271	$112,131	$169,509	$133,124	$228,430	$182,461	$277,284	$164,977

Figure 3-15 Monthly average balancing operating reserve rate: Calendar years 2003 to 2007

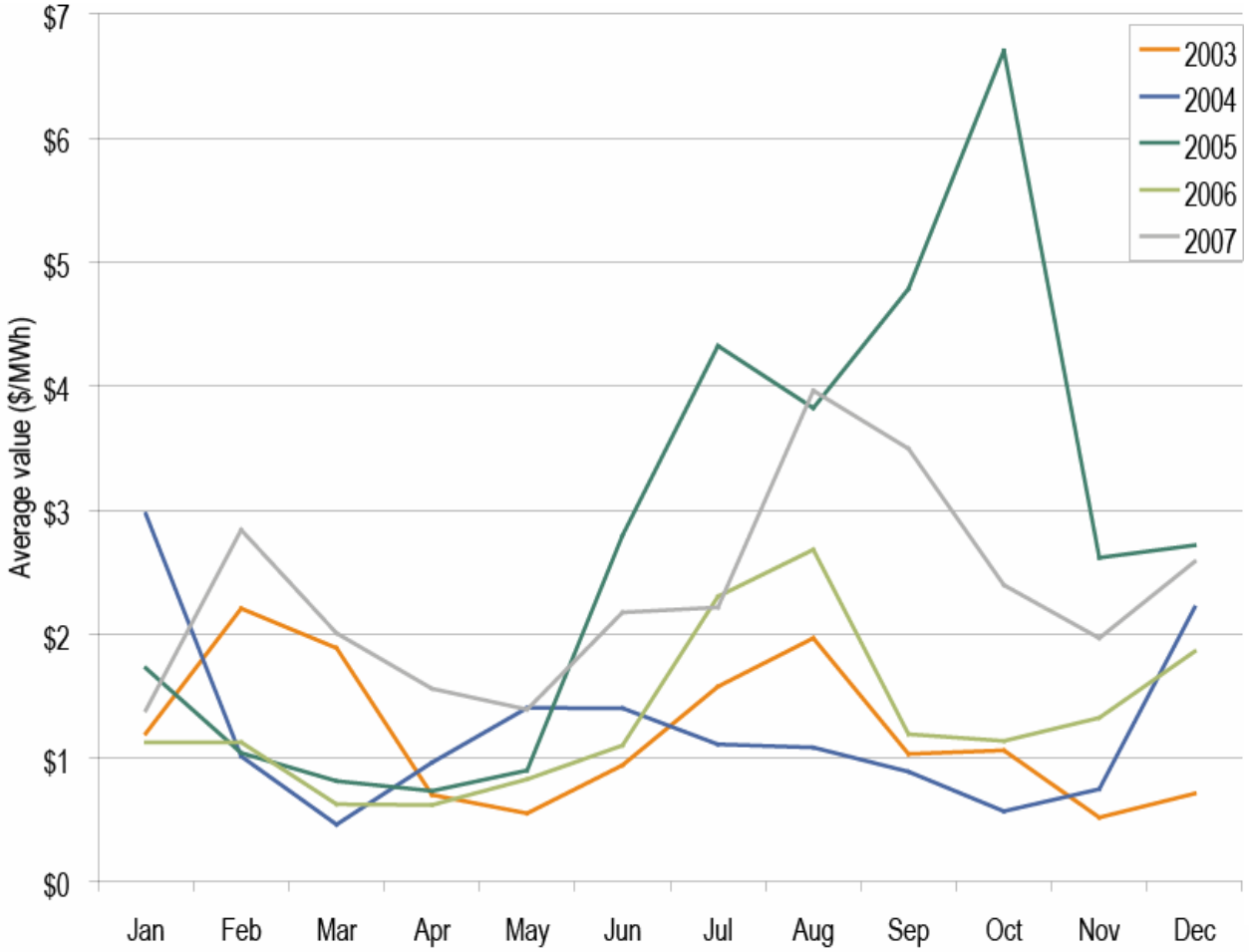


Table 3-48 Total day-ahead and balancing operating reserve charges: Calendar years 1999 to 2007

	Total Operating Reserve Credits	Annual Credit Change	Operating Reserves as a Percent of Total PJM Billing	Day-Ahead $/MWh	Day-Ahead Change	Balancing $/MWh	Balancing Change
1999	$133,897,428	NA	7.5%	NA	NA	NA	NA
2000	$216,985,147	62.05%	9.6%	$0.341	NA	$0.535	NA
2001	$290,867,269	34.05%	8.7%	$0.275	(19.5%)	$1.070	100.2%
2002	$237,102,574	(18.48%)	5.0%	$0.164	(40.4%)	$0.787	(26.4%)
2003	$289,510,257	22.10%	4.2%	$0.226	38.2%	$1.197	52.0%
2004	$414,891,790	43.31%	4.8%	$0.230	1.7%	$1.236	3.3%
2005	$682,781,889	64.57%	3.0%	$0.076	(66.9%)	$2.758	123.1%
2006	$322,315,152	(52.79%)	1.5%	$0.078	2.6%	$1.331	(51.7%)
2007	$459,124,502	42.45%	1.5%	$0.057	(27.0%)	$2.331	75.1%

Figure 4-3 PJM scheduled import and export transaction volume history: Calendar years 1999 to 2007

Figure 4-14 Neptune hourly average flow: July to December 2007

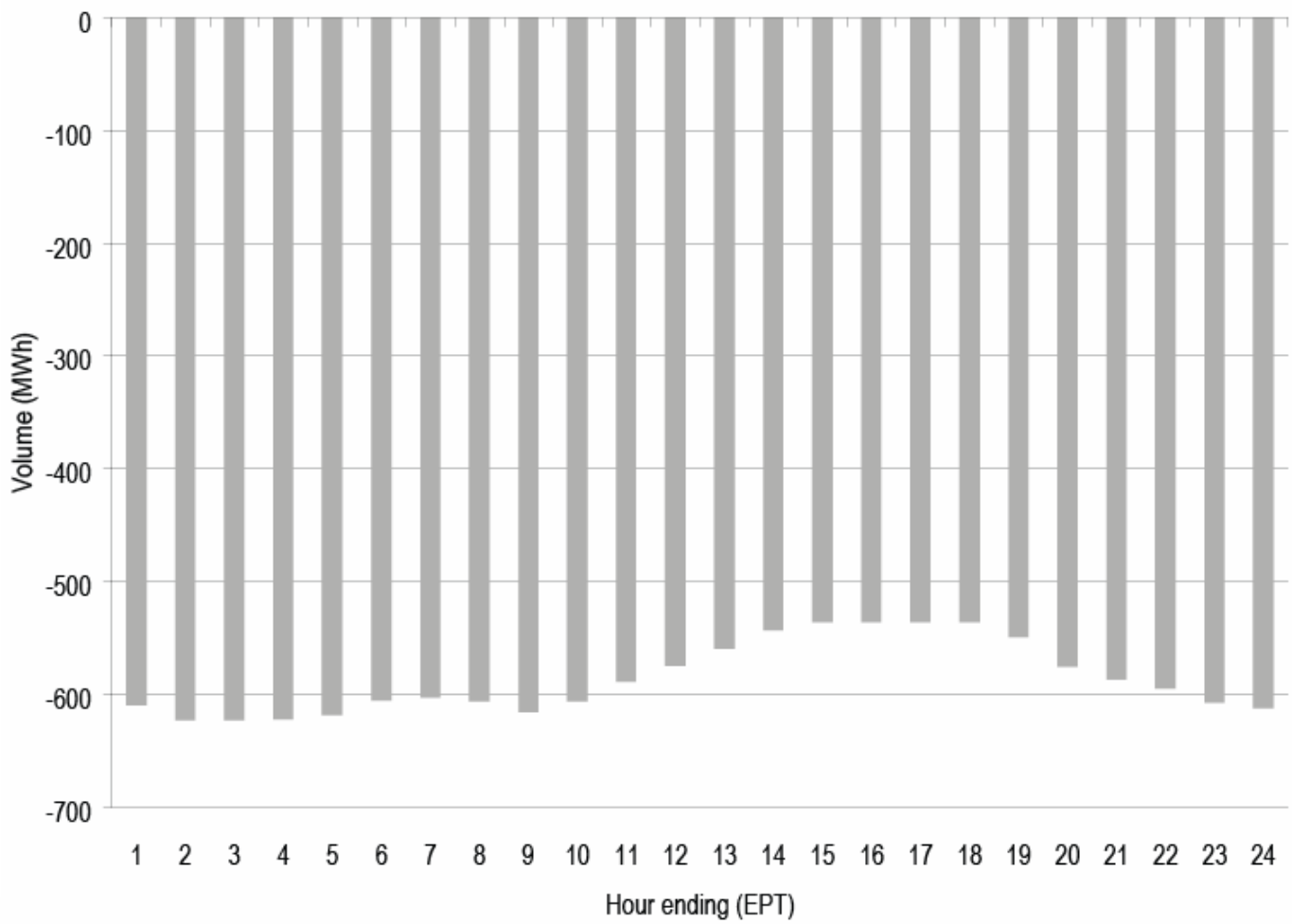


Figure 4-15 PJM/MECS Interface average actual minus scheduled volume: Calendar year 2007

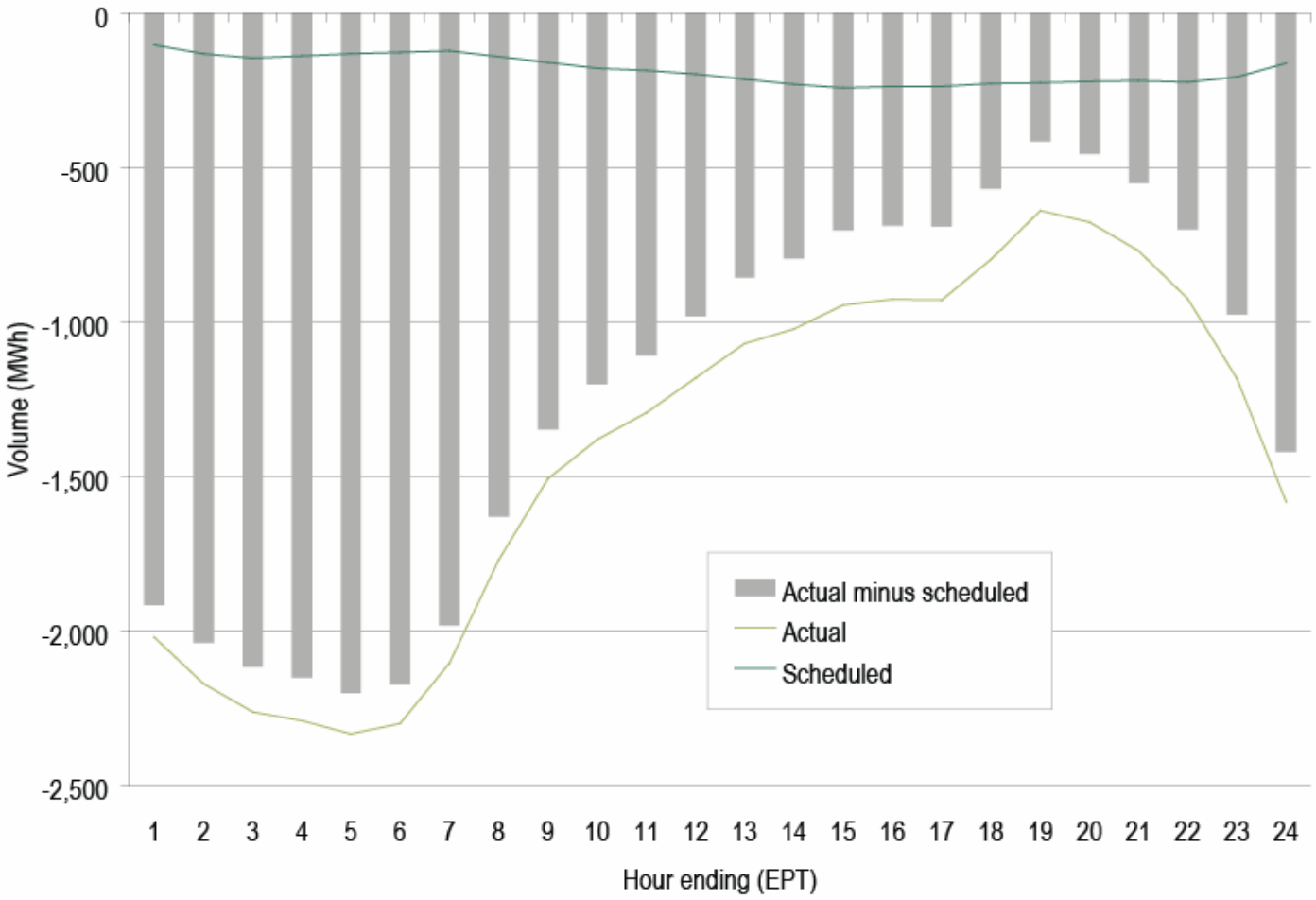


Figure 4-17 PJM/TVA average flows: Calendar year 2007

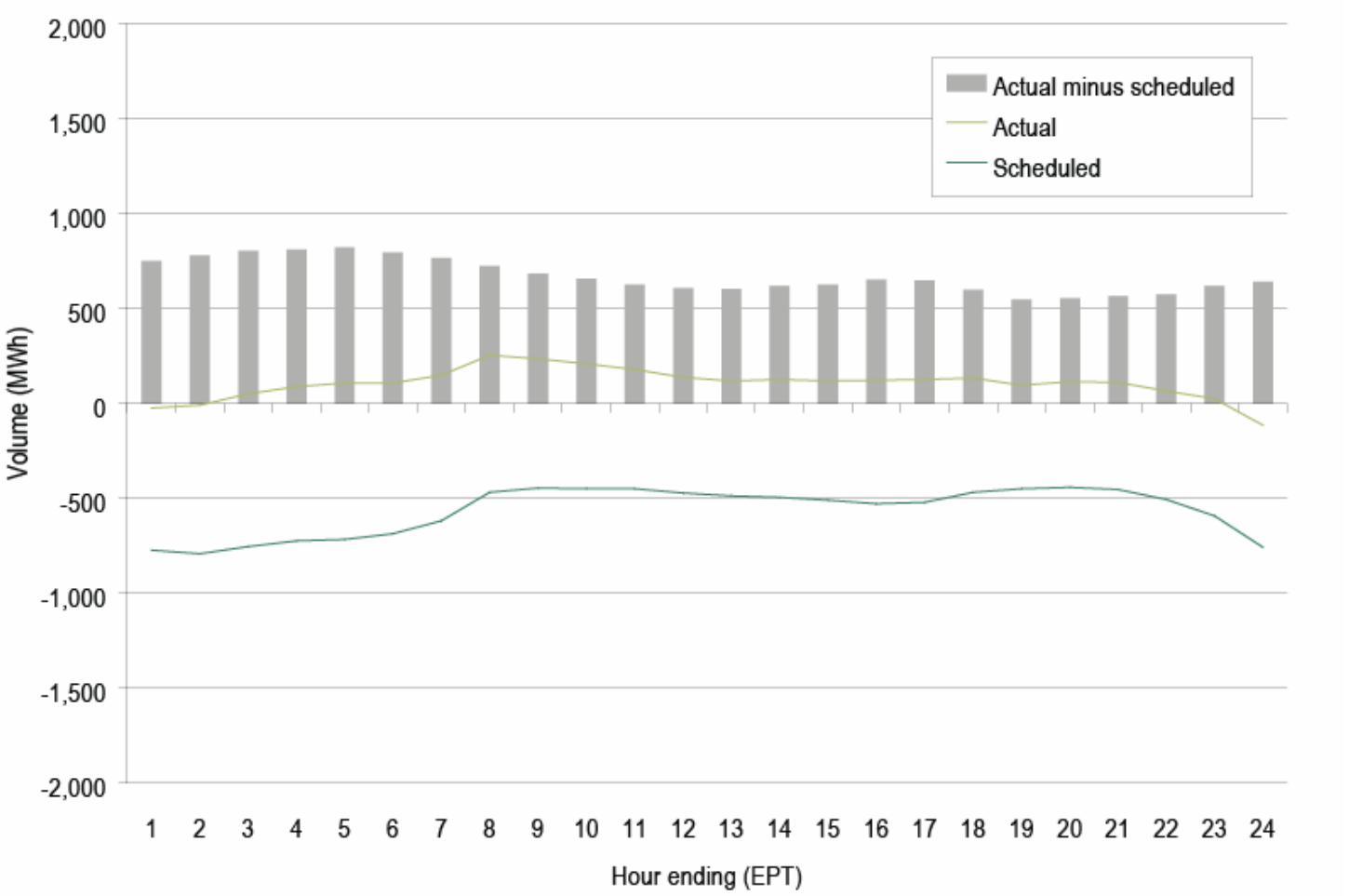


Figure 4-18 Southwest actual and scheduled flows: Calendar years 2006 to 2007

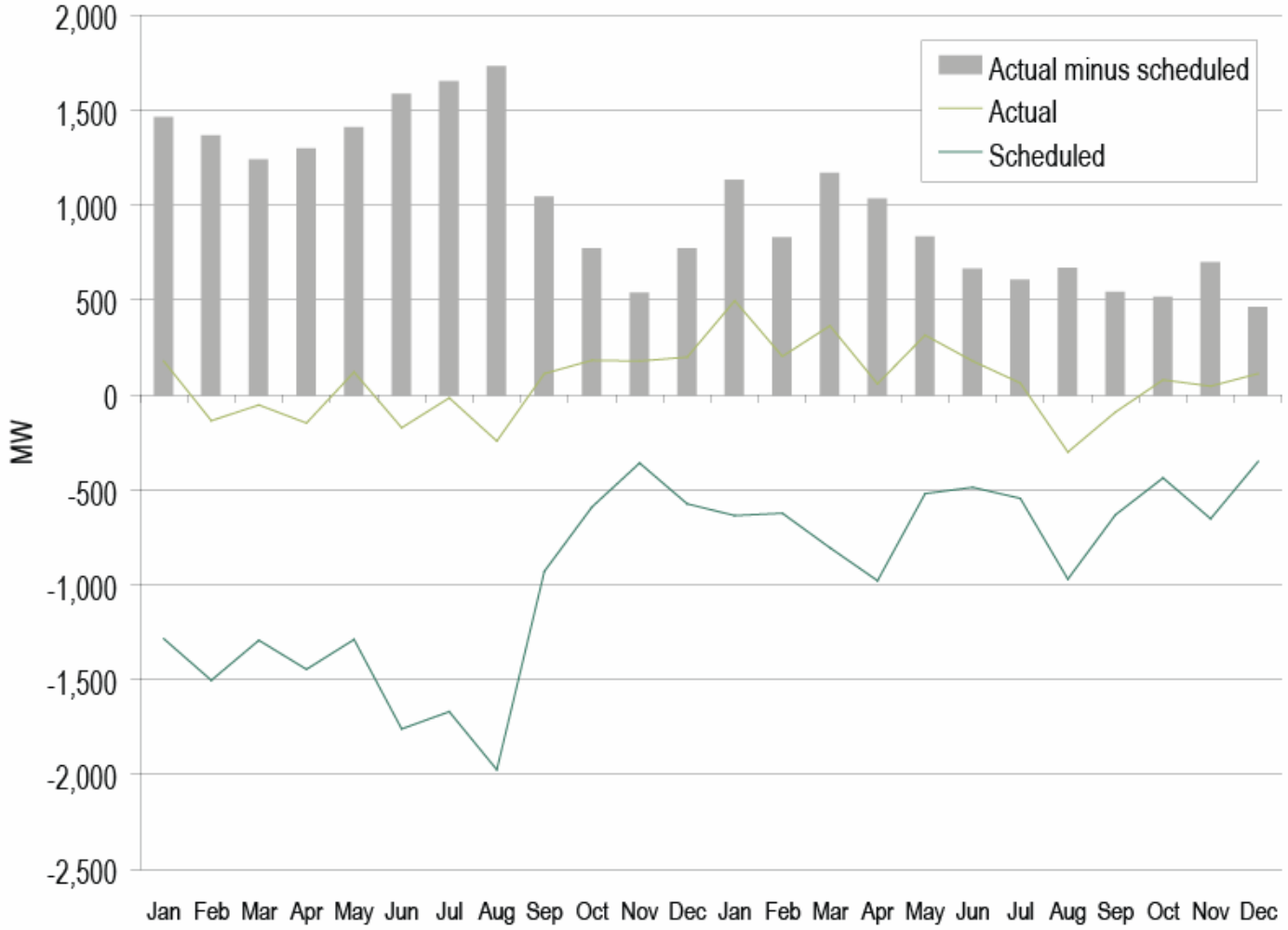


Figure 4-20 Distribution of expired ramp reservations in the hour prior to flow [Old rules (Theoretical) and new rules (Actual)]: October 2006 to December 2007

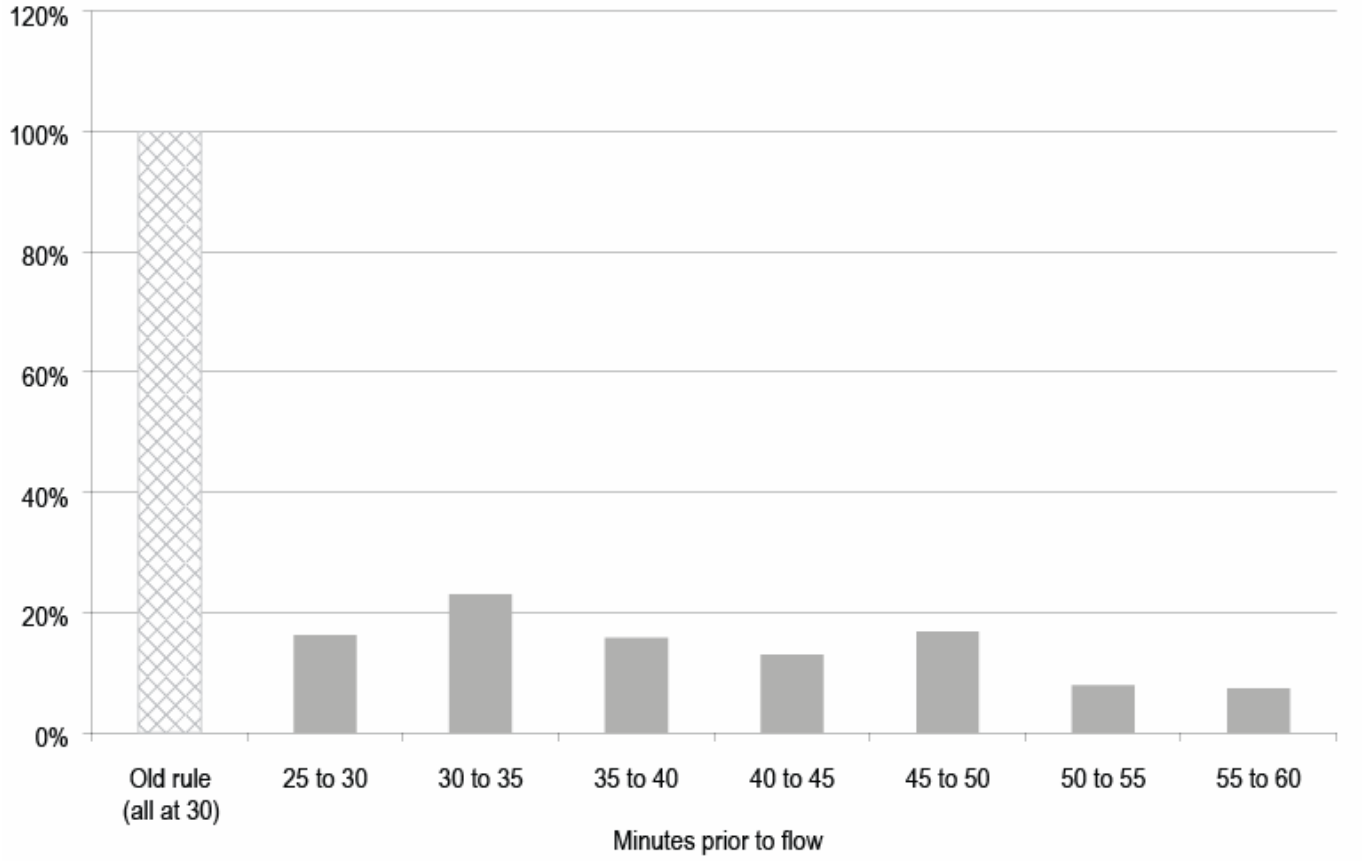


Figure 4-21 Spot import service utilization: May through December 2007

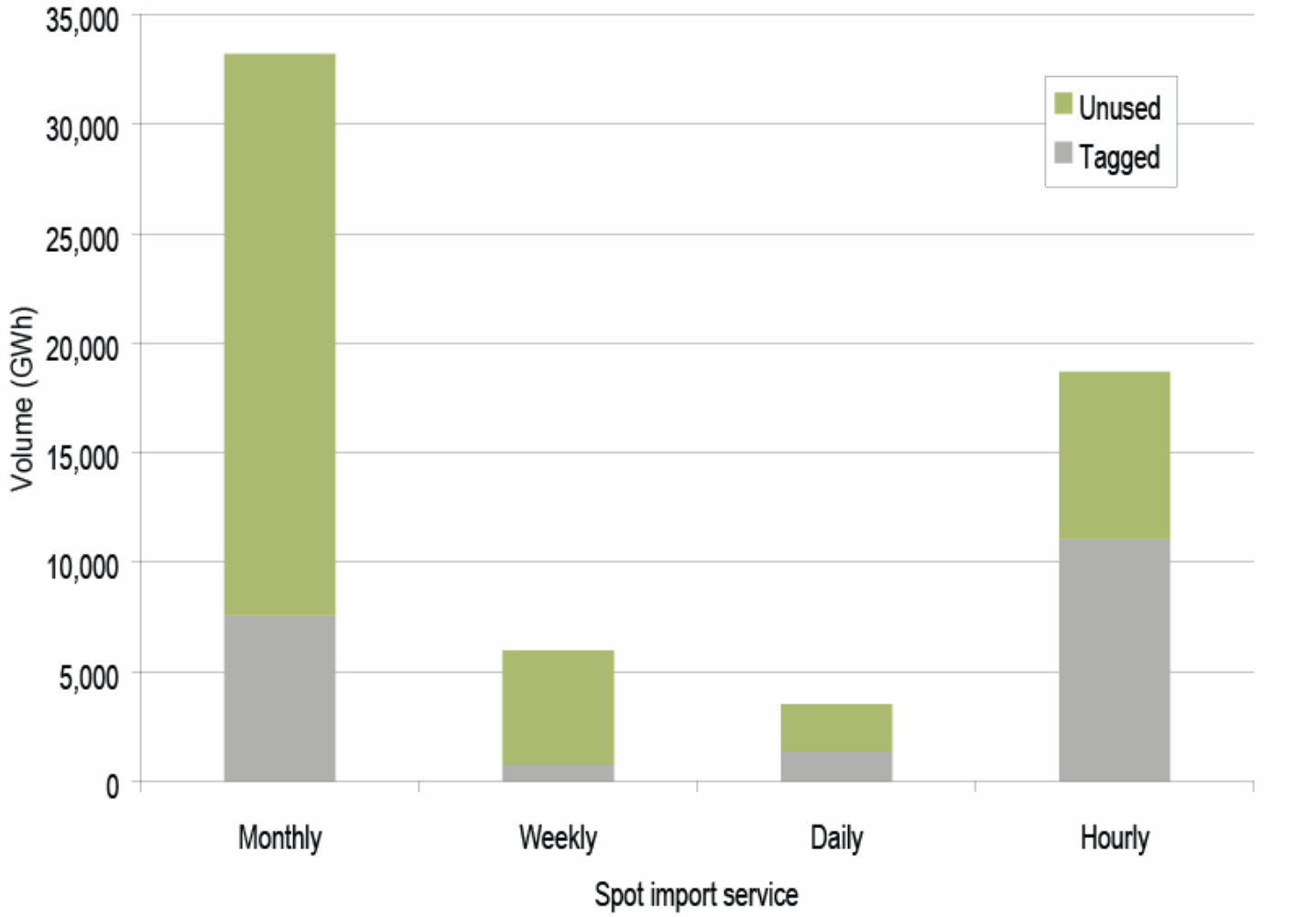


Figure 5-10 PJM equivalent outage and availability factors: Calendar years 2003 to 2007

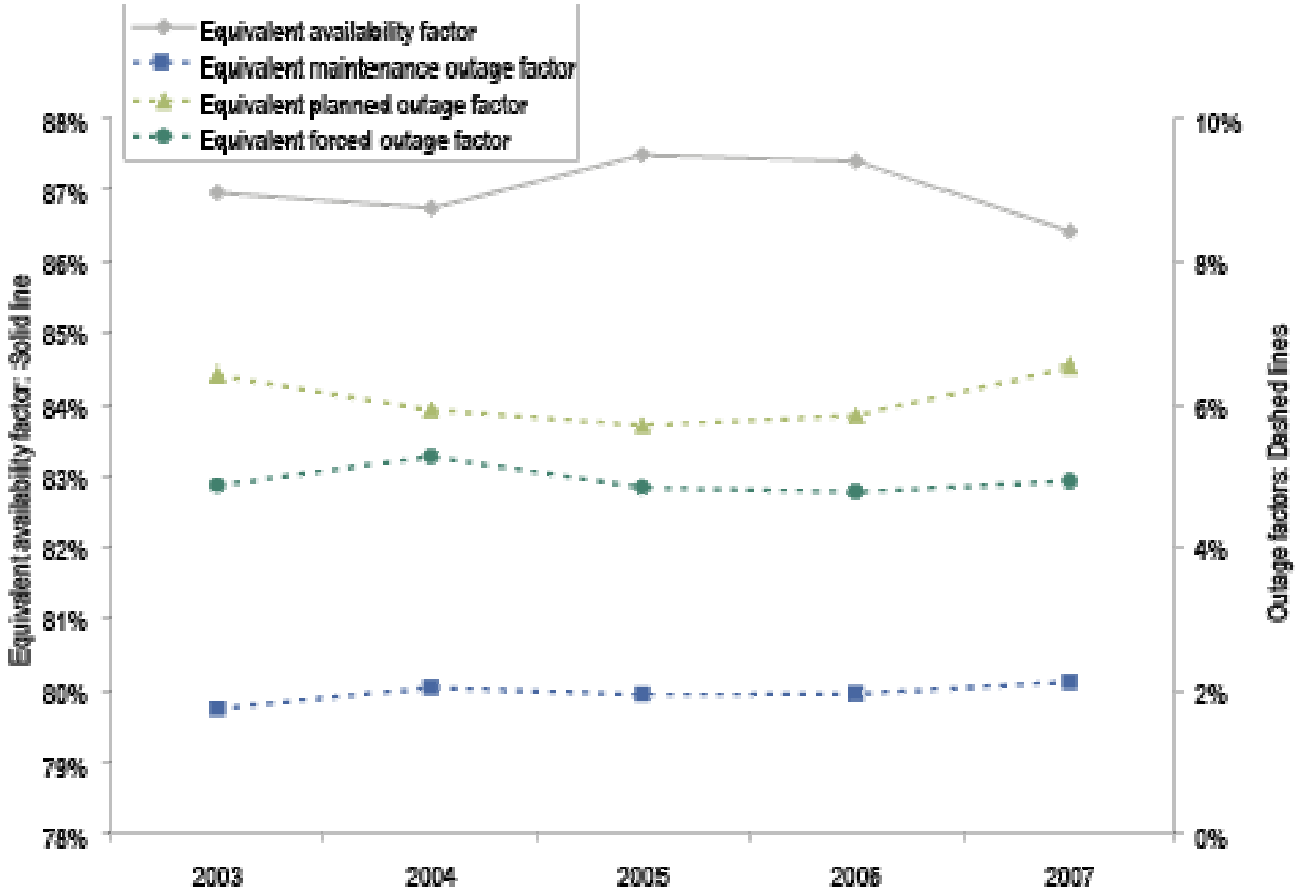


Figure 5-11 Trends in the PJM equivalent demand forced outage rate (EFORd): Calendar years 2003 to 2007

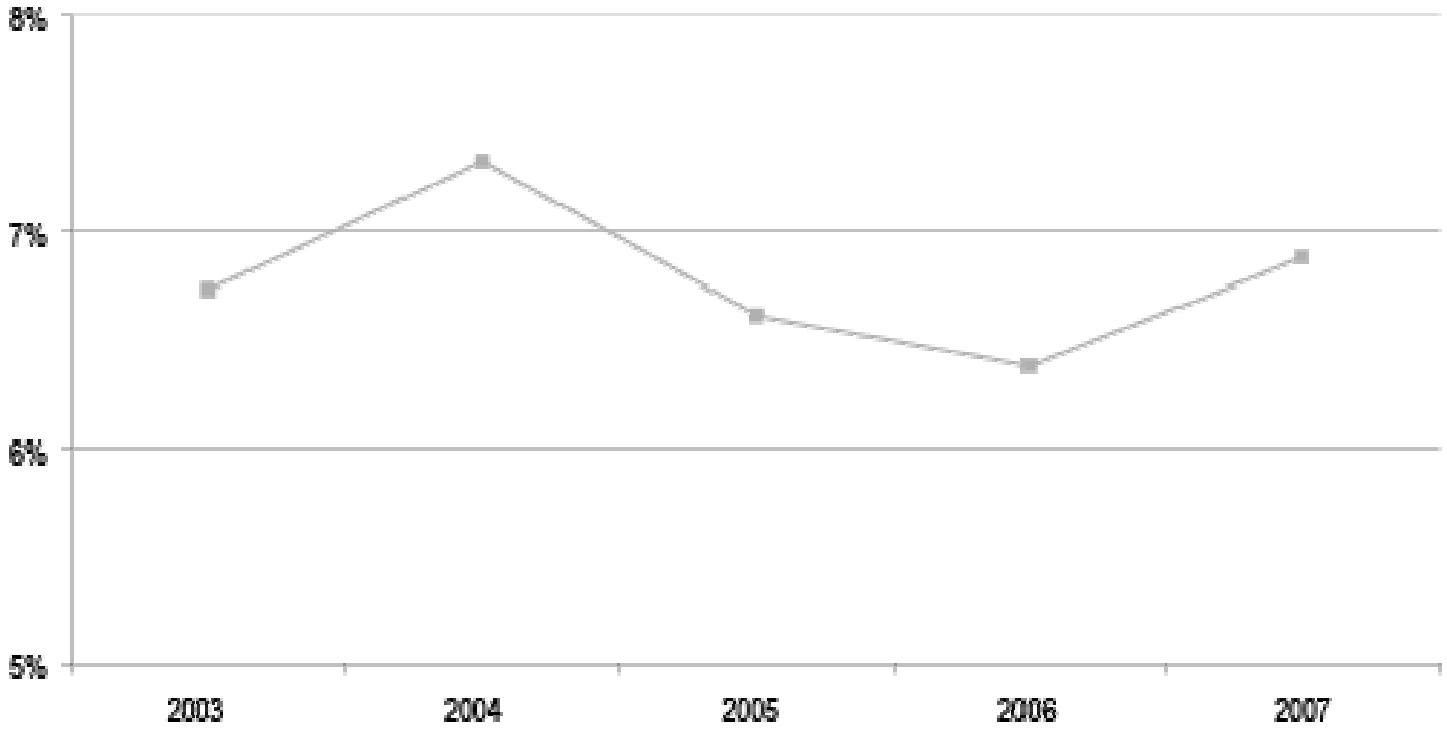


Table 6-4 Regulation Market pivotal suppliers: Calendar year 2007

	Hours with One Pivotal Supplier (Percent)	Hours with Three Pivotal Suppliers (Percent)
Price ≤ RMCP • 1.05	68%	94%
Price ≤ RMCP • 1.5	14%	80%

Figure 6-4 Monthly load-weighted, average regulation cost and price: Calendar year 2007

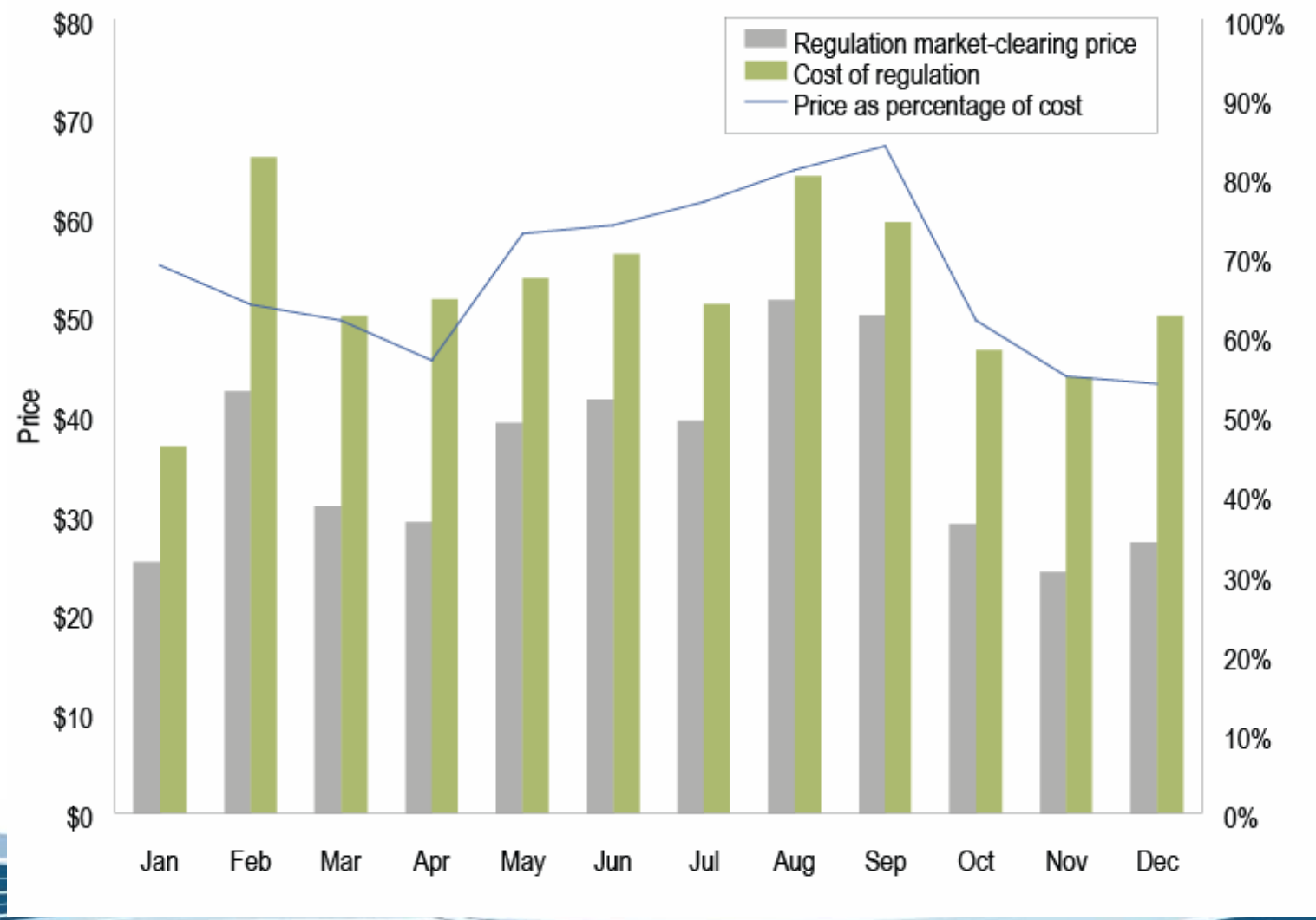


Figure 6-10 Impact of synchronized condensing added to the combined Synchronized Reserve Market after market clearing: Calendar year 2007

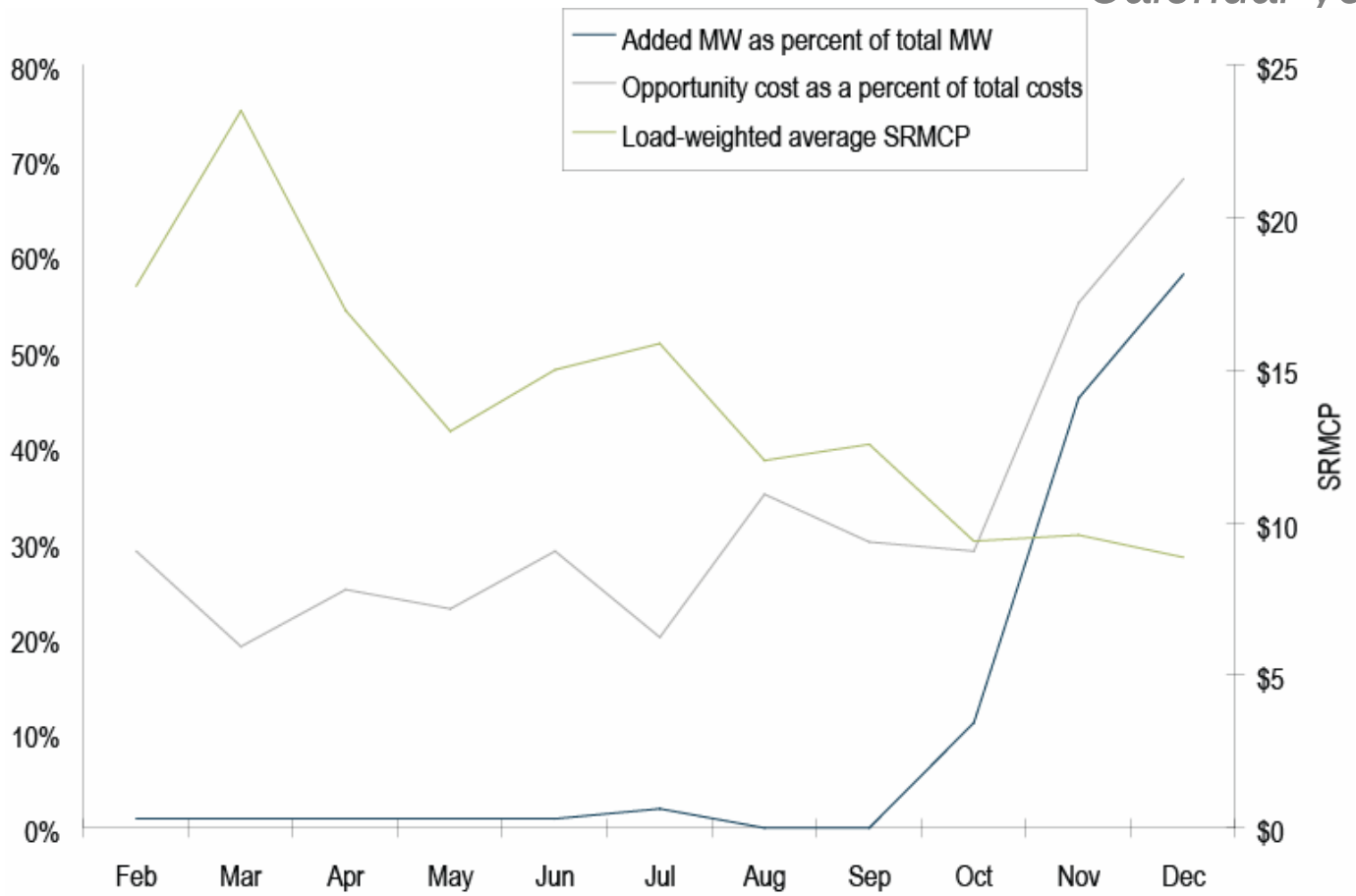


Figure 6-11 Comparison of RFC Tier 2 synchronized reserve price and cost (Dollars per MW): Calendar year 2007

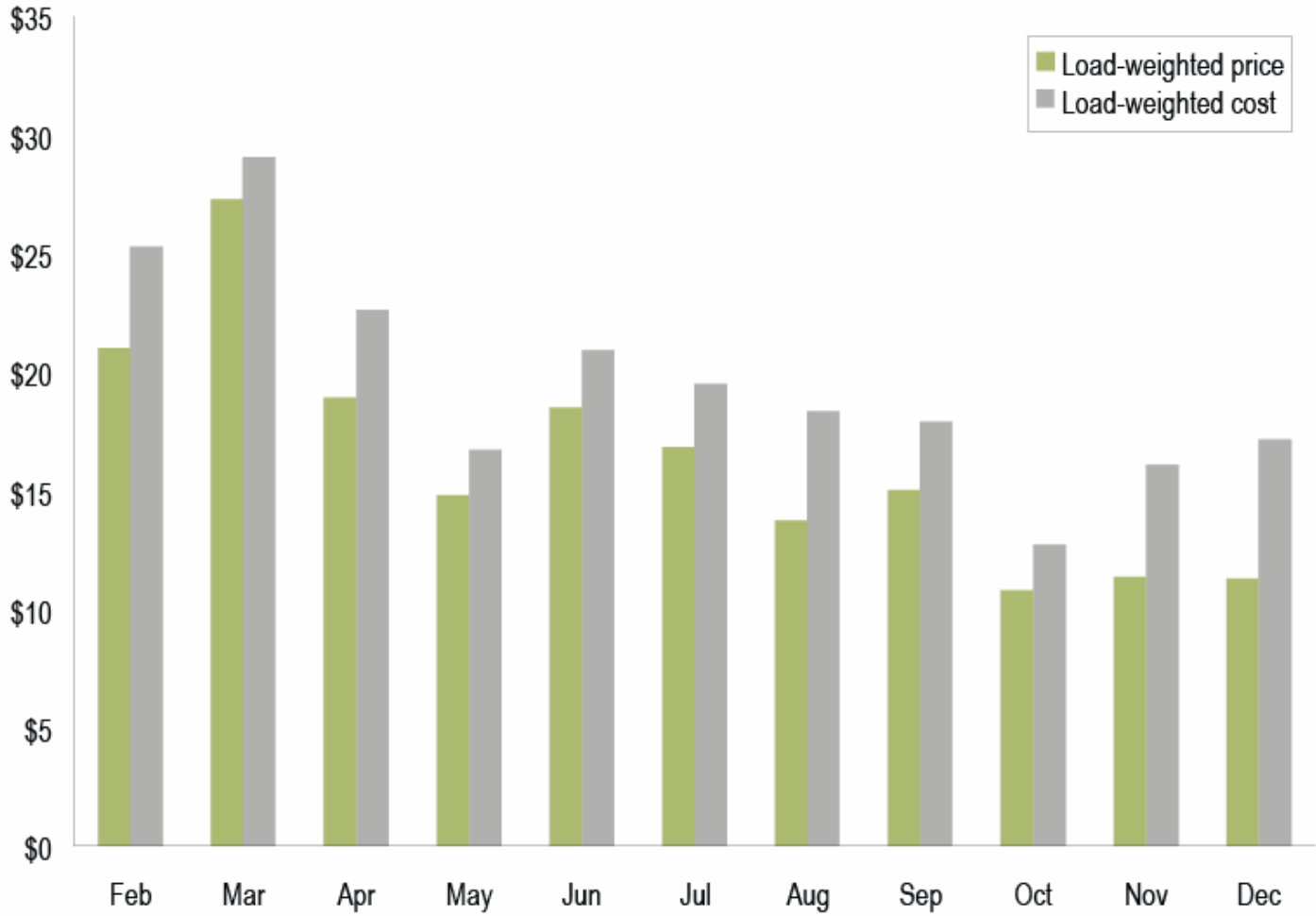


Table 2-97 Available ALM MW and LM MW: Within 2002 to 2007

	2002	2003	2004	2005	2006	2007
1-Jun	1,342	1,265	1,412	2,035	1,655	2,140
1-Jul	1,304	1,255	1,228	2,042	1,679	2,145
1-Aug	1,285	1,156	1,226	2,042	1,679	2,145
1-Sep	1,275	1,158	1,224	2,038	1,678	2,145

- The State of the Market Report is the work of the entire PJM Market Monitoring Unit.

