

# **PJM Markets: January through November, 2011**

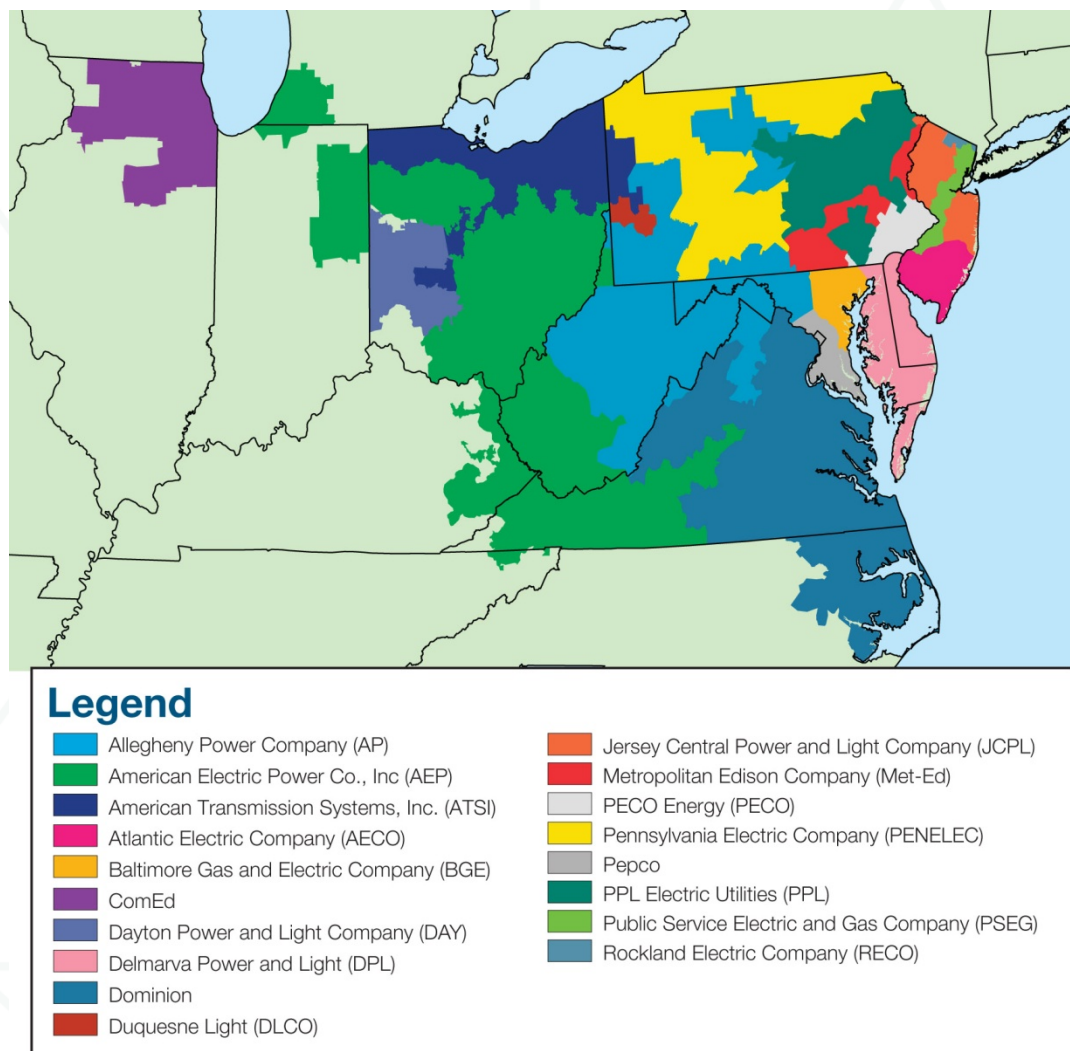
Members Committee  
January 26, 2012

Joe Bowring



Monitoring Analytics

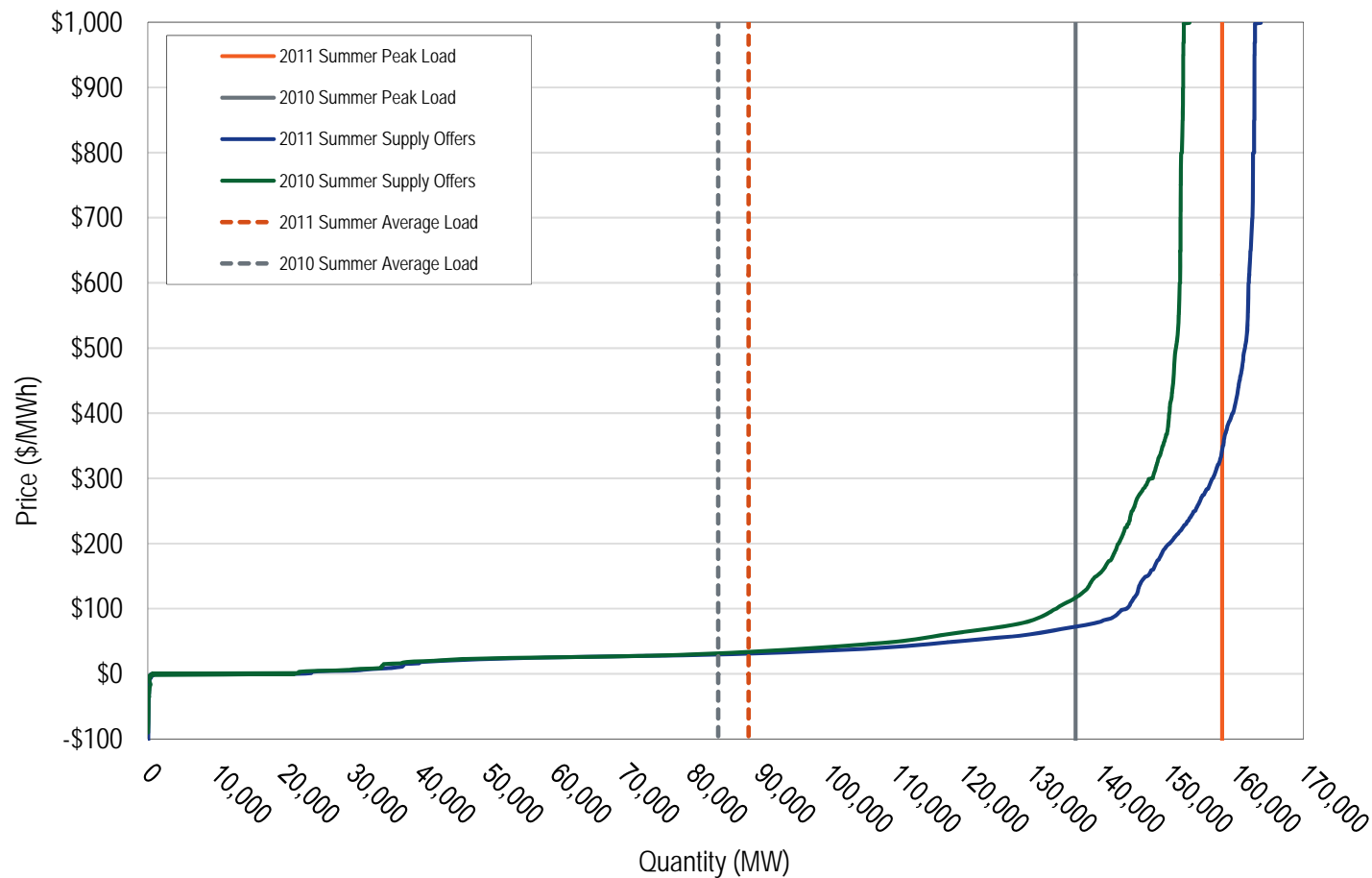
**Figure 1-1 PJM's footprint and its 18 control zones (See 2010 SOM, Figure A-1)**



**Table 1-7 Total price per MWh by category and total revenues by category: January through November of 2010 and 2011 (See 2010 SOM, Table 1-7)**

Category	2010 (Jan-Nov) \$/MWh	2011 (Jan-Nov) \$/MWh	Percent Change \$/MWh	2010 (Jan- Nov) Percent	2011 (Jan- Nov) Percent
Energy	\$47.65	\$47.13	(1.1%)	72.0%	73.7%
Capacity	\$12.19	\$9.91	(18.7%)	18.4%	15.5%
Transmission Service Charges	\$4.04	\$4.41	9.2%	6.1%	6.9%
Operating Reserves (Uplift)	\$0.74	\$0.82	10.6%	1.1%	1.3%
Reactive	\$0.40	\$0.42	4.6%	0.6%	0.7%
PJM Administrative Fees	\$0.37	\$0.37	1.3%	0.6%	0.6%
Regulation	\$0.35	\$0.34	(4.3%)	0.5%	0.5%
Transmission Enhancement Cost Recovery	\$0.20	\$0.29	41.8%	0.3%	0.4%
Synchronized Reserves	\$0.07	\$0.09	39.8%	0.1%	0.1%
Transmission Owner (Schedule 1A)	\$0.09	\$0.09	0.0%	0.1%	0.1%
Day Ahead Scheduling Reserve (DASR)	\$0.01	\$0.06	394.9%	0.0%	0.1%
Black Start	\$0.02	\$0.02	21.1%	0.0%	0.0%
NERC/RFC	\$0.02	\$0.02	(9.0%)	0.0%	0.0%
RTO Startup and Expansion	\$0.01	\$0.01	(4.1%)	0.0%	0.0%
Load Response	\$0.01	\$0.01	(23.8%)	0.0%	0.0%
Transmission Facility Charges	\$0.00	\$0.00	19.8%	0.0%	0.0%
Total	\$66.17	\$63.98	(3.3%)	100.0%	100.0%

**Figure 2-1 Average PJM aggregate supply curves: Summer 2010 and 2011 (See 2010 SOM, Figure 2-1)**



**Table 2-2 Frequency distribution of unit offer prices: January through November 2011 (See 2010 SOM, Table 2-3)**

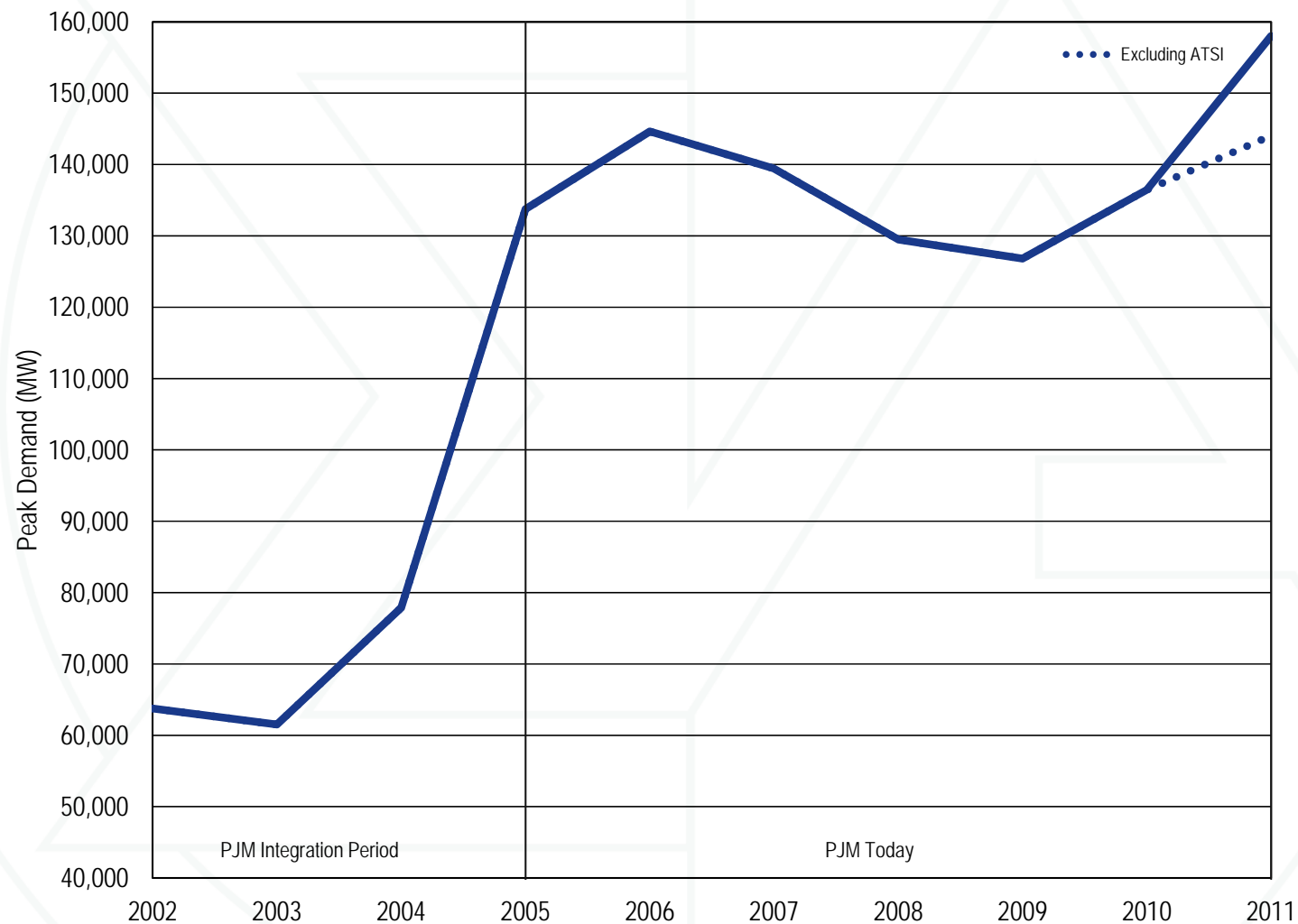
Unit Type	Range												Total
	(\$200) - \$0		\$0 - \$200		\$200 - \$400		\$400 - \$600		\$600 - \$800		\$800 - \$1,000		
	Dispatchable	Self-Scheduled	Dispatchable	Self-Scheduled	Dispatchable	Self-Scheduled	Dispatchable	Self-Scheduled	Dispatchable	Self-Scheduled	Dispatchable	Self-Scheduled	
BATTERY	0.0%	2.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	97.9%	100.0%
CC	0.1%	0.0%	11.3%	65.5%	0.3%	14.6%	0.1%	3.0%	0.4%	3.8%	0.0%	0.9%	100.0%
CT	0.4%	0.0%	0.1%	41.6%	0.0%	16.1%	0.1%	11.8%	0.0%	27.4%	0.1%	2.3%	100.0%
DIESEL	17.1%	0.0%	10.3%	11.3%	0.1%	51.8%	0.0%	6.5%	0.0%	1.8%	0.0%	1.0%	100.0%
HYDRO	97.8%	0.1%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	100.0%
NUCLEAR	51.2%	0.0%	37.1%	11.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
PUMPED STORAGE	42.5%	57.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
SOLAR	99.7%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
STEAM	1.5%	0.0%	21.2%	48.6%	6.9%	20.6%	0.1%	0.8%	0.1%	0.0%	0.1%	0.1%	100.0%
TRANSACTION	77.0%	0.0%	23.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
WIND	65.2%	33.5%	0.0%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
ALL OFFERS	13.2%	1.8%	16.6%	40.5%	3.1%	14.4%	0.1%	3.2%	0.1%	6.2%	0.1%	0.7%	100.0%
ALL OFFERS	15.0%		57.1%		17.5%		3.3%		6.3%		0.7%		100.0%



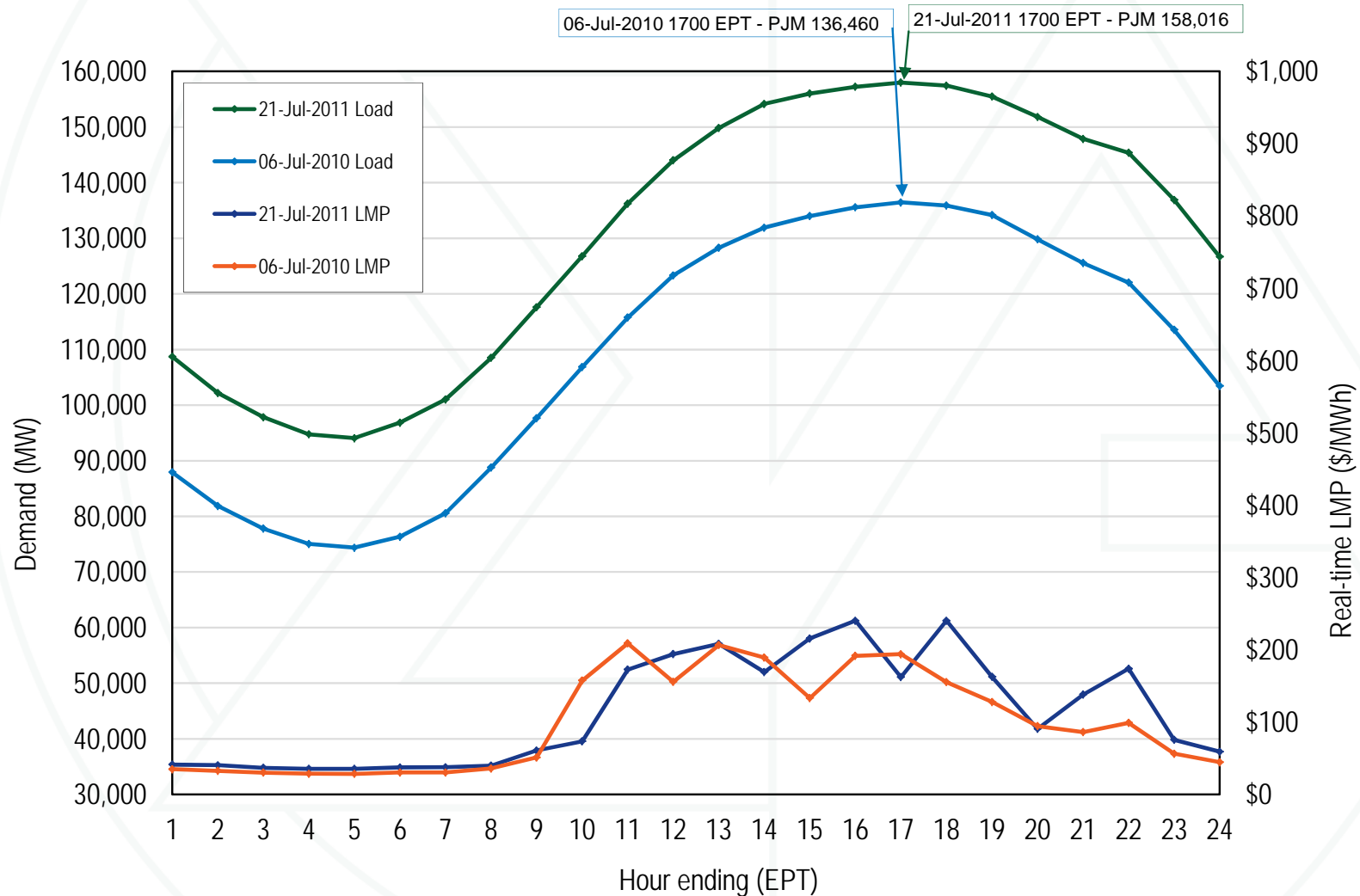
**Table 2-3 Actual PJM footprint peak loads: January through November of 2002 to 2011 (See 2010 SOM, Table 2-4)**

Year	Date	Hour Ending (EPT)	PJM Load (MW)	Annual Change (MW)	Annual Change (%)
2002	Wed, August 14	16	63,762	NA	NA
2003	Fri, August 22	16	61,499	(2,263)	(3.5%)
2004	Tue, August 03	17	77,887	16,387	26.6%
2005	Tue, July 26	16	133,761	55,875	71.7%
2006	Wed, August 02	17	144,644	10,883	8.1%
2007	Wed, August 08	16	139,428	(5,216)	(3.6%)
2008	Thu, July 17	17	129,481	(9,947)	(7.1%)
2009	Mon, August 10	17	126,798	(2,683)	(2.1%)
2010	Tue, July 06	17	136,460	9,662	7.6%
2011 (with ATSI)	Thu, July 21	17	158,016	21,556	15.8%
2011 (without ATSI)	Thu, July 21	17	144,063	7,603	5.6%

**Figure 2-2 Actual PJM footprint peak loads: January through November of 2003 to 2011 (See 2010 SOM, Figure 2-2)**

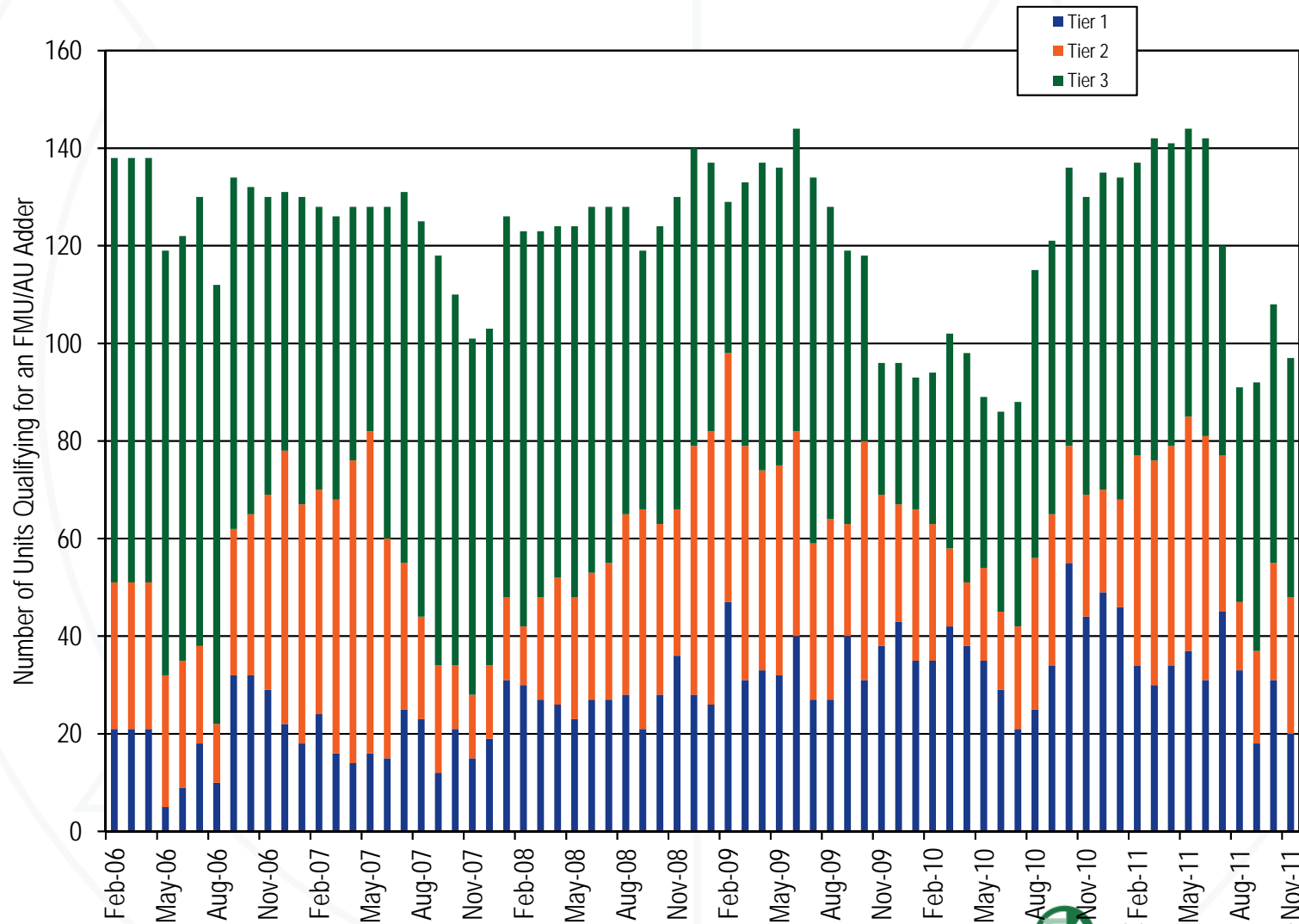


**Figure 2-3 PJM peak-load comparison: Thursday, July 21, 2011, and Tuesday, July 06, 2010 (See 2010 SOM, Figure 2-3)**

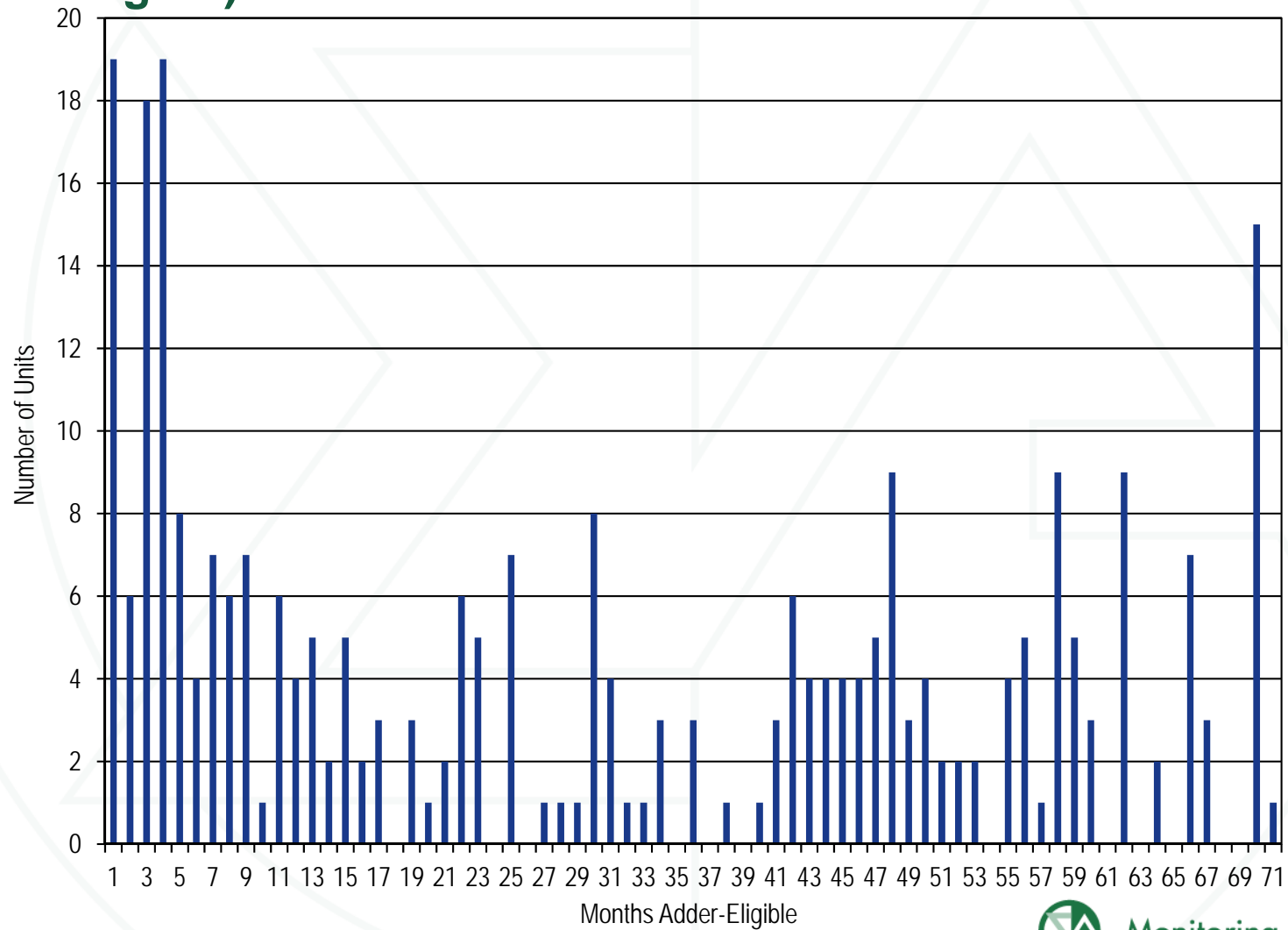




**Figure 2-5 Frequently mitigated units and associated units (By month): February, 2006 through November, 2011 (New Figure)**



**Figure 2-6 Frequently mitigated units and associated units  
total months eligible: February, 2006 through November, 2011  
(New Figure)**



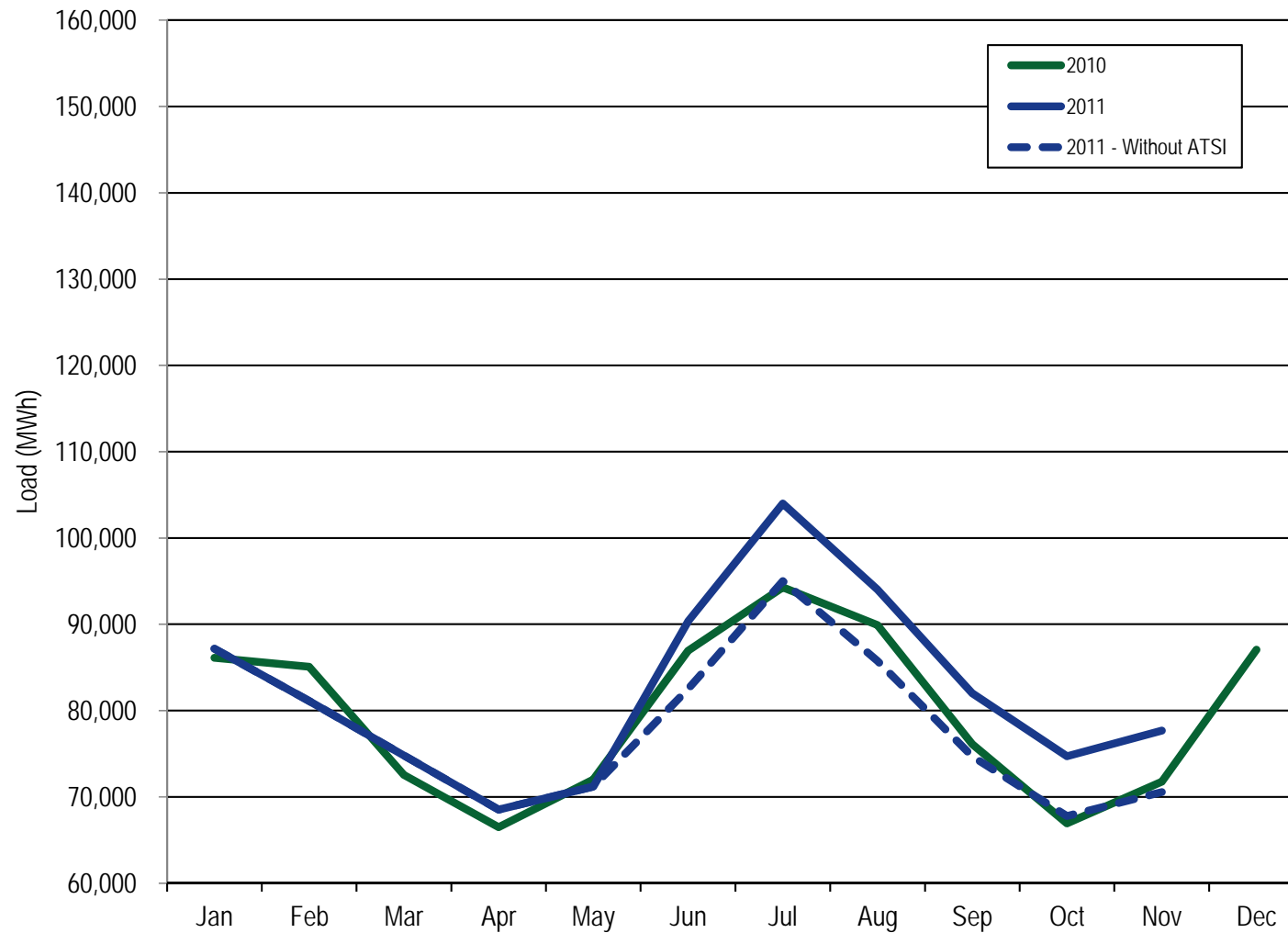
**Table 2-7 Real-time offer-capped unit statistics: January through November 2011 (See 2010 SOM, Table 2-8)**

Run Hours Offer-Capped, Percent Greater Than Or Equal To:	2011 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%	0	0	0	6	7	5
80% and < 90%	0	0	1	2	5	10
75% and < 80%	0	0	0	0	3	4
70% and < 75%	0	0	0	0	0	8
60% and < 70%	0	1	0	1	1	22
50% and < 60%	0	0	0	1	11	21
25% and < 50%	2	0	0	5	20	73
10% and < 25%	6	2	0	1	1	47

**Table 2-13 PJM real-time average hourly load: January through November 1998 through 2011 (See 2010 SOM, Table 2-28)**

Year	PJM Real-Time Load (MWh)		Year-to-Year Change	
	Average Load	Load Standard Deviation	Average Load	Load Standard Deviation
1998	28,564	5,619	NA	NA
1999	29,610	6,103	3.7%	8.6%
2000	29,842	5,589	0.8%	(8.4%)
2001	30,368	6,012	1.8%	7.6%
2002	35,441	8,208	16.7%	36.5%
2003	37,231	6,996	5.1%	(14.8%)
2004	48,111	11,736	29.2%	67.8%
2005	77,406	16,519	60.9%	40.8%
2006	79,443	14,874	2.6%	(10.0%)
2007	81,622	14,980	2.7%	0.7%
2008	79,236	13,994	(2.9%)	(6.6%)
2009	75,459	13,428	(4.8%)	(4.0%)
2010	78,919	15,754	4.6%	17.3%
2011	82,373	16,653	4.4%	5.7%

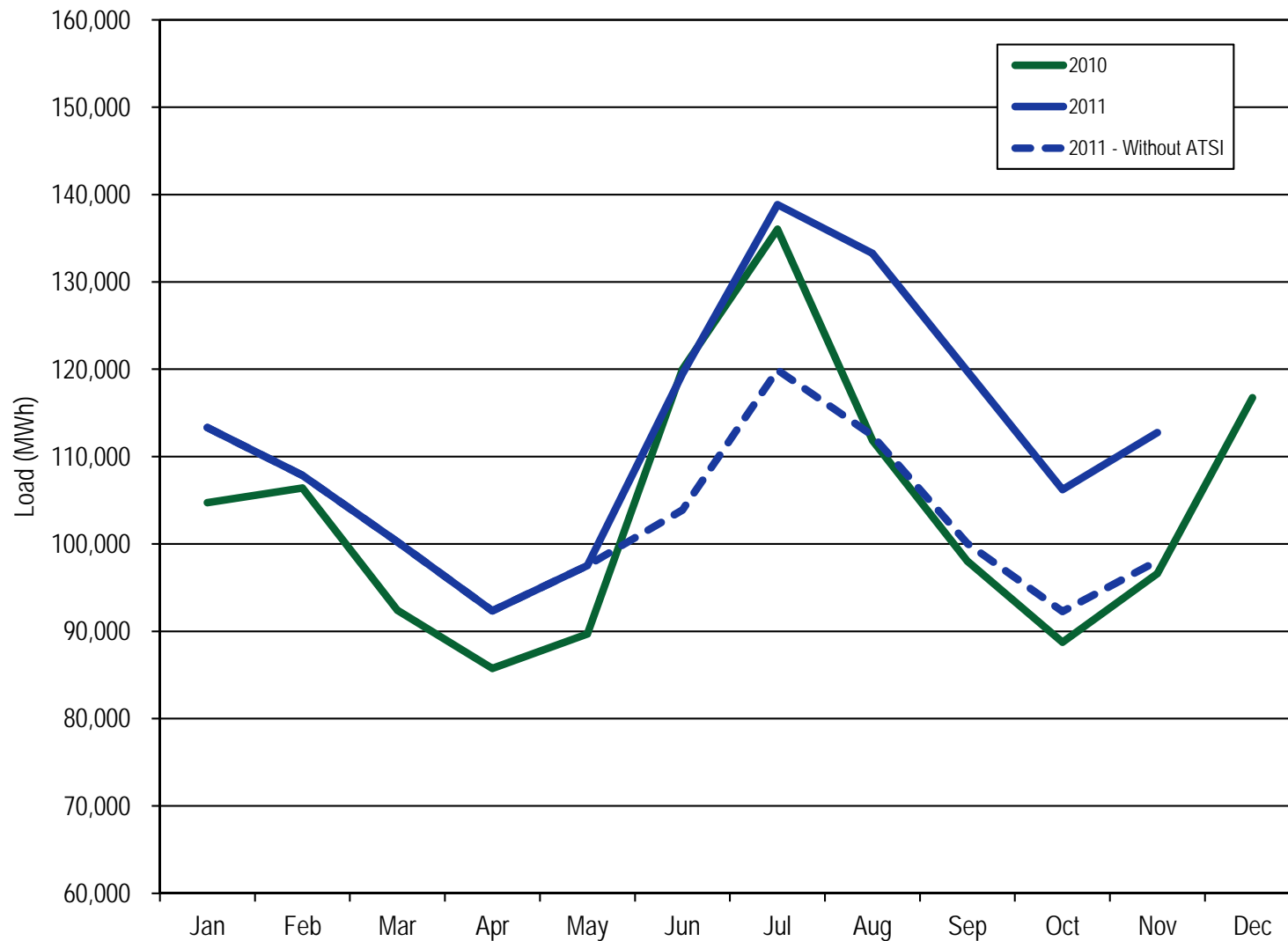
**Figure 2-8 PJM real-time average hourly load: Calendar years 2010 through November 2011 (See 2010 SOM, Figure 2-6)**



**Table 2-15 PJM day-ahead average load: January through November 2000 through 2011 (See 2010 SOM, Table 2-31)**

Year	PJM Day-Ahead Load (MWh)						Year-to-Year Change					
	Average Load	Average Up-to Congestion	Average Load and Up-to Congestion	Load Standard Deviation	Up-to Congestion Standard Deviation	Load and Up-to Congestion Standard Deviation	Average Load	Average Up-to Congestion	Average Load and Up-to Congestion	Load Standard Deviation	Up-to Congestion Standard Deviation	Load and Up-to Congestion Standard Deviation
2000	32,710	0	32,710	7,141	0	7,141	NA	NA	NA	NA	NA	NA
2001	33,406	82	33,488	6,648	213	6,683	2.1%	NA	2.4%	(6.9%)	NA	(6.4%)
2002	40,813	148	40,961	12,310	287	12,338	22.2%	81.2%	22.3%	85.1%	34.9%	84.6%
2003	44,282	386	44,669	8,119	347	8,078	8.5%	160.7%	9.1%	(34.0%)	21.0%	(34.5%)
2004	58,736	859	59,595	14,856	798	15,099	32.6%	122.5%	33.4%	83.0%	130.0%	86.9%
2005	91,245	1,295	92,540	17,722	772	17,871	55.3%	50.8%	55.3%	19.3%	(3.2%)	18.4%
2006	94,550	3,740	98,290	16,470	1,553	17,130	3.6%	188.7%	6.2%	(7.1%)	101.2%	(4.1%)
2007	100,923	4,427	105,350	16,635	1,475	17,099	6.7%	18.4%	7.2%	1.0%	(5.0%)	(0.2%)
2008	95,061	6,248	101,309	16,592	1,889	16,975	(5.8%)	41.2%	(3.8%)	(0.3%)	28.1%	(0.7%)
2009	87,255	6,429	93,684	15,765	2,086	16,914	(8.2%)	2.9%	(7.5%)	(5.0%)	10.4%	(0.4%)
2010	90,262	12,491	102,754	17,328	7,924	21,709	3.4%	94.3%	9.7%	9.9%	279.9%	28.3%
2011	91,465	21,476	112,941	18,383	5,416	21,137	1.3%	71.9%	9.9%	6.1%	(31.6%)	(2.6%)

**Figure 2-10 PJM day-ahead average load: Calendar years 2010 through November 2011 (See 2010 SOM, Figure 2-8)**

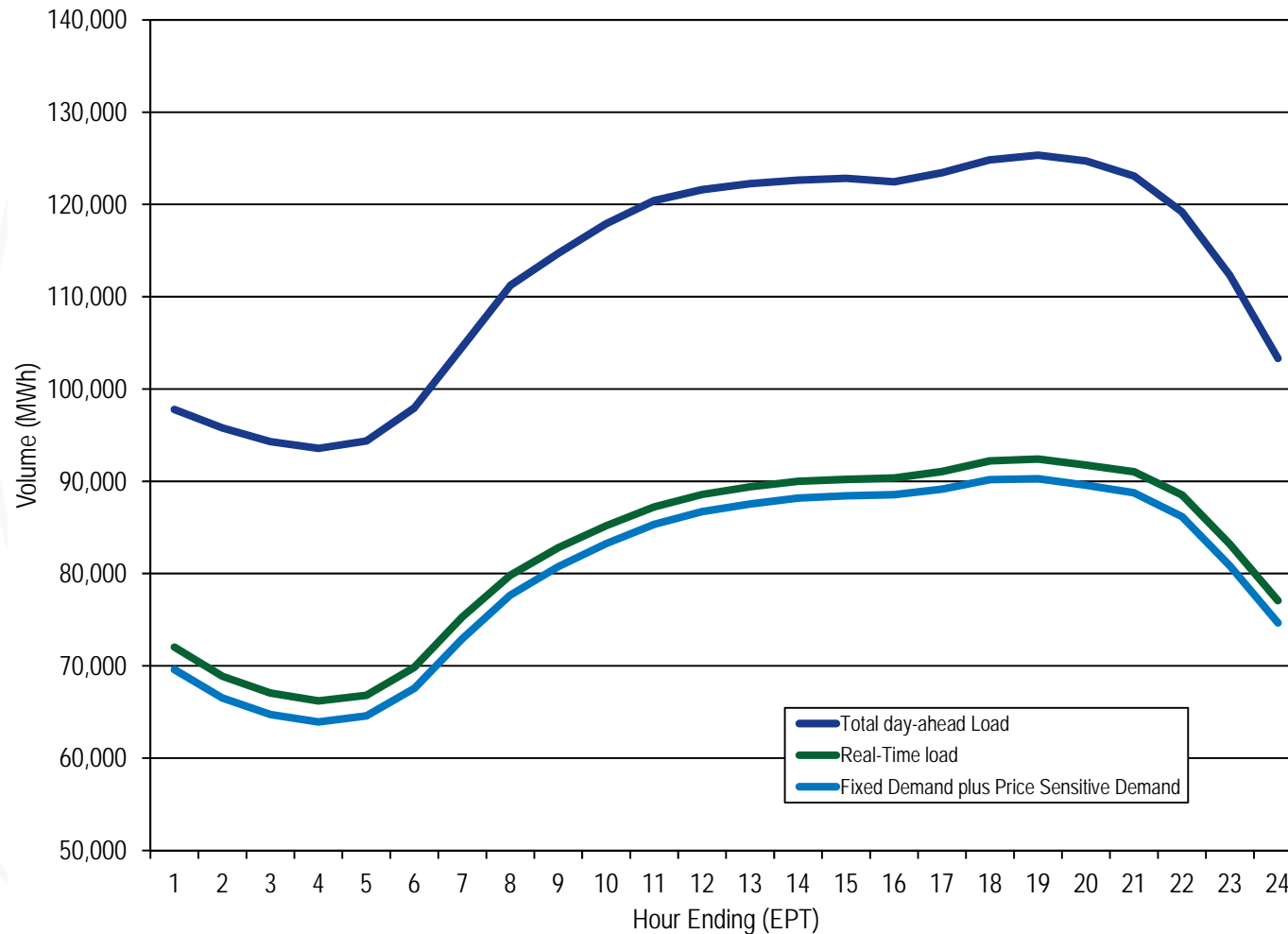


**Table 2-16 Cleared day-ahead and real-time load (MWh):  
January through November 2010 and 2011 (See 2010 SOM,  
Table 2-32)**

	Year	Day Ahead				Real Time		Average Difference Total Load Minus Cleared DEC Bids Minus Up-to Congestion	
		Cleared Fixed Demand	Cleared Price Sensitive	Cleared DEC Bids	Cleared Up-to Congestion	Total Load	Total Load	Total Load	
Average	2010	73,853	1,166	15,941	12,491	102,754	79,611	23,143	(5,289)
	2011	79,372	874	11,219	21,476	112,941	82,373	30,568	(2,126)
Median	2010	71,824	1,057	15,792	10,035	99,101	76,442	22,659	(3,168)
	2011	76,887	874	10,992	20,702	110,026	80,369	29,657	(2,037)
Standard Deviation	2010	14,558	474	2,622	7,924	21,709	15,754	5,956	(4,590)
	2011	16,448	183	2,488	5,416	21,137	16,653	4,484	(3,420)
Peak Average	2010	81,491	1,357	17,330	13,156	113,334	87,555	25,780	(4,706)
	2011	88,285	951	12,952	22,555	124,744	91,407	33,337	(2,170)
Peak Median	2010	78,286	1,235	17,141	10,441	107,004	84,237	22,767	(4,815)
	2011	84,025	967	12,716	21,920	121,541	87,172	34,369	(267)
Peak Standard Deviation	2010	13,169	490	2,169	8,557	20,899	14,108	6,792	(3,935)
	2011	15,378	179	2,026	5,582	19,359	15,420	3,939	(3,669)
Off-Peak Average	2010	66,682	1,000	14,733	11,913	93,550	71,408	22,142	(4,503)
	2011	71,557	807	9,699	20,529	102,592	74,452	28,140	(2,088)
Off-Peak Median	2010	64,834	917	14,442	9,655	90,337	69,036	21,300	(2,797)
	2011	69,454	812	9,429	19,717	100,661	71,993	28,668	(478)
Off-Peak Standard Deviation	2010	11,991	410	2,372	7,280	17,869	13,026	4,843	(4,809)
	2011	13,027	159	1,754	5,082	16,754	13,332	3,423	(3,412)



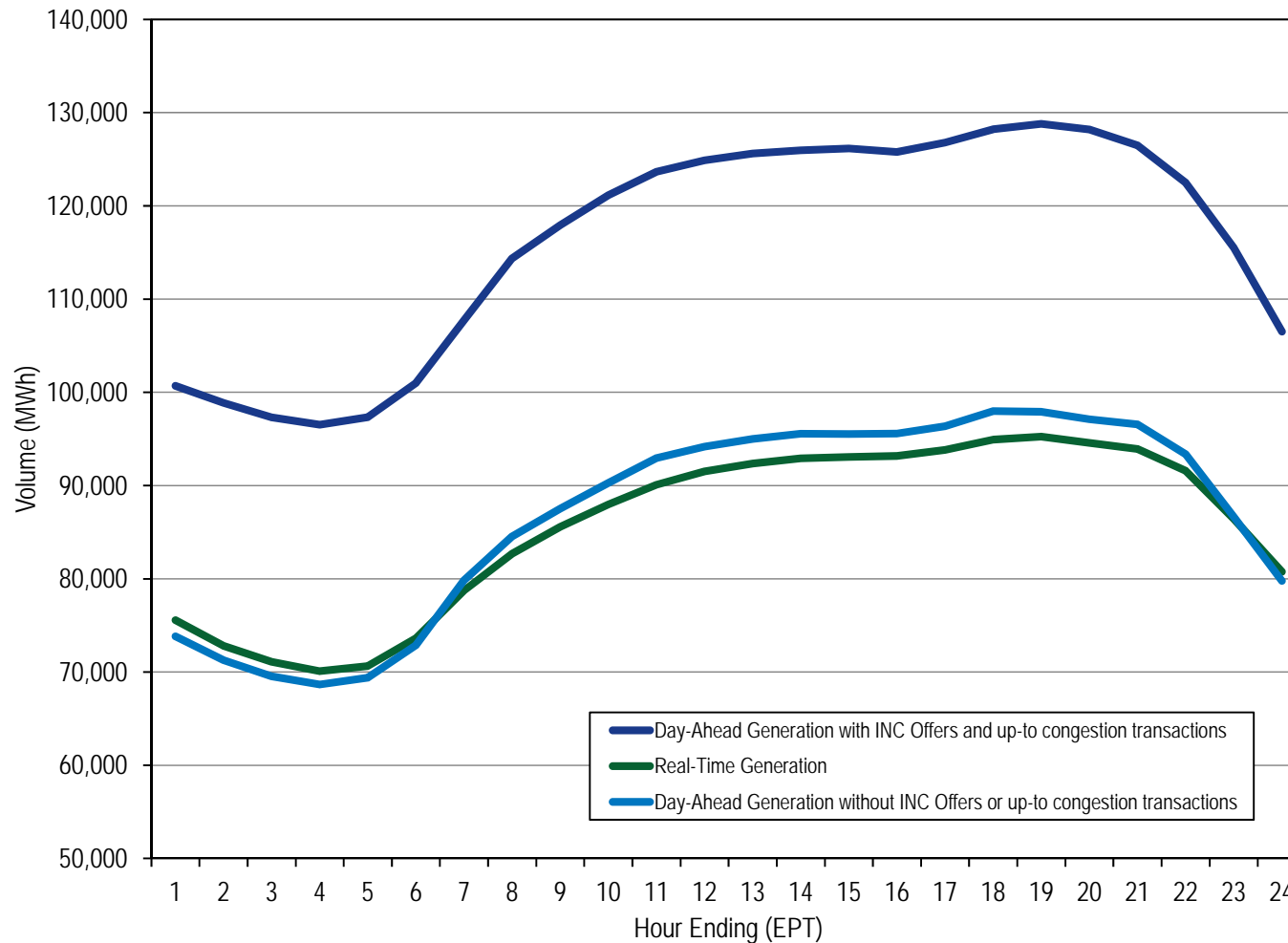
**Figure 2-11 Day-ahead and real-time loads (Average hourly volumes): January through November 2011 (See 2010 SOM, Figure 2-9)**



**Table 2-17 Day-ahead and real-time generation (MWh): January through November 2010 and 2011 (See 2010 SOM, Table 2-33)**

	Year	Day Ahead				Real Time	Average Difference	
		Cleared Generation	Cleared INC Offers	Cleared Up-to Congestion	Cleared Generation Plus INC Offers Plus Up-to Congestion	Generation	Cleared Generation	Cleared Generation Plus INC Offers Plus Up-to Congestion
Average	2010	90,262	11,112	12,491	106,082	81,945	8,318	24,138
	2011	91,465	7,927	21,476	116,169	85,552	5,913	30,617
Median	2010	87,899	10,989	10,035	102,428	79,573	8,326	22,854
	2011	89,207	7,884	20,702	113,338	83,467	5,740	29,871
Standard Deviation	2010	17,328	1,511	7,924	22,099	15,846	1,483	6,254
	2011	18,383	1,322	5,416	21,397	16,417	1,967	4,981
Peak Average	2010	100,178	11,853	13,156	116,843	90,426	9,752	26,417
	2011	102,189	8,832	22,555	128,114	94,225	7,964	33,889
Peak Median	2010	96,701	11,723	10,441	110,513	86,987	9,714	23,526
	2011	97,837	8,726	21,920	124,777	89,888	7,949	34,889
Peak Standard Deviation	2010	15,094	1,407	8,557	21,200	14,182	912	7,018
	2011	16,530	1,061	5,582	19,528	15,249	1,281	4,279
Off-Peak Average	2010	81,638	10,468	11,913	96,723	74,568	7,070	22,155
	2011	82,063	7,133	20,529	105,697	77,948	4,115	27,749
Off-Peak Median	2010	79,254	10,436	9,655	93,513	72,052	7,202	21,461
	2011	79,793	7,066	19,717	103,686	75,605	4,188	28,081
Off-Peak Standard Deviation	2010	14,261	1,287	7,280	18,276	13,326	936	4,950
	2011	14,335	972	5,082	17,036	13,348	986	3,687

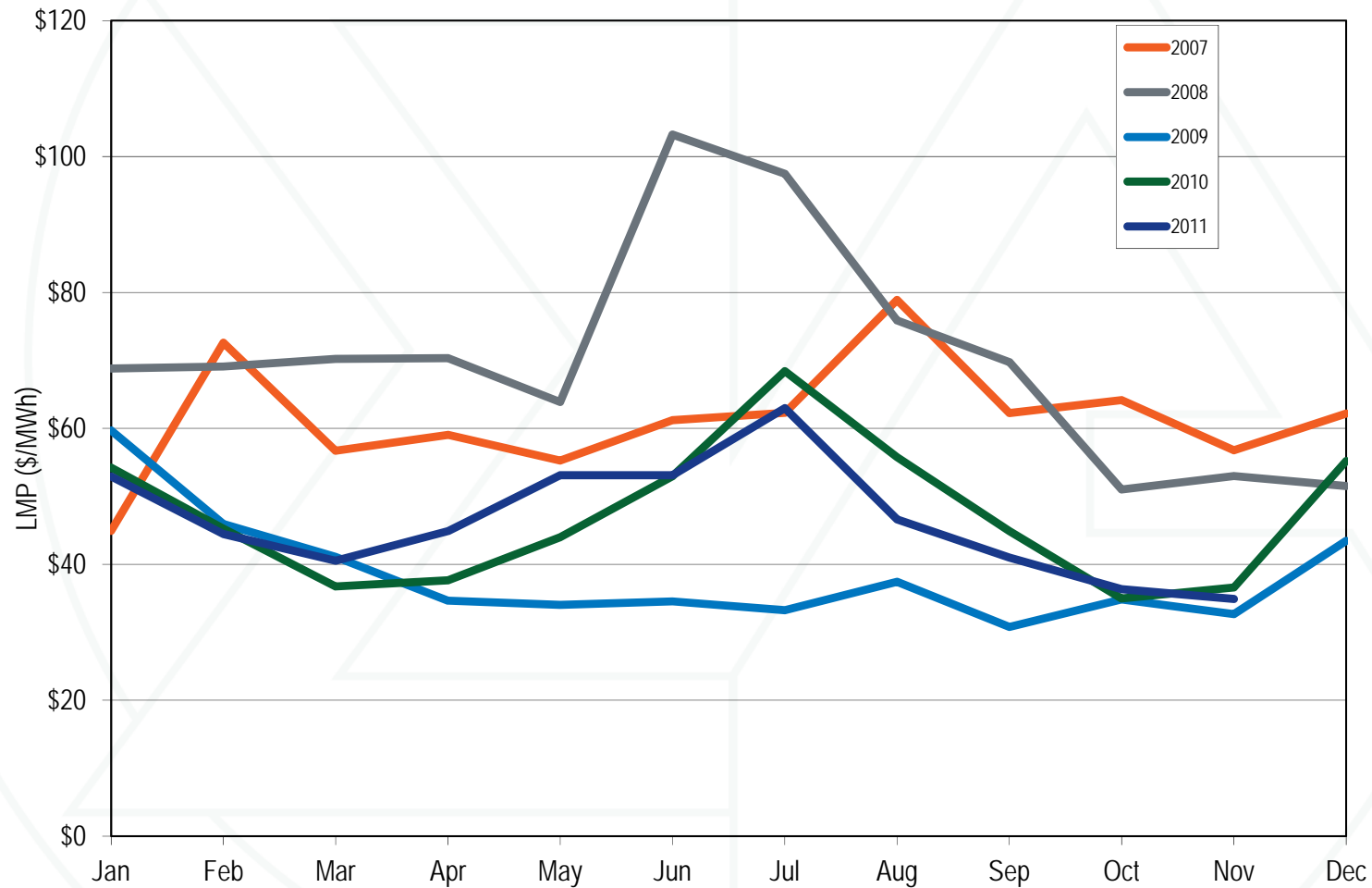
**Figure 2-13 Day-ahead and real-time generation (Average hourly volumes): January through November 2011 (See 2010 SOM, Figure 2-11)**



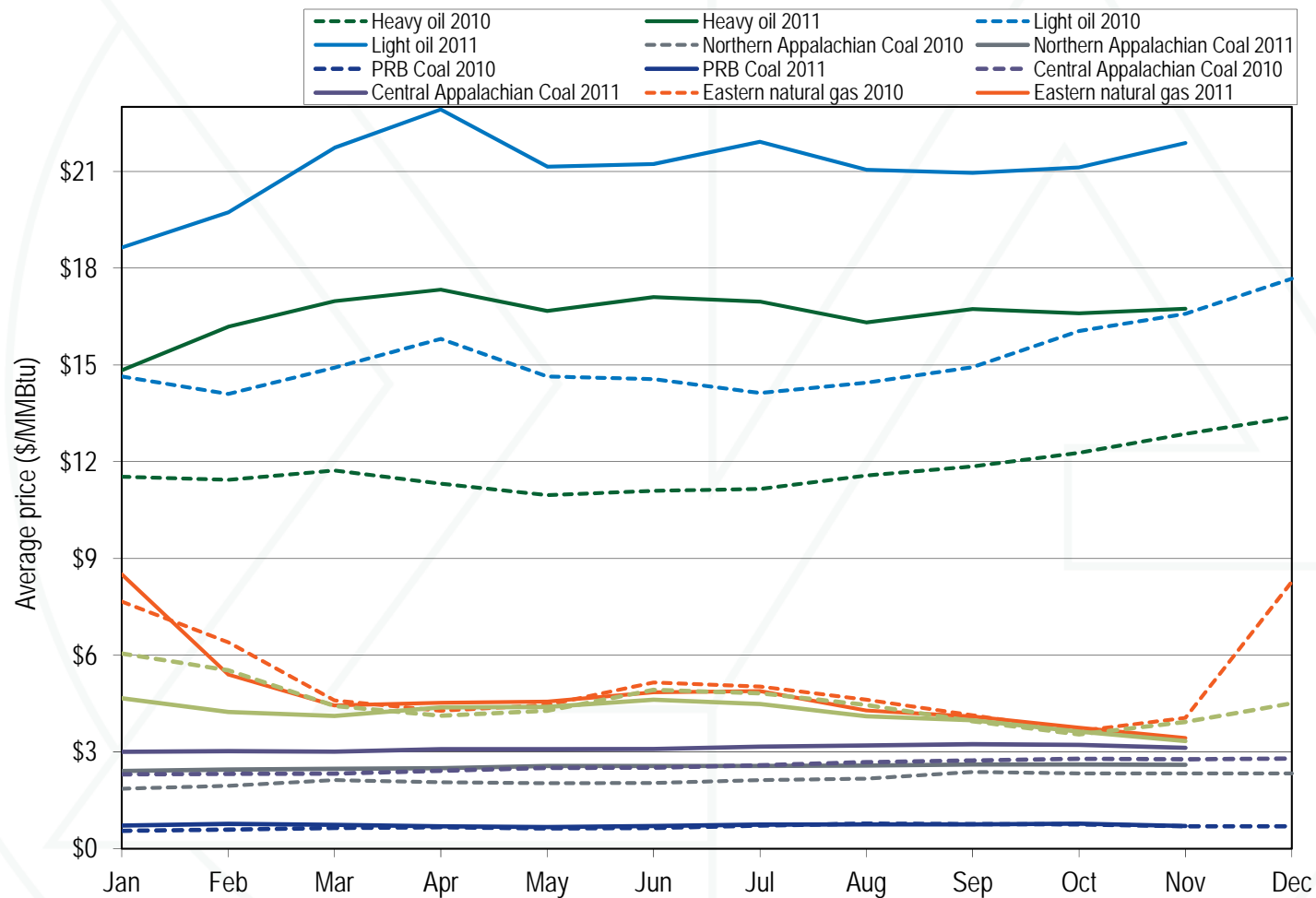
**Table 2-19 PJM real-time, load-weighted, average LMP (Dollars per MWh): January through November 1998 through 2011 (See 2010 SOM, Table 2-38)**

Jan-Nov	Real-Time, Load-Weighted, Average LMP			Year-to-Year Change		
	Average	Median	Standard Deviation	Average	Median	Standard Deviation
1998	\$24.80	\$17.90	\$40.98	NA	NA	NA
1999	\$35.49	\$19.45	\$95.52	43.1%	8.7%	133.1%
2000	\$29.09	\$19.81	\$25.90	(18.0%)	1.9%	(72.9%)
2001	\$38.06	\$26.19	\$59.53	30.8%	32.2%	129.8%
2002	\$31.31	\$23.12	\$27.20	(17.8%)	(11.7%)	(54.3%)
2003	\$41.51	\$35.31	\$25.70	32.6%	52.8%	(5.5%)
2004	\$44.42	\$40.54	\$21.14	7.0%	14.8%	(17.8%)
2005	\$61.41	\$51.02	\$36.90	38.2%	25.8%	74.6%
2006	\$54.39	\$45.41	\$38.46	(11.4%)	(11.0%)	4.2%
2007	\$61.61	\$54.89	\$37.07	13.3%	20.9%	(3.6%)
2008	\$73.03	\$61.58	\$41.82	18.5%	12.2%	12.8%
2009	\$38.60	\$33.91	\$18.13	(47.1%)	(44.9%)	(56.6%)
2010	\$47.65	\$38.60	\$28.16	23.4%	13.8%	55.3%
2011	\$47.13	\$37.33	\$34.55	(1.1%)	(3.3%)	22.7%

**Figure 2-16 PJM real-time, monthly, load-weighted, average LMP: January through November 2007 through 2011 (See 2010 SOM, Figure 2-14)**



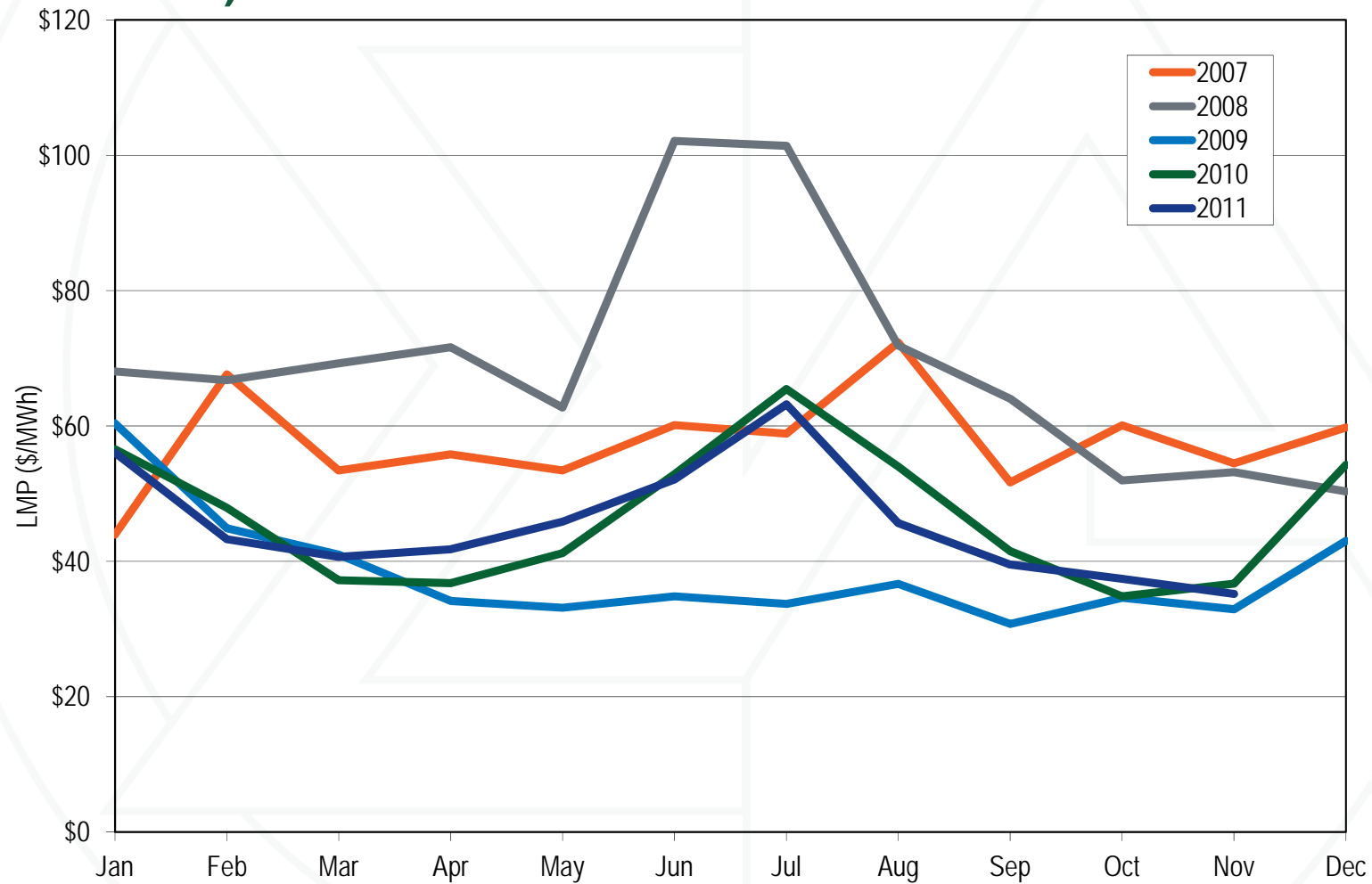
**Figure 2-17 Spot average fuel price comparison: Calendar years 2010 through November 2011 (See 2010 SOM, Table 2-15)**



**Table 2-21 PJM day-ahead, load-weighted, average LMP  
(Dollars per MWh): January through November 2000 through  
2011 (See 2010 SOM, Table 2-46)**

Jan-Nov	Day-Ahead, Load-Weighted, Average LMP			Year-to-Year Change		
	Average	Median	Standard Deviation	Average	Median	Standard Deviation
2000	\$32.18	\$25.33	\$19.29	NA	NA	NA
2001	\$37.24	\$30.11	\$38.81	15.7%	18.8%	101.2%
2002	\$31.63	\$25.71	\$21.19	(15.1%)	(14.6%)	(45.4%)
2003	\$41.73	\$38.69	\$21.62	31.9%	50.4%	2.0%
2004	\$43.22	\$42.83	\$16.61	3.6%	10.7%	(23.2%)
2005	\$60.39	\$52.73	\$30.75	39.7%	23.1%	85.2%
2006	\$52.31	\$47.69	\$26.95	(13.4%)	(9.6%)	(12.4%)
2007	\$57.70	\$55.96	\$25.29	10.3%	17.3%	(6.1%)
2008	\$72.09	\$65.22	\$33.75	24.9%	16.5%	33.4%
2009	\$38.41	\$36.23	\$14.16	(46.7%)	(44.5%)	(58.1%)
2010	\$46.98	\$41.49	\$20.39	22.3%	14.5%	44.0%
2011	\$46.29	\$40.61	\$24.81	(1.5%)	(2.1%)	21.6%

**Figure 2-19 Day-ahead, monthly, load-weighted, average LMP: January through November 2007 through 2011 (See 2010 SOM, Table 2-17)**

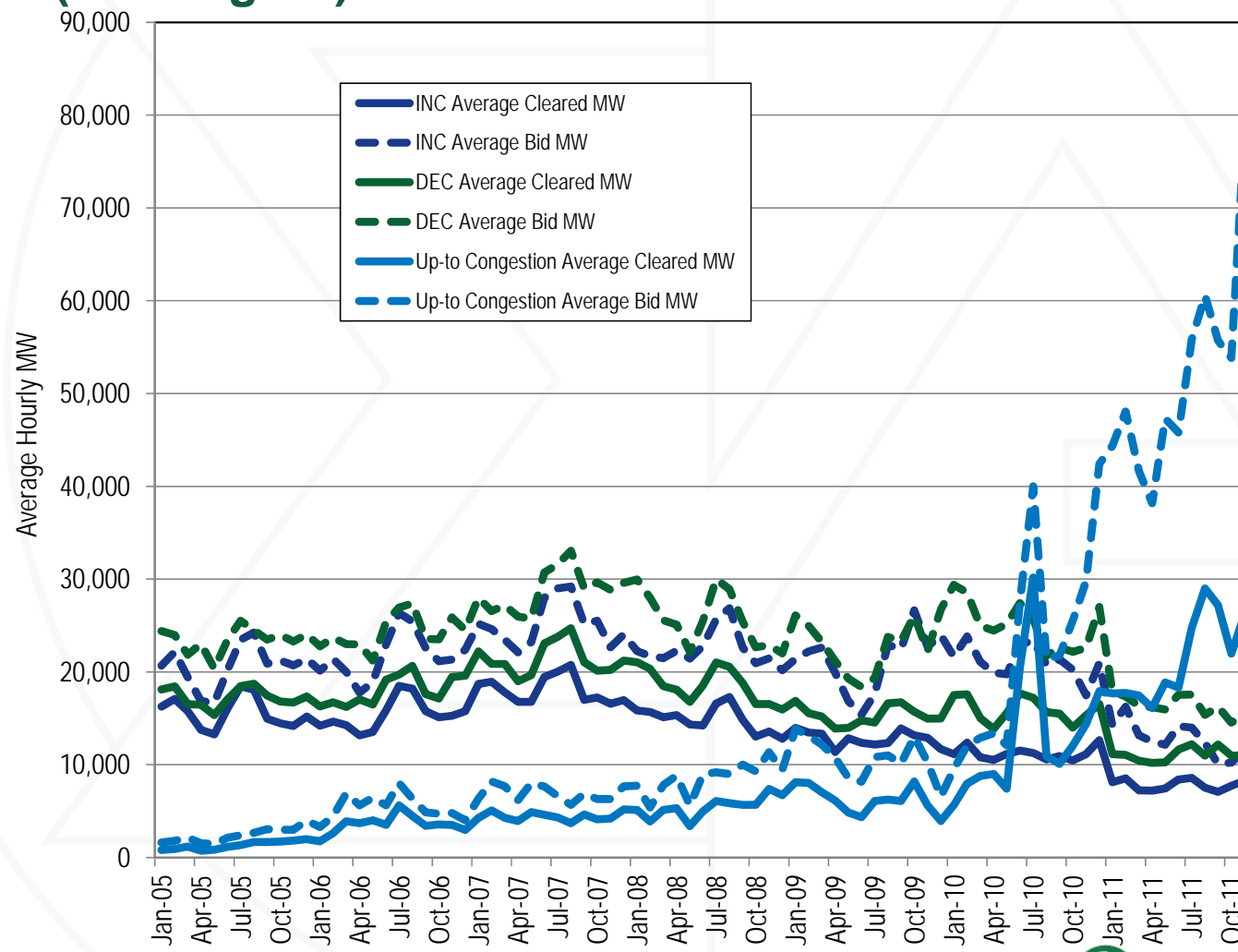




**Table 2-22 Monthly volume of cleared and submitted INCs, DEC's: January 2010 through November 2011 (See 2010 SOM, Table 2-61)**

Year	Increment Offers				Decrement Bids			
	Average Cleared MW	Average Submitted MW	Average Cleared Volume	Average Submitted Volume	Average Cleared MW	Average Submitted MW	Average Cleared Volume	Average Submitted Volume
2010 Jan	11,144	21,634	282	936	17,513	29,406	266	893
2010 Feb	12,387	23,827	387	1,122	17,602	28,542	270	883
2010 Mar	10,811	21,062	308	915	15,019	24,968	253	763
2010 Apr	10,512	19,940	289	784	13,875	24,458	246	705
2010 May	11,165	19,744	218	806	15,556	25,194	223	787
2010 Jun	11,534	22,956	254	1,496	17,689	27,422	258	1,246
2010 Jul	11,276	23,414	250	1,585	17,223	25,690	304	1,284
2010 Aug	10,567	20,751	226	1,332	15,656	21,745	327	1,140
2010 Sep	10,944	21,365	263	1,232	15,522	22,646	311	1,072
2010 Oct	10,454	20,253	234	1,129	14,011	22,154	253	1,030
2010 Nov	11,134	17,495	220	1,035	15,315	22,618	271	1,055
2010 Dec	12,656	20,957	277	1,340	16,560	26,995	274	1,266
2010 Annual	11,208	21,101	267	1,143	15,952	25,135	271	1,011
2011 Jan	8,137	14,299	218	1,077	11,135	17,917	224	963
2011 Feb	8,532	16,263	215	1,672	11,076	17,355	230	1,034
2011 Mar	7,230	13,164	201	1,059	10,435	16,343	219	982
2011 Apr	7,222	12,516	185	984	10,211	16,199	202	846
2011 May	7,443	12,161	220	835	10,250	15,956	243	800
2011 Jun	8,405	14,171	238	1,084	11,648	17,542	279	1,015
2011 Jul	8,595	14,006	185	1,234	12,196	17,567	213	1,140
2011 Aug	7,540	12,349	120	1,034	10,992	15,368	161	847
2011 Sep	7,092	10,071	114	591	12,171	16,268	147	648
2011 Oct	7,726	10,242	104	351	10,983	14,550	116	396
2011 Nov	8,290	11,554	105	382	10,936	15,427	118	416
2011 Annual	7,792	12,924	180	992	11,110	16,507	203	867

**Figure 2-20 Monthly volume of bid and cleared INC, DEC and Up-to Congestion bids (MW) January, 2005 through November, 2011 (New Figure)**



**Table 2-25 PJM virtual offers and bids by top ten aggregates (MW): January through November 2010 and 2011 (See 2010 SOM, Table 2-64)**

2010 (Jan - Nov)					2011 (Jan - Nov)				
Aggregate/Bus Name	Aggregate/Bus Type	INC MW	DEC MW	Total MW	Aggregate/Bus Name	Aggregate/Bus Type	INC MW	DEC MW	Total MW
WESTERN HUB	HUB	55,083,354	62,534,973	117,618,326	WESTERN HUB	HUB	28,042,953	32,199,376	60,242,329
N ILLINOIS HUB	HUB	10,668,350	11,210,144	21,878,494	N ILLINOIS HUB	HUB	9,132,253	14,158,700	23,290,952
AEP-DAYTON HUB	HUB	5,423,597	7,018,222	12,441,820	AEP-DAYTON HUB	HUB	5,476,826	7,322,802	12,799,628
PPL	ZONE	480,977	7,727,451	8,208,427	MISO	INTERFACE	201,269	6,574,555	6,775,824
PSEG	ZONE	2,407,133	5,108,756	7,515,889	PECO	ZONE	1,705,497	4,782,167	6,487,665
PEPCO	ZONE	5,905,364	1,153,245	7,058,610	SOUTHIMP	INTERFACE	5,645,127	0	5,645,127
BGE	ZONE	3,658,154	3,310,469	6,968,624	PPL	ZONE	260,452	3,789,743	4,050,195
JCPL	ZONE	3,926,887	2,186,370	6,113,257	COMED	ZONE	2,397,346	223,409	2,620,755
MISO	INTERFACE	1,164,158	3,458,823	4,622,981	IMO	INTERFACE	2,193,493	97,828	2,291,321
COMED	ZONE	2,037,735	2,291,318	4,329,053	GEN BUS	GEN	1,037,760	1,037,836	2,075,596
Top ten total		90,755,708	105,999,772	196,755,480			56,092,976	70,186,415	126,279,391
PJM total		169,254,631	200,094,185	369,348,816			102,420,405	131,466,025	233,886,430
Top ten total as percent of PJM total		53.6%	53.0%	53.3%			54.8%	53.4%	54.0%

**Table 2-26 PJM cleared up-to congestion import, export and wheel bids by top ten source and sink pairs (MW): January through November 2010 and 2011 (New Table)**

Imports					Exports					Wheels				
Source	Source Type	Sink	Sink Type	MW	Source	Source Type	Sink	Sink Type	MW	Source	Source Type	Sink	Sink Type	MW
MISO	INTERFACE	COMED	ZONE	3,430,215	COMED	ZONE	MISO	INTERFACE	3,216,407	SOUTHIMP	INTERFACE	SOUTHEXP	INTERFACE	3,014,673
MISO	INTERFACE	DAY	ZONE	3,130,704	DAY	ZONE	MISO	INTERFACE	2,760,350	NCMPAIMP	INTERFACE	NCMPAEXP	INTERFACE	2,129,852
MISO	INTERFACE	COOK	EHVAGG	2,839,815	BEAV DUQ UNIT1	AGGREGATE	MICHFE	INTERFACE	2,429,200	NORTHWEST	INTERFACE	NIPSCO	INTERFACE	790,017
MISO	INTERFACE	112 WILTON	EHVAGG	2,445,944	ROCKPORT	EHVAGG	MISO	INTERFACE	1,836,020	NORTHWEST	INTERFACE	SOUTHWEST	AGGREGATE	605,864
MISO	INTERFACE	AEP-DAYTON HUB	HUB	2,146,054	23 COLLINS	EHVAGG	MISO	INTERFACE	1,610,598	MISO	INTERFACE	OVEC	INTERFACE	204,084
NYIS	INTERFACE	PSEG	ZONE	1,658,148	COOK	EHVAGG	MISO	INTERFACE	1,331,079	NORTHWEST	INTERFACE	MISO	INTERFACE	181,148
NORTHWEST	INTERFACE	N ILLINOIS HUB	HUB	1,138,062	MT STORM	EHVAGG	MISO	INTERFACE	1,076,845	NORTHWEST	INTERFACE	IMO	INTERFACE	138,232
MISO	INTERFACE	GREENLAND GAP	EHVAGG	941,233	21 KINCA ATR24304	AGGREGATE	MISO	INTERFACE	933,726	SOUTHEAST	AGGREGATE	CPLEEXP	INTERFACE	124,560
NYIS	INTERFACE	MARION	AGGREGATE	836,029	COOK	EHVAGG	MICHFE	INTERFACE	680,868	OVEC	INTERFACE	MISO	INTERFACE	118,225
MISO	INTERFACE	ROCKPORT	EHVAGG	763,071	QUAD CITIES 2	AGGREGATE	MISO	INTERFACE	659,472	OVEC	INTERFACE	SOUTHEXP	INTERFACE	92,526
Top ten total				19,329,275					16,534,565					7,399,181
PJM total				47,173,487					44,005,907					8,872,865
Top ten total as percent of PJM total				41.0%					37.6%					83.4%
Imports					Exports					Wheels				
Source	Source Type	Sink	Sink Type	MW	Source	Source Type	Sink	Sink Type	MW	Source	Source Type	Sink	Sink Type	MW
MISO	INTERFACE	N ILLINOIS HUB	HUB	3,371,070	LUMBERTON	AGGREGATE	SOUTHEAST	AGGREGATE	6,076,609	CPLIMP	INTERFACE	NCMPAEXP	INTERFACE	397,775
MISO	INTERFACE	112 WILTON	EHVAGG	2,316,337	WESTERN HUB	HUB	MISO	INTERFACE	3,602,121	CPLIMP	INTERFACE	DUKEXP	INTERFACE	287,643
NORTHWEST	INTERFACE	ZION 1	AGGREGATE	2,130,157	23 COLLINS	EHVAGG	MISO	INTERFACE	1,580,704	NORTHWEST	INTERFACE	MISO	INTERFACE	220,031
OVEC	INTERFACE	CONESVILLE 6	AGGREGATE	2,036,144	SULLIVAN-AEP	EHVAGG	OVEC	INTERFACE	1,490,917	NORTHWEST	INTERFACE	SOUTHWEST	AGGREGATE	204,835
NYIS	INTERFACE	MARION	AGGREGATE	1,530,617	FE GEN	AGGREGATE	SOUTHWEST	AGGREGATE	1,324,704	SOUTHWEST	AGGREGATE	OVEC	INTERFACE	145,252
OVEC	INTERFACE	CONESVILLE 4	AGGREGATE	1,170,328	21 KINCA ATR24304	AGGREGATE	SOUTHWEST	AGGREGATE	1,143,867	NYIS	INTERFACE	MICHFE	INTERFACE	115,574
OVEC	INTERFACE	CONESVILLE 5	AGGREGATE	1,163,179	BELMONT	EHVAGG	OVEC	INTERFACE	978,057	MISO	INTERFACE	NIPSCO	INTERFACE	110,104
NYIS	INTERFACE	PSEG	ZONE	1,117,782	FOWLER 34.5 KV FWLR1AWF	AGGREGATE	OVEC	INTERFACE	869,372	NIPSCO	INTERFACE	OVEC	INTERFACE	85,407
OVEC	INTERFACE	JEFFERSON	EHVAGG	1,035,425	RECO	ZONE	IMO	INTERFACE	835,596	NIPSCO	INTERFACE	MISO	INTERFACE	70,297
SOUTHEAST	AGGREGATE	CRVWOOD	AGGREGATE	974,486	BEAV DUQ UNIT1	AGGREGATE	MICHFE	INTERFACE	742,722	NCMPAIMP	INTERFACE	OVEC	INTERFACE	62,459
Top ten total				16,845,525					18,644,668					1,699,375
PJM total				93,048,072					75,577,869					3,071,504
Top ten total as percent of PJM total				18.1%					24.7%					55.3%



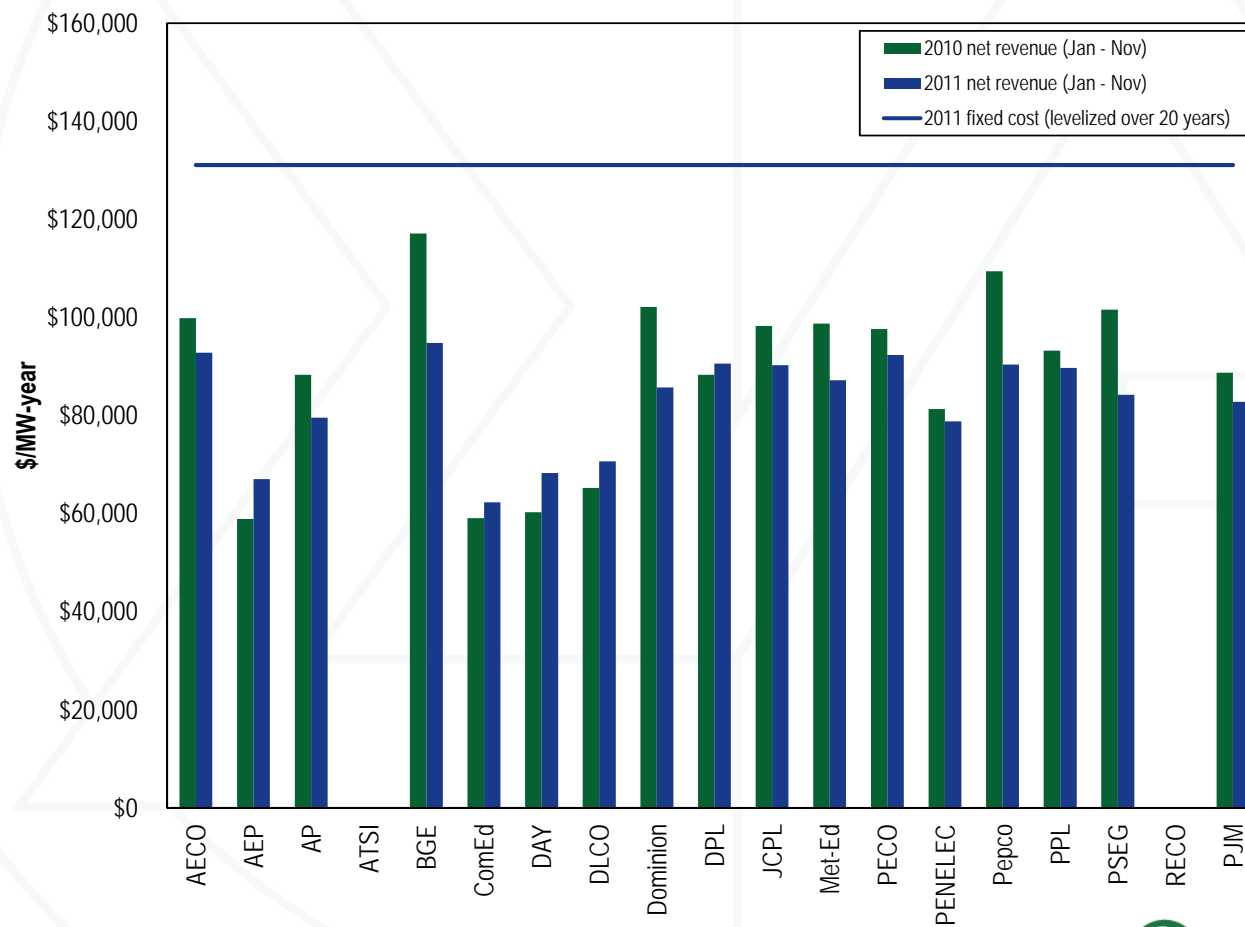
**Table 2-30 18 Monthly average percentage of real-time self-supply load, bilateral-supply load and spot-supply load based on parent companies: Calendar years 2010 through November 2011 (See 2010 SOM, Table 2-70)**

	2010			2011			Difference in Percentage Points		
	Bilateral Contract	Spot	Self-Supply	Bilateral Contract	Spot	Self-Supply	Bilateral Contract	Spot	Self-Supply
Jan	12.0%	17.4%	70.5%	9.3%	28.8%	61.9%	(2.7%)	11.4%	(8.6%)
Feb	13.5%	18.1%	68.4%	10.9%	27.9%	61.2%	(2.6%)	9.8%	(7.2%)
Mar	12.8%	18.2%	68.9%	10.4%	29.3%	60.3%	(2.5%)	11.1%	(8.6%)
Apr	12.6%	19.3%	68.1%	10.7%	25.3%	64.1%	(1.9%)	6.0%	(4.1%)
May	11.6%	19.9%	68.5%	11.1%	25.7%	63.3%	(0.4%)	5.8%	(5.2%)
Jun	10.4%	19.0%	70.5%	10.5%	25.4%	64.1%	0.1%	6.4%	(6.5%)
Jul	9.8%	19.5%	70.7%	9.5%	24.7%	65.8%	(0.3%)	5.2%	(4.9%)
Aug	10.6%	20.5%	68.9%	10.3%	24.6%	65.1%	(0.3%)	4.1%	(3.8%)
Sep	12.0%	22.3%	65.7%	10.9%	26.7%	62.4%	(1.1%)	4.4%	(3.3%)
Oct	13.0%	25.1%	61.9%	12.2%	29.8%	58.0%	(0.8%)	4.7%	(3.9%)
Nov	12.8%	22.7%	64.5%	10.7%	28.3%	61.1%	(2.1%)	5.5%	(3.4%)
Dec	11.5%	21.8%	66.7%						
Annual	11.8%	20.2%	68.0%	10.3%	26.4%	63.3%	(1.4%)	6.2%	(4.7%)

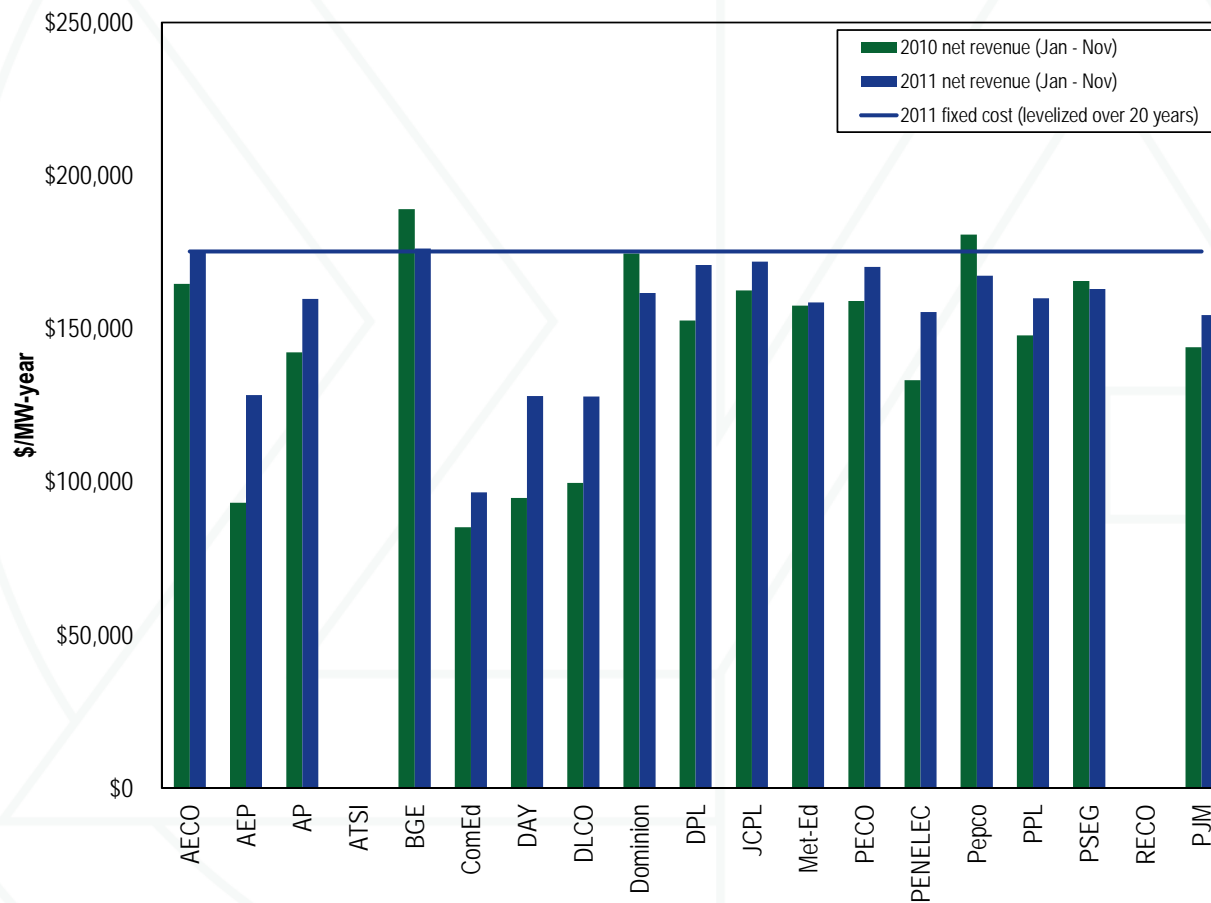
**Table 2-31 Monthly average percentage of day-ahead self-supply load, bilateral supply load, and spot-supply load based on parent companies: Calendar years 2010 through November 2011 (See 2010 SOM, Table 2-71)**

	2010			2011			Difference in Percentage Points		
	Bilateral Contract	Spot	Self-Supply	Bilateral Contract	Spot	Self-Supply	Bilateral Contract	Spot	Self-Supply
Jan	4.6%	17.8%	77.6%	4.7%	23.7%	71.6%	0.1%	5.9%	(6.0%)
Feb	4.6%	18.4%	77.0%	5.4%	23.7%	70.9%	0.8%	5.3%	(6.1%)
Mar	4.8%	18.4%	76.8%	5.8%	24.3%	70.0%	1.0%	5.8%	(6.8%)
Apr	4.9%	19.1%	76.0%	6.1%	23.8%	70.1%	1.2%	4.7%	(5.9%)
May	6.6%	19.0%	74.4%	6.0%	24.0%	70.0%	(0.6%)	5.1%	(4.5%)
Jun	4.6%	18.6%	76.7%	6.0%	25.3%	68.8%	1.3%	6.6%	(7.9%)
Jul	4.7%	18.6%	76.6%	5.5%	23.4%	71.2%	0.7%	4.7%	(5.5%)
Aug	4.8%	19.3%	75.9%	5.7%	24.1%	70.1%	1.0%	4.8%	(5.8%)
Sep	4.6%	20.7%	74.8%	5.8%	25.2%	69.0%	1.2%	4.5%	(5.8%)
Oct	4.9%	22.7%	72.4%	5.7%	25.7%	68.5%	0.9%	3.1%	(3.9%)
Nov	4.9%	20.7%	74.4%	6.4%	25.3%	68.3%	1.5%	4.6%	(6.1%)
Dec	4.6%	19.2%	76.2%						
Annual	4.9%	19.3%	75.8%	5.7%	24.3%	70.0%	0.9%	5.0%	(5.9%)

**Figure 3-2 New entrant CT zonal real-time January through November 2011 net revenue by market and 20-year levelized fixed cost as of 2011 (Dollars per installed MW-year) (See 2010 SOM, Figure 3-4)**

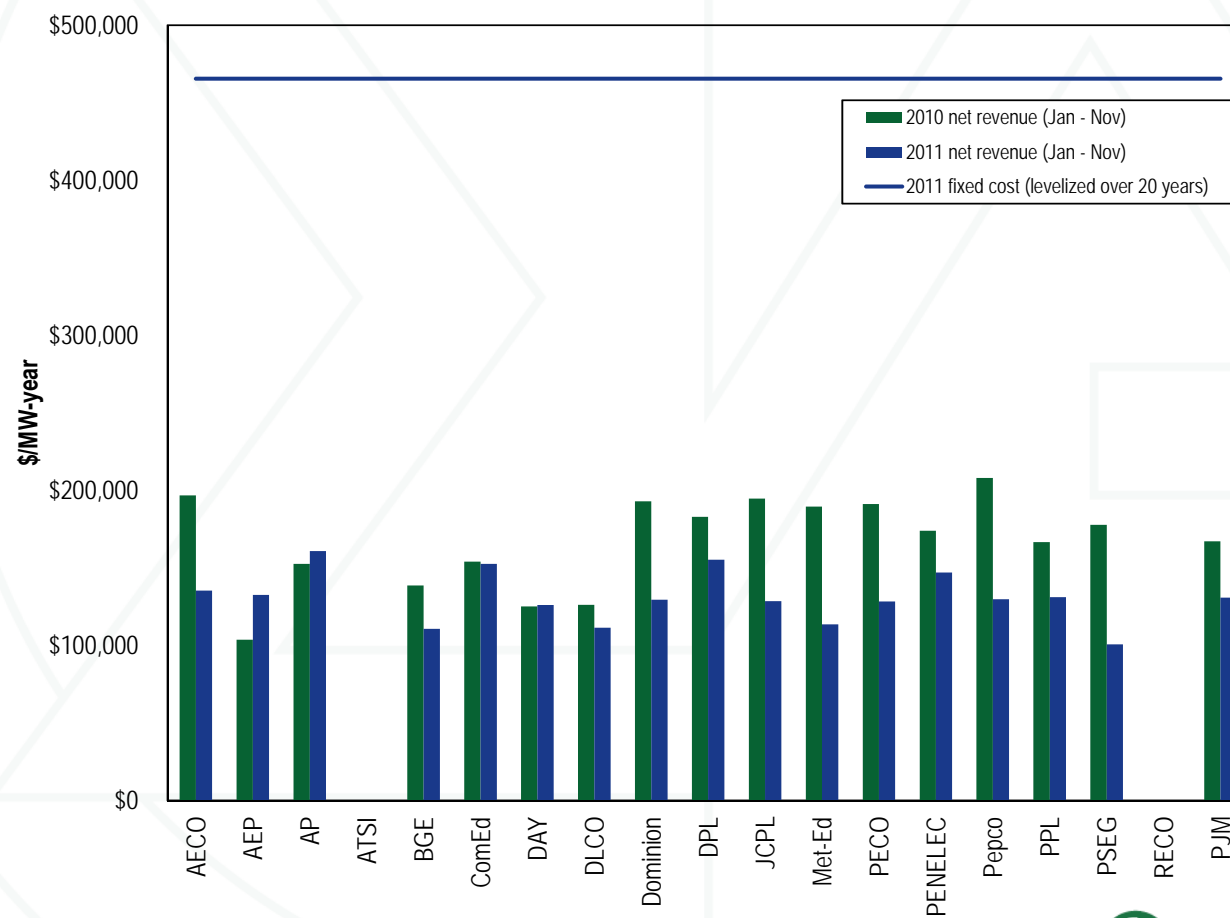


**Figure 3-4 New entrant CC zonal real-time January through November 2011 net revenue by market and 20-year levelized fixed cost as of 2011 (Dollars per installed MW-year) (See 2010 SOM, Figure 3-7)**





**Figure 3-6 New entrant CP zonal real-time January through November 2011 net revenue by market and 20-year levelized fixed cost as of 2011 (Dollars per installed MW-year) (See 2010 SOM, Figure 3-10)**



**Table 3-21 PJM installed capacity (By fuel source): January 1, May 31, June 1, and November 30, 2011 (See 2010 SOM, Table 3-42)**

	1-Jan-11		31-May-11		1-Jun-11		30-Nov-11	
	MW	Percent	MW	Percent	MW	Percent	MW	Percent
Coal	67,986.0	40.9%	67,879.4	40.7%	76,968.3	42.4%	75,190.4	41.9%
Gas	47,736.6	28.7%	47,831.1	28.7%	50,729.0	28.0%	50,529.3	28.2%
Hydroelectric	7,954.5	4.8%	7,991.8	4.8%	8,029.6	4.4%	8,047.0	4.5%
Nuclear	30,552.2	18.4%	30,822.2	18.5%	33,145.6	18.3%	33,145.6	18.5%
Oil	10,949.5	6.6%	10,854.1	6.5%	11,212.3	6.2%	11,217.3	6.2%
Solar	0.0	0.0%	1.9	0.0%	15.3	0.0%	15.3	0.0%
Solid waste	680.1	0.4%	680.1	0.4%	705.1	0.4%	705.1	0.4%
Wind	551.3	0.3%	551.3	0.3%	633.5	0.3%	649.5	0.4%
Total	166,410.2	100.0%	166,611.9	100.0%	181,438.7	100.0%	179,499.5	100.0%

**Table 3-22 PJM generation (By fuel source (GWh)): January through November 2010 and 2011 (See 2010 SOM, Table 3-43)**

	2010 (Jan-Nov)		2011 (Jan-Nov)		Change in Output
	GWh	Percent	GWh	Percent	
Coal	330,109.6	48.7%	332,544.6	47.4%	0.7%
Standard Coal	318,742.0	47.1%	321,284.8	45.8%	0.0%
Waste Coal	11,367.6	1.7%	11,259.8	1.6%	0.0%
Nuclear	231,159.1	34.1%	237,707.6	33.9%	2.8%
Gas	84,961.5	12.5%	99,691.2	14.2%	17.3%
Natural Gas	83,402.5	12.3%	97,981.1	14.0%	17.5%
Landfill Gas	1,558.6	0.2%	1,709.5	0.2%	9.7%
Biomass Gas	0.4	0.0%	0.5	0.0%	16.9%
Hydroelectric	13,157.1	1.9%	13,861.8	2.0%	5.4%
Wind	8,502.1	1.3%	10,378.6	1.5%	22.1%
Waste	6,131.3	0.9%	5,083.7	0.7%	(17.1%)
Solid Waste	4,596.5	0.7%	4,052.9	0.6%	(11.8%)
Miscellaneous	1,534.9	0.2%	1,030.8	0.1%	(32.8%)
Oil	3,151.9	0.5%	2,120.8	0.3%	(32.7%)
Heavy Oil	2,625.6	0.4%	1,744.7	0.2%	(33.6%)
Light Oil	473.9	0.1%	346.6	0.0%	(26.8%)
Diesel	29.3	0.0%	16.6	0.0%	(43.2%)
Kerosene	23.1	0.0%	12.8	0.0%	(44.7%)
Jet Oil	0.1	0.0%	0.1	0.0%	(5.2%)
Solar	5.0	0.0%	49.6	0.0%	896.7%
Battery	0.3	0.0%	0.2	0.0%	(32.4%)
Total	677,177.8	100.0%	701,438.1	100.0%	3.6%

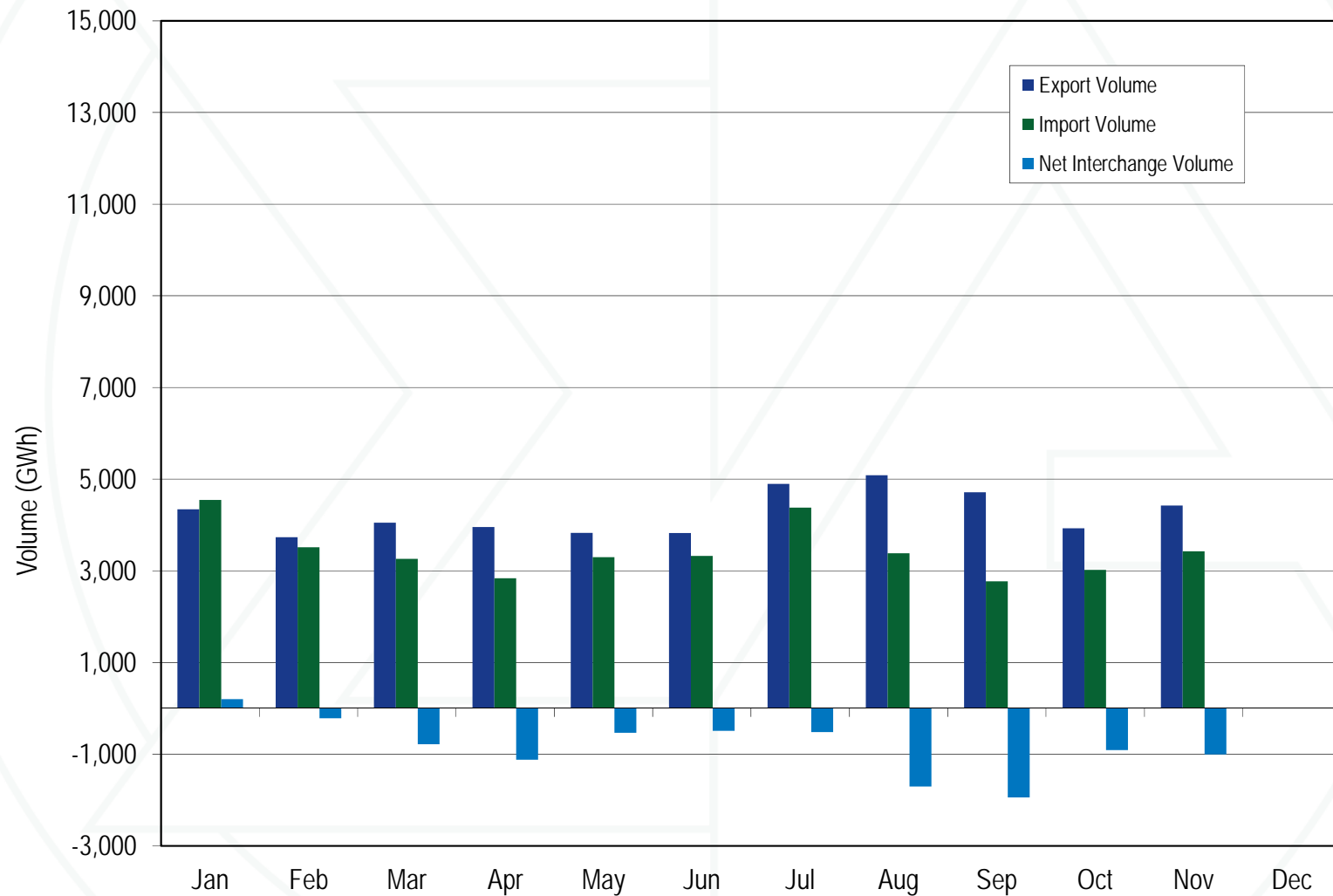
**Table 3-23 PJM capacity factor (By unit type (GWh)); January through November 2010 and 2011 (New table)**

Unit Type	2010 (Jan-Nov)		2011 (Jan-Nov)	
	Generation (GWh)	Capacity Factor	Generation (GWh)	Capacity Factor
Battery	0.3	3.6%	0.2	0.4%
Combined Cycle	73,211.6	28.8%	90,261.5	46.2%
Combustion Turbine	7,911.3	3.5%	6,459.8	2.8%
Diesel	781.7	20.3%	650.4	16.3%
Diesel (Landfill gas)	624.1	40.8%	731.6	42.8%
Nuclear	231,159.1	91.6%	237,707.6	90.8%
Pumped Storage Hydro	7,223.4	16.4%	6,425.4	14.6%
Run of River Hydro	5,933.7	31.6%	7,436.4	39.6%
Solar	5.0	14.9%	49.6	12.6%
Steam	341,825.6	53.5%	341,337.0	50.2%
Wind	8,430.1	26.2%	10,378.6	28.6%
Total	677,105.8	48.6%	701,438.1	47.6%

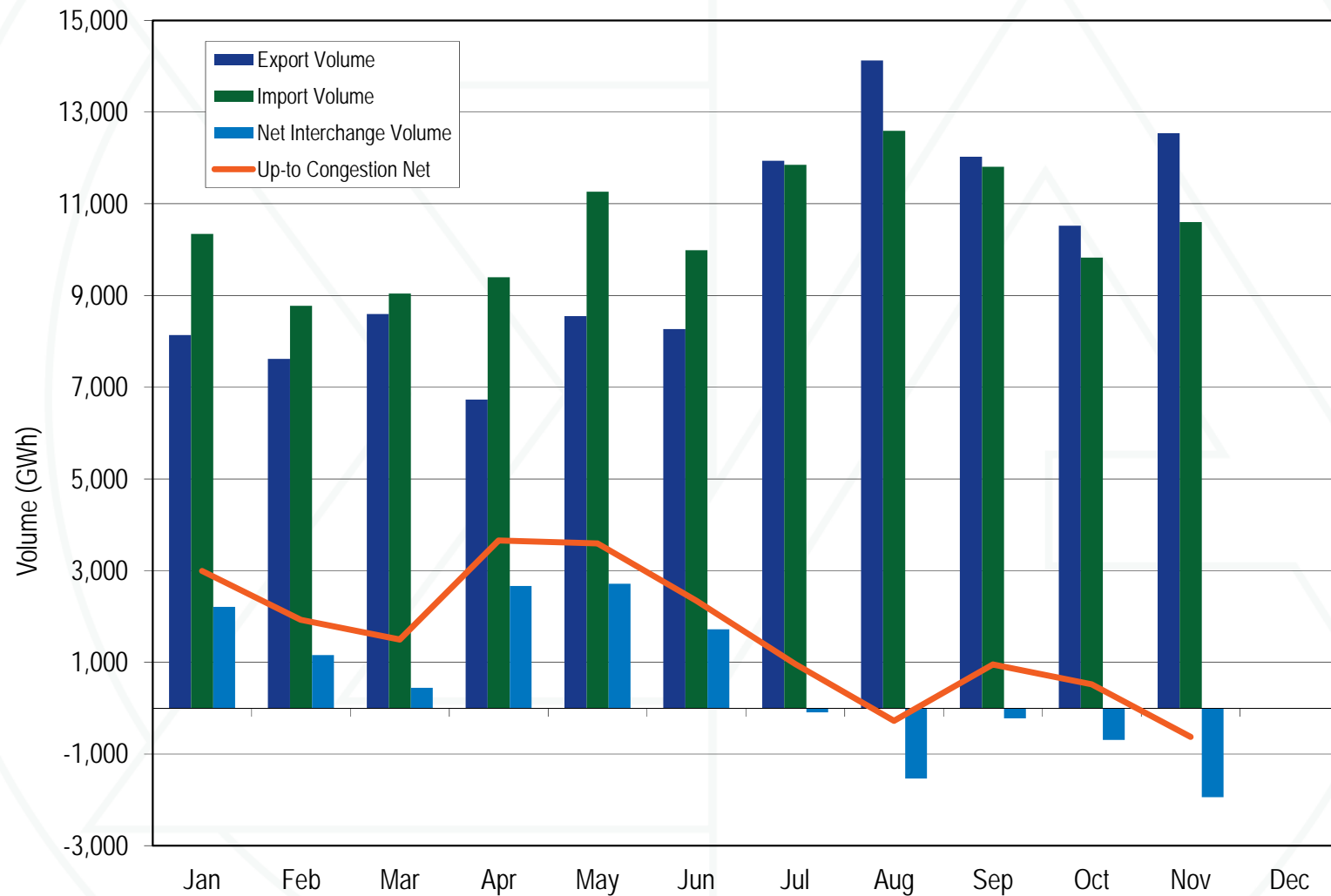
**Table 3-50 Monthly operating reserve charges: Calendar years 2010 and 2011 (See SOM 2010, Table 3-72)**

	2010 Charges				2011 Charges			
	Day-Ahead	Synchronous Condensing	Balancing	Total	Day-Ahead	Synchronous Condensing	Balancing	Total
Jan	\$10,281,351	\$50,022	\$40,499,267	\$50,830,640	\$12,373,099	\$110,095	\$49,318,566	\$61,801,760
Feb	\$11,425,494	\$14,715	\$22,452,901	\$33,893,110	\$8,940,203	\$139,287	\$26,545,703	\$35,625,193
Mar	\$8,836,886	\$122,817	\$17,209,745	\$26,169,448	\$6,837,719	\$66,032	\$24,018,534	\$30,922,285
Apr	\$7,633,141	\$93,253	\$22,993,208	\$30,719,602	\$4,405,102	\$13,011	\$18,768,882	\$23,186,994
May	\$5,127,307	\$131,600	\$39,255,902	\$44,514,809	\$7,064,934	\$39,417	\$46,249,730	\$53,354,081
Jun	\$3,511,264	\$33,923	\$57,159,612	\$60,704,798	\$8,303,391	\$9,056	\$62,062,766	\$70,375,214
Jul	\$4,601,788	\$88,136	\$63,395,174	\$68,085,098	\$4,993,311	\$238,127	\$106,569,842	\$111,801,280
Aug	\$3,622,670	\$66,535	\$41,720,672	\$45,409,877	\$8,360,392	\$104,982	\$55,242,614	\$63,707,987
Sep	\$8,433,892	\$27,971	\$40,865,602	\$49,327,464	\$6,249,240	\$40,878	\$36,626,146	\$42,916,265
Oct	\$7,719,744	\$1,543	\$30,645,840	\$38,367,127	\$5,133,837	\$0	\$20,343,870	\$25,477,707
Nov	\$6,556,715	\$29,674	\$21,001,178	\$27,587,566	\$7,063,847	\$0	\$19,217,638	\$26,281,485
Dec	\$12,951,879	\$59,954	\$83,752,366	\$96,764,199				
Total through Nov	\$77,750,253	\$660,188	\$397,199,099	\$475,609,540	\$79,725,075	\$760,886	\$464,964,290	\$545,450,251
Share of Charges	16.3%	0.1%	83.5%	100.0%	14.6%	0.1%	85.2%	100.0%

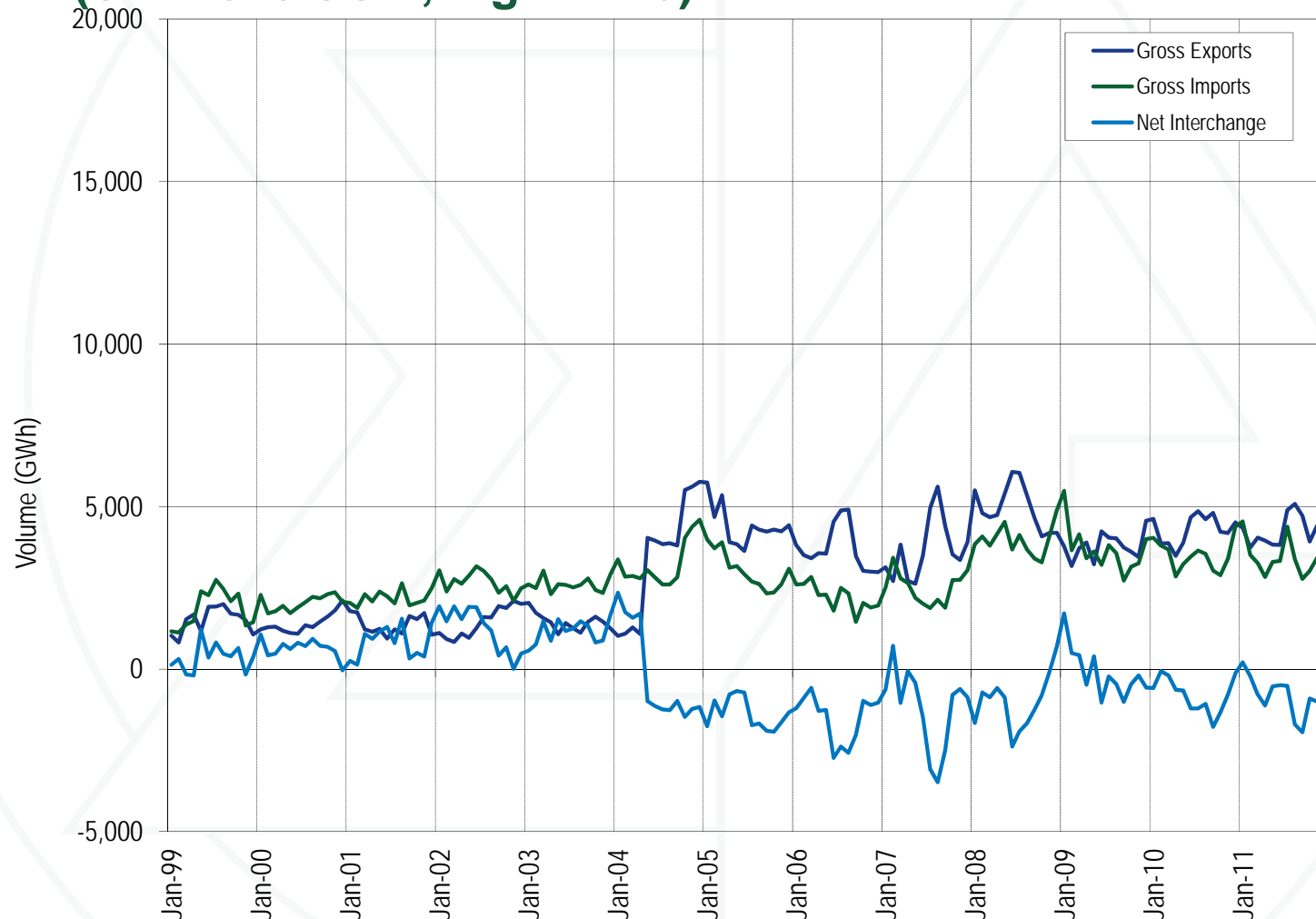
**Figure 4-1 PJM real-time scheduled imports and exports:  
January through November 2011 (See 2010 SOM, Figure 4-1)**



**Figure 4-2 PJM day-ahead scheduled imports and exports:  
January through November 2011 (See 2010 SOM, Figure 4-2)**

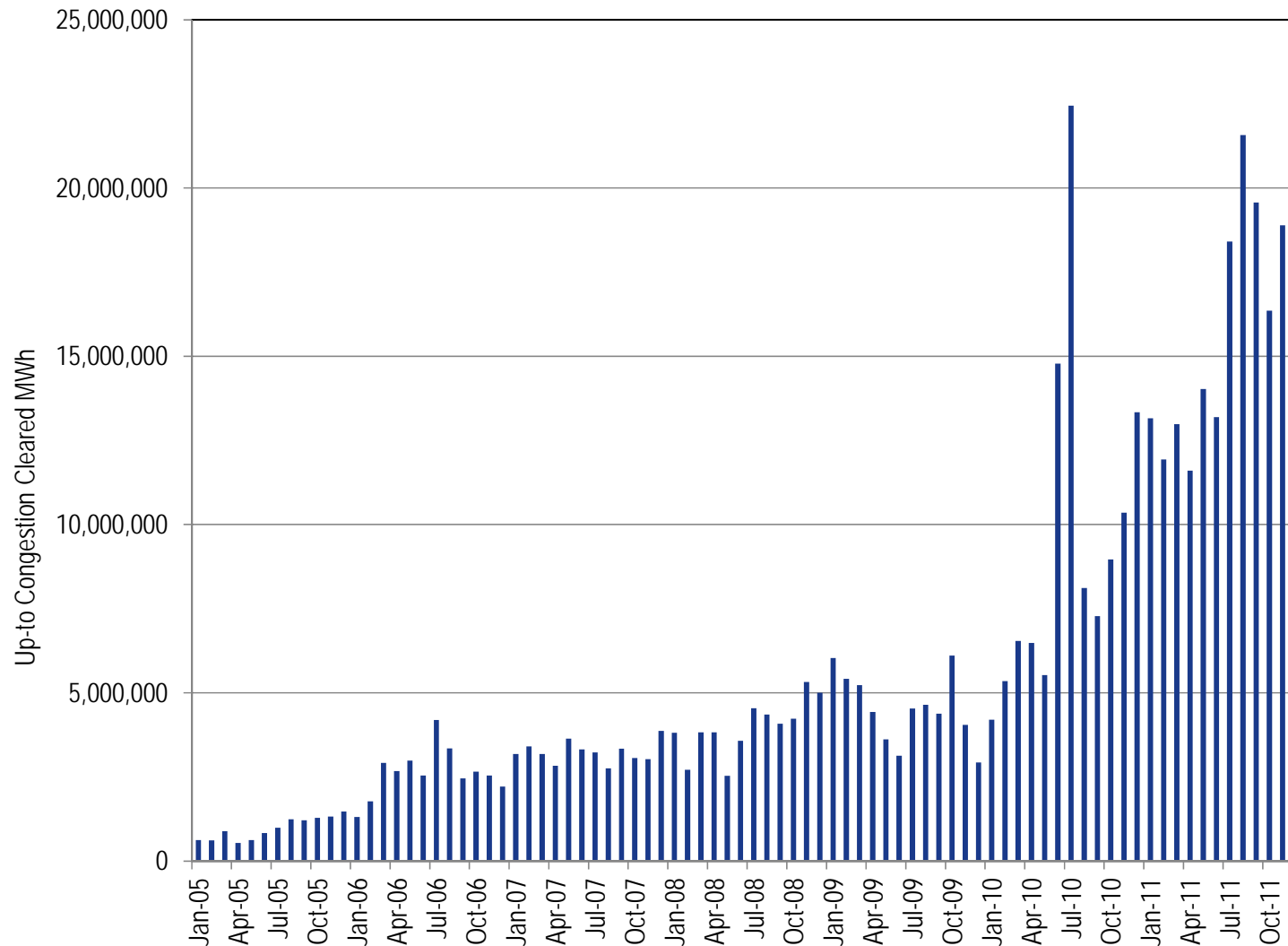


**Figure 4-3 PJM real-time scheduled import and export transaction monthly volume history: 1999 through November 2011 (See 2010 SOM, Figure 4-3)**





**Figure 4-17 Monthly up-to congestion cleared bids in MWh:  
January 2006 through November 2011 (See 2010 SOM, Figure 4-19)**



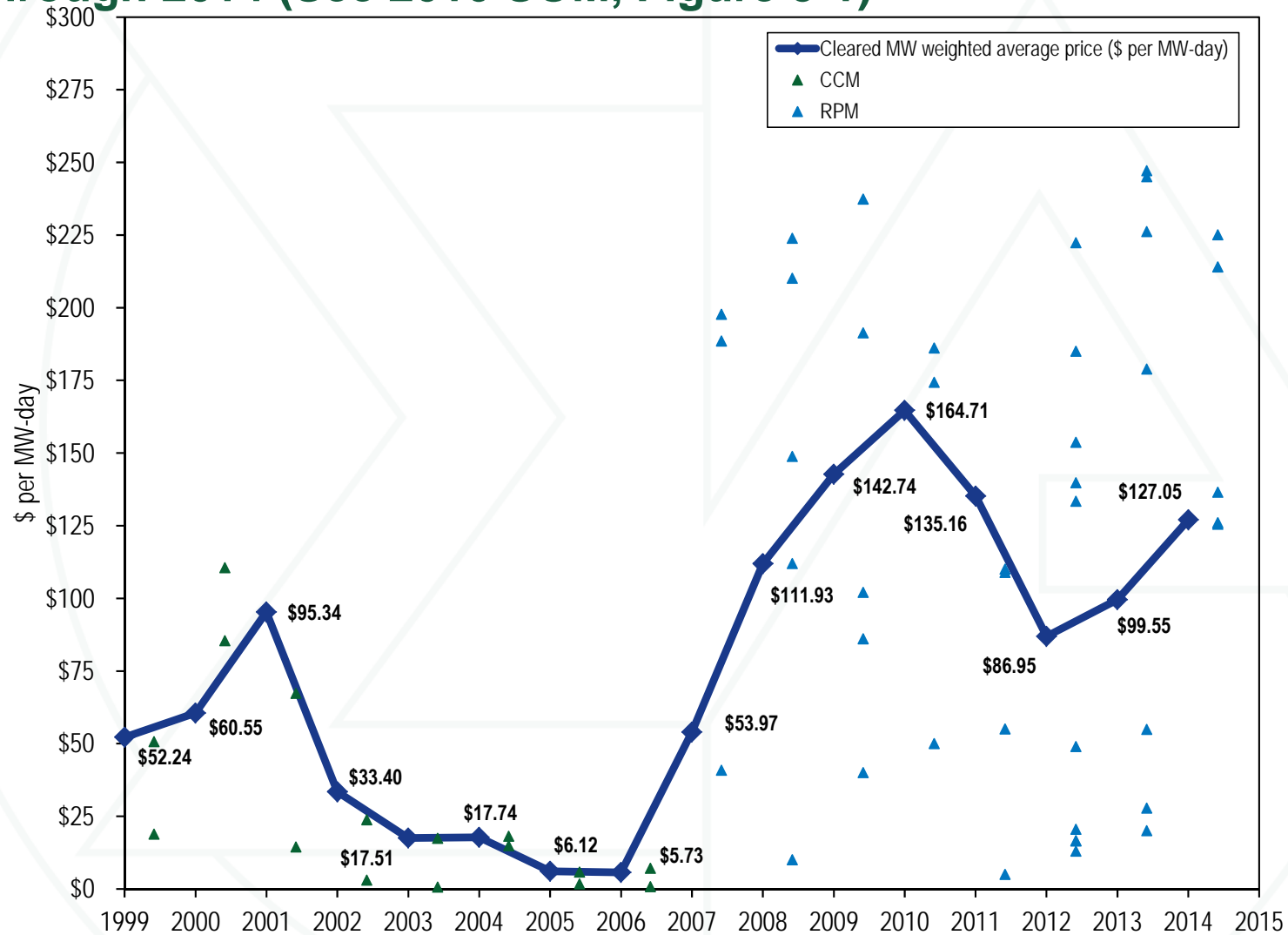
**Table 5-2 RPM Related MMU Reports, 2011 (New Table)**

Date	Name
January 6, 2011	Analysis of the 2011/2012 RPM First Incremental Auction <a href="http://www.monitoringanalytics.com/reports/Reports/2011/Analysis_of_2011_2012_RPM_First_Incremental_Auction_20110106.pdf">http://www.monitoringanalytics.com/reports/Reports/2011/Analysis_of_2011_2012_RPM_First_Incremental_Auction_20110106.pdf</a>
January 6, 2011	Impact of New Jersey Assembly Bill 3442 on the PJM Capacity Market <a href="http://www.monitoringanalytics.com/reports/Reports/2011/NJ_Assembly_3442_Impact_on_PJM_Capacity_Market.pdf">http://www.monitoringanalytics.com/reports/Reports/2011/NJ_Assembly_3442_Impact_on_PJM_Capacity_Market.pdf</a>
January 14, 2011	Analysis of the 2011/2012 and 2012/2013 ATSI Integration Auctions <a href="http://www.monitoringanalytics.com/reports/Reports/2011/Analysis_of_2011_2012_and_2012_2013_ATSI_Integration_Auctions_20110114.pdf">http://www.monitoringanalytics.com/reports/Reports/2011/Analysis_of_2011_2012_and_2012_2013_ATSI_Integration_Auctions_20110114.pdf</a>
January 28, 2011	Impact of Maryland PSC's Proposed RFP on the PJM Capacity Market <a href="http://www.monitoringanalytics.com/reports/Reports/2011/IMM_Comments_to_MDPSC_Case_No_9214_20110128.pdf">http://www.monitoringanalytics.com/reports/Reports/2011/IMM_Comments_to_MDPSC_Case_No_9214_20110128.pdf</a>
February 1, 2011	Preliminary Market Structure Screen Results for the 2014/2015 RPM Base Residual Auction <a href="http://www.monitoringanalytics.com/reports/Reports/2011/IMM_Comments_to_MDPSC_Case_No_9214_20110128.pdf">http://www.monitoringanalytics.com/reports/Reports/2011/IMM_Comments_to_MDPSC_Case_No_9214_20110128.pdf</a>
March 4, 2011	IMM Comments re MOPR Filing Nos. EL11-20, ER11-2875 <a href="http://www.monitoringanalytics.com/reports/Reports/2011/IMM_Comments_EL11-20-000_ER11-2875-000_20110304.pdf">http://www.monitoringanalytics.com/reports/Reports/2011/IMM_Comments_EL11-20-000_ER11-2875-000_20110304.pdf</a>
March 21, 2011	IMM Answer and Motion for Leave to Answer re: MOPR Filing Nos. EL11-20, ER11-2875 <a href="http://www.monitoringanalytics.com/reports/Reports/2011/IMM_Answer_and_Motion_for_Leave_to_Answer_EL11-20-000_ER11-2875-000_20110321.pdf">http://www.monitoringanalytics.com/reports/Reports/2011/IMM_Answer_and_Motion_for_Leave_to_Answer_EL11-20-000_ER11-2875-000_20110321.pdf</a>
June 2, 2011	IMM Protest re: PJM Filing in Response to FERC Order Regarding MOPR No. ER11-2875-002 <a href="http://www.monitoringanalytics.com/reports/Reports/2011/IMM_Protest_ER11-2875-002.pdf">http://www.monitoringanalytics.com/reports/Reports/2011/IMM_Protest_ER11-2875-002.pdf</a>
June 17, 2011	IMM Comments re: In the Matter of the Board's Investigation of Capacity Procurement and Transmission Planning No. EO11050309 <a href="http://www.monitoringanalytics.com/reports/Reports/2011/IMM_Comments_NJ_EO_11050309_20110617.pdf">http://www.monitoringanalytics.com/reports/Reports/2011/IMM_Comments_NJ_EO_11050309_20110617.pdf</a>
June 27, 2011	Units Subject to RPM Must Offer Obligation <a href="http://www.monitoringanalytics.com/reports/Reports/2011/IMM_Units_Subject_to_RPM_Must_Offer_Obligation_20110627.pdf">http://www.monitoringanalytics.com/reports/Reports/2011/IMM_Units_Subject_to_RPM_Must_Offer_Obligation_20110627.pdf</a>
August 29, 2011	Post Technical Conference Comments re: PJM's Minimum Offer price Rule Nos. ER11-2875-001. 002 and EL11-20-001 <a href="http://www.monitoringanalytics.com/reports/Reports/2011/IMM_Post_Technical_Conference_Comments_ER11-2875_20110829.pdf">http://www.monitoringanalytics.com/reports/Reports/2011/IMM_Post_Technical_Conference_Comments_ER11-2875_20110829.pdf</a>
September 15, 2011	IMM Motion for Leave to Answer and Answer re: MMU Role in MOPR Review No. ER11-2875-002 <a href="http://www.monitoringanalytics.com/reports/Reports/2011/IMM_Motion_for_Leave_to_Answer_and_Answer_ER11-2875-002_20110915.pdf">http://www.monitoringanalytics.com/reports/Reports/2011/IMM_Motion_for_Leave_to_Answer_and_Answer_ER11-2875-002_20110915.pdf</a>

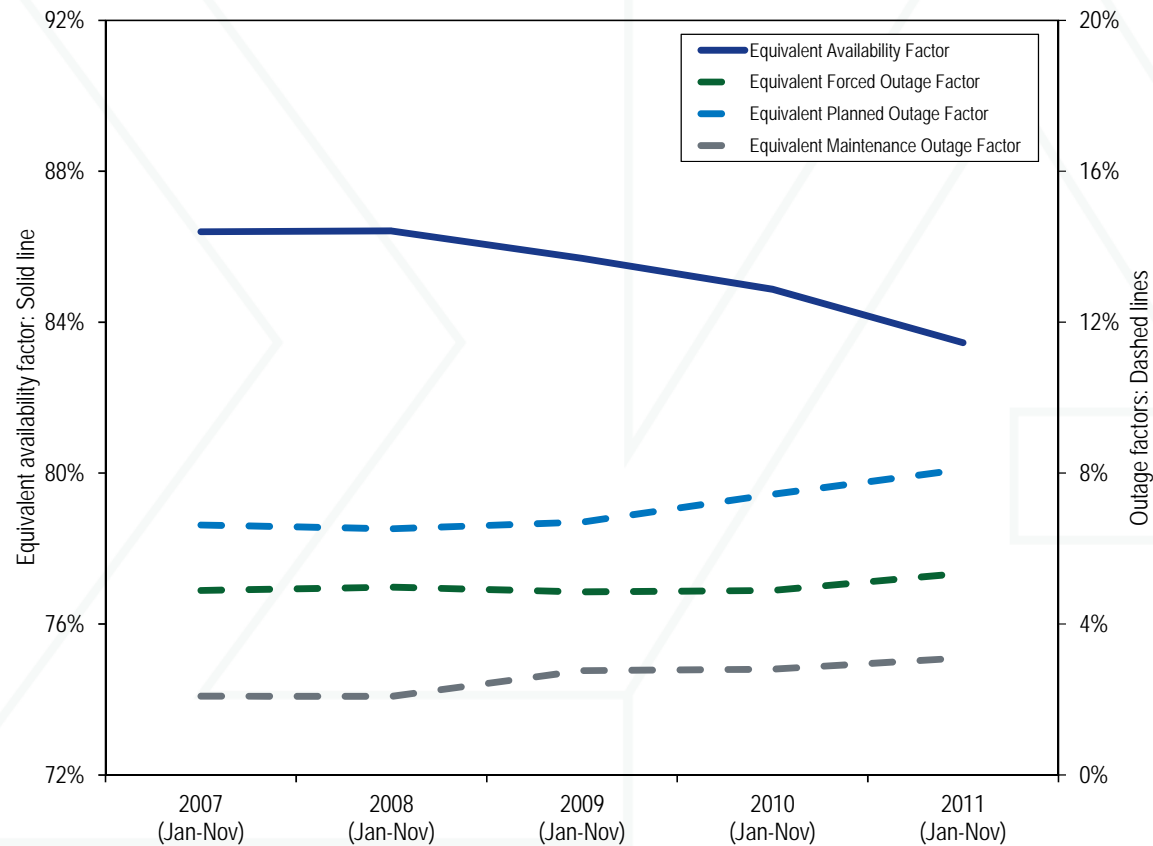
**Table 5-9 Capacity prices: 2007/2008 through 2014/2015 RPM Auctions (See 2010 SOM, Table 5-14)**

Product Type	RPM Clearing Price (\$ per MW-day)							
	RTO	MAAC	APS	EMAAC	SWMAAC	DPL South	PSEG North	Pepco
2007/2008 BRA	\$40.80	\$40.80	\$40.80	\$197.67	\$188.54	\$197.67	\$197.67	\$188.54
2008/2009 BRA	\$111.92	\$111.92	\$111.92	\$148.80	\$210.11	\$148.80	\$148.80	\$210.11
2008/2009 Third Incremental Auction	\$10.00	\$10.00	\$10.00	\$10.00	\$223.85	\$10.00	\$10.00	\$223.85
2009/2010 BRA	\$102.04	\$191.32	\$191.32	\$191.32	\$237.33	\$191.32	\$191.32	\$237.33
2009/2010 Third Incremental Auction	\$40.00	\$86.00	\$86.00	\$86.00	\$86.00	\$86.00	\$86.00	\$86.00
2010/2011 BRA	\$174.29	\$174.29	\$174.29	\$174.29	\$174.29	\$186.12	\$174.29	\$174.29
2010/2011 Third Incremental Auction	\$50.00	\$50.00	\$50.00	\$50.00	\$50.00	\$50.00	\$50.00	\$50.00
2011/2012 BRA	\$110.00	\$110.00	\$110.00	\$110.00	\$110.00	\$110.00	\$110.00	\$110.00
2011/2012 First Incremental Auction	\$55.00	\$55.00	\$55.00	\$55.00	\$55.00	\$55.00	\$55.00	\$55.00
2011/2012 ATSI FRR Integration Auction	\$108.89	\$108.89	\$108.89	\$108.89	\$108.89	\$108.89	\$108.89	\$108.89
2011/2012 Third Incremental Auction	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00
2012/2013 BRA	\$16.46	\$133.37	\$16.46	\$139.73	\$133.37	\$222.30	\$185.00	\$133.37
2012/2013 ATSI FRR Integration Auction	\$20.46	\$20.46	\$20.46	\$20.46	\$20.46	\$20.46	\$20.46	\$20.46
2012/2013 First Incremental Auction	\$16.46	\$16.46	\$16.46	\$153.67	\$16.46	\$153.67	\$153.67	\$16.46
2012/2013 Second Incremental Auction	\$13.01	\$13.01	\$13.01	\$48.91	\$13.01	\$48.91	\$48.91	\$13.01
2013/2014 BRA	\$27.73	\$226.15	\$27.73	\$245.00	\$226.15	\$245.00	\$245.00	\$247.14
2013/2014 First Incremental Auction	\$20.00	\$20.00	\$20.00	\$178.85	\$54.82	\$178.85	\$178.85	\$54.82
2014/2015 BRA Limited	\$125.47	\$125.47	\$125.47	\$125.47	\$125.47	\$125.47	\$213.97	\$125.47
2014/2015 BRA Extended Summer	\$125.99	\$136.50	\$125.99	\$136.50	\$136.50	\$136.50	\$225.00	\$136.50
2014/2015 BRA Annual	\$125.99	\$136.50	\$125.99	\$136.50	\$136.50	\$136.50	\$225.00	\$136.50

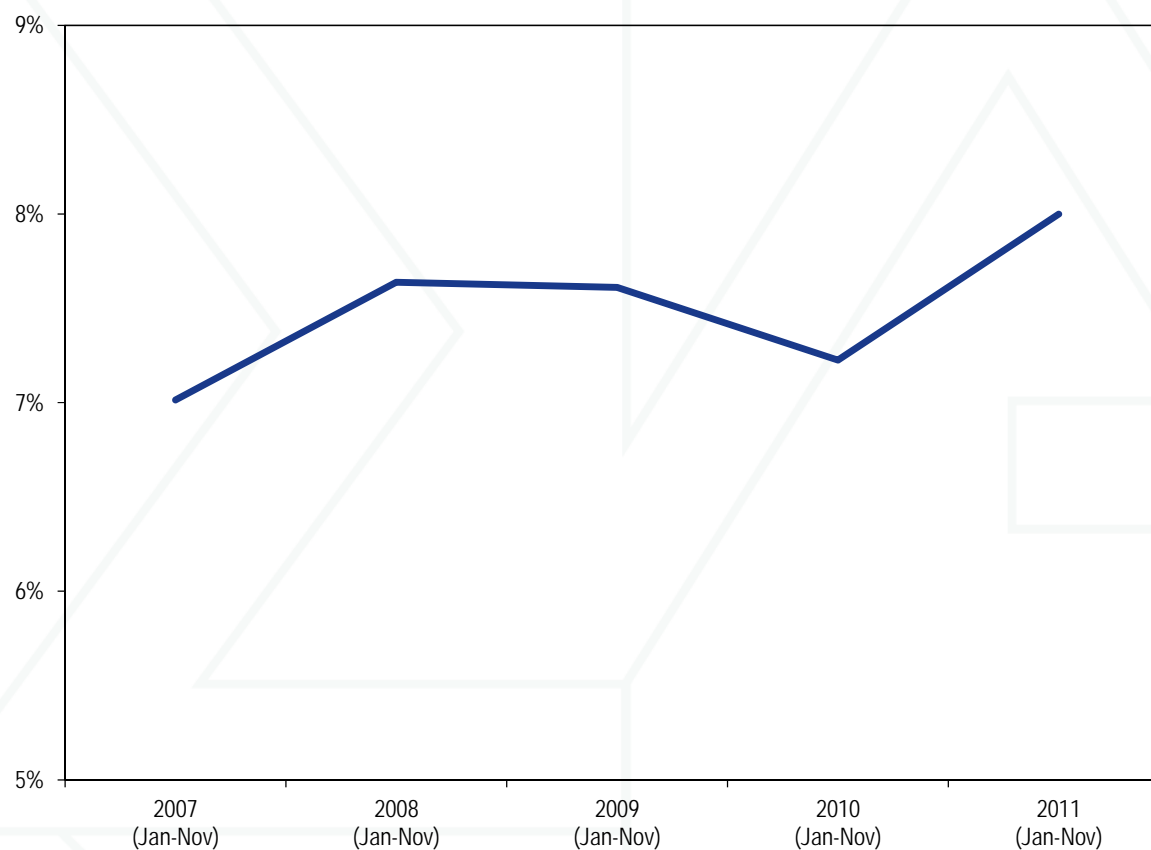
**Figure 5-1 History of capacity prices: Calendar year 1999 through 2014 (See 2010 SOM, Figure 5-1)**



**Figure 5-2 PJM equivalent outage and availability factors:  
January through November 2007 to 2011 (See 2010 SOM,  
Figure 5-4)**



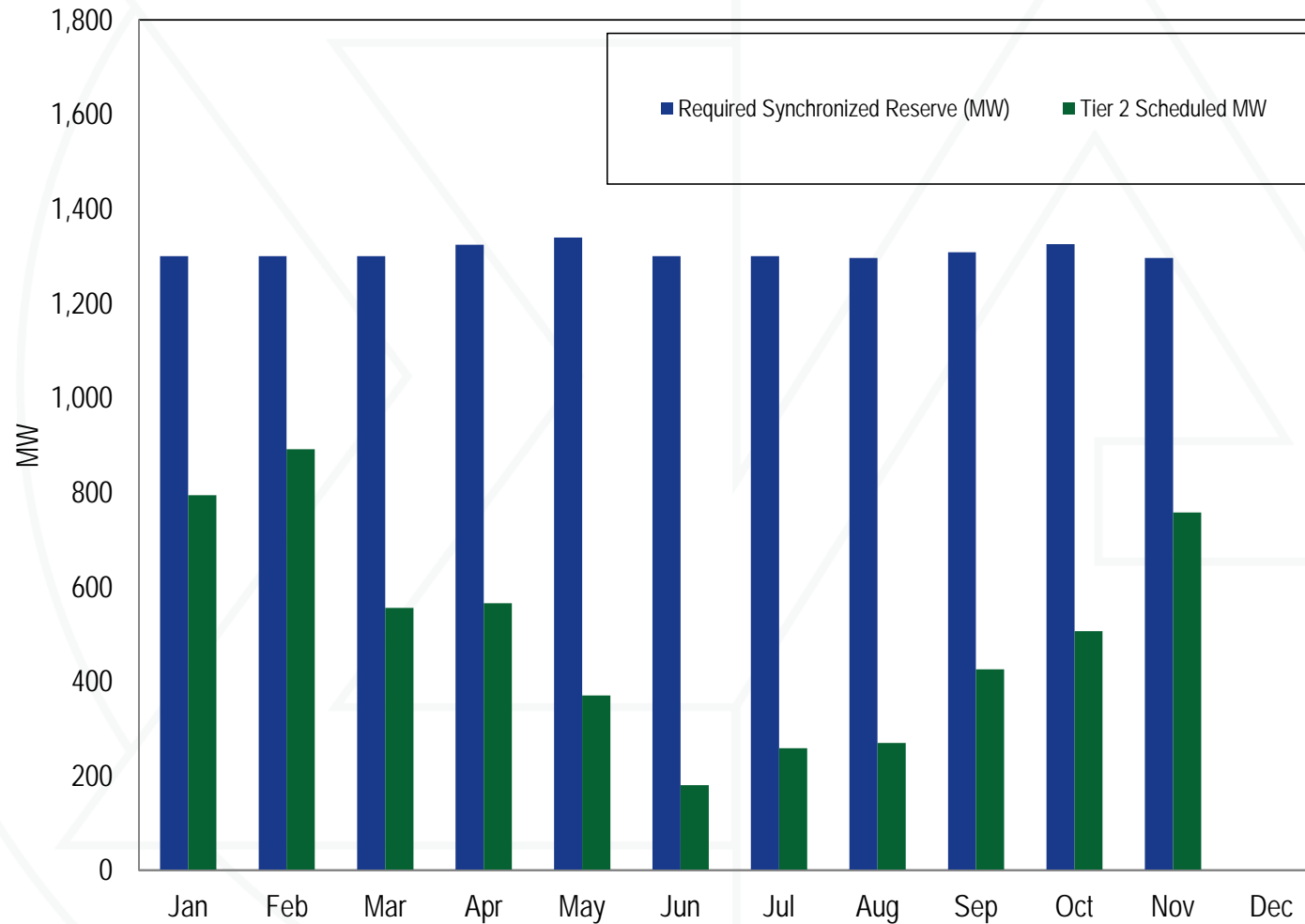
**Figure 5-4 Trends in the PJM equivalent demand forced outage rate (EFORd): January through November 2007 to 2011 (See 2010 SOM, Figure 5-5)**



**Table 6-12 Comparison of load weighted price and cost for PJM Regulation, August 2005 through November 2011 (See 2010 SOM, Table 6-12)**

Year	Load Weighted Regulation Market Price	Load Weighted Regulation Market Cost	Regulation Price as Percent Cost
2005	\$64.41	\$77.55	83%
2006	\$31.70	\$43.79	73%
2007	\$36.69	\$52.78	70%
2008	\$42.29	\$65.70	65%
2009	\$22.48	\$30.01	79%
2010	\$18.08	\$31.76	56%
2011	\$16.55	\$30.56	54%

**Figure 6-6 Mid-Atlantic Subzone average hourly Required synchronized reserve and Tier 2 scheduled: January through November, 2011 (See 2010 SOM, Figure 6-7)**





**Table 6-19 Comparison of load weighted average price and cost for PJM Synchronized Reserve, January through November 2005 through 2011 (See 2010 SOM, Table 6-18)**

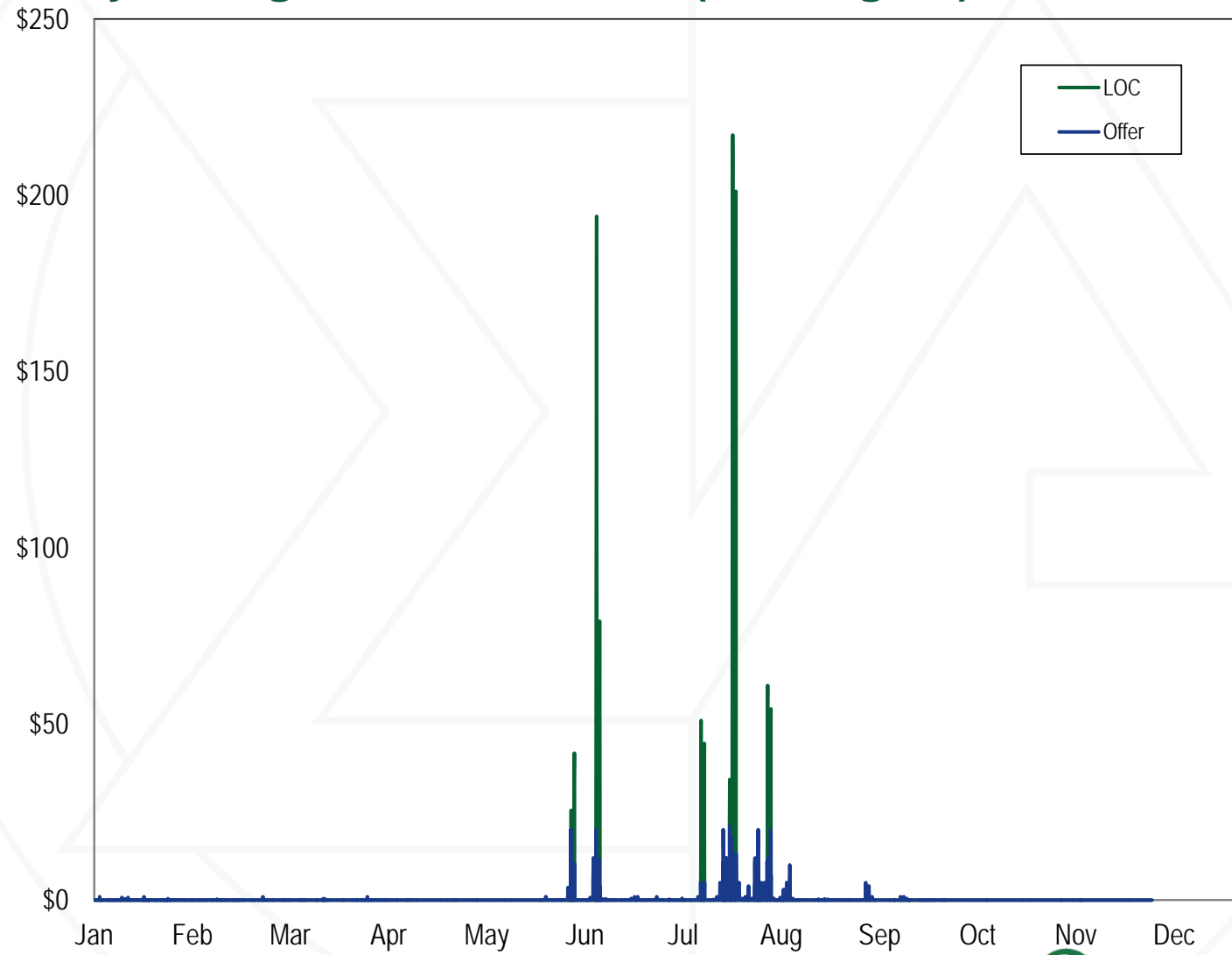
Year	Load Weighted Synchronized Reserve Market Price	Load Weighted Synchronized Reserve Cost	Synchronized Reserve Price as Percent of Cost
2005 (Jan-Nov)	\$13.33	\$17.64	76%
2006 (Jan-Nov)	\$14.70	\$22.03	67%
2007 (Jan-Nov)	\$16.80	\$19.89	84%
2008 (Jan-Nov)	\$11.02	\$16.33	67%
2009 (Jan-Nov)	\$6.70	\$10.13	66%
2010 (Jan-Nov)	\$11.19	\$15.74	71%
2011 (Jan-Nov)	\$11.97	\$15.92	75%

# Table 6-20 Spinning Events, January 2009 through November 2011 (New table)

Effective Time	Region	Duration (Minutes)	Effective Time	Region	Duration (Minutes)	Effective Time	Region	Duration (Minutes)
JAN-17-2009 09:37	RFC	7	FEB-18-2010 13:27	Mid-Atlantic	19	JAN-11-2011 15:10	Mid-Atlantic	6
JAN-20-2009 17:33	RFC	10	MAR-18-2010 11:02	RFC	27	FEB-02-2011 01:21	RFC	5
JAN-21-2009 11:52	RFC	9	MAR-23-2010 20:14	RFC	13	FEB-08-2011 22:41	Mid-Atlantic	11
FEB-18-2009 18:38	Mid-Atlantic	10	APR-11-2010 13:12	RFC	9	FEB-09-2011 11:40	Mid-Atlantic	16
FEB-19-2009 11:01	RFC	6	APR-28-2010 15:09	Mid-Atlantic	8	FEB-13-2011 15:35	Mid-Atlantic	14
FEB-28-2009 06:19	RFC	5	MAY-11-2010 19:57	Mid-Atlantic	9	FEB-24-2011 11:35	Mid-Atlantic	14
MAR-03-2009 05:20	Mid-Atlantic	11	MAY-15-2010 03:03	RFC	6	FEB-25-2011 14:12	RFC	10
MAR-05-2009 01:30	Mid-Atlantic	43	MAY-28-2010 04:06	Mid-Atlantic	5	MAR-30-2011 19:13	RFC	12
MAR-07-2009 23:22	RFC	11	JUN-15-2010 00:46	RFC	34	APR-02-2011 13:13	Mid-Atlantic	11
MAR-23-2009 23:40	Mid-Atlantic	10	JUN-19-2010 23:49	Mid-Atlantic	9	APR-11-2011 00:28	RFC	6
MAR-23-2009 23:42	RFCNonMA	8	JUN-24-2010 00:56	RFC	15	APR-16-2011 22:51	RFC	9
MAR-24-2009 13:20	Mid-Atlantic	8	JUN-27-2010 19:33	Mid-Atlantic	15	APR-21-2011 20:02	Mid-Atlantic	6
MAR-25-2009 02:29	RFC	9	JUL-07-2010 15:20	RFC	8	APR-27-2011 01:22	RFC	8
MAR-26-2009 13:08	RFC	10	JUL-16-2010 20:45	Mid-Atlantic	19	MAY-02-2011 00:05	Mid-Atlantic	21
MAR-26-2009 18:30	Mid-Atlantic	20	AUG-11-2010 19:09	RFC	17	MAY-12-2011 19:39	RFC	9
APR-24-2009 16:43	RFC	11	AUG-13-2010 23:19	RFC	6	MAY-26-2011 17:17	Mid-Atlantic	20
APR-26-2009 03:04	Mid-Atlantic	5	AUG-16-2010 07:08	RFC	17	MAY-27-2011 12:51	RFC	6
MAY-03-2009 15:07	RFC	10	AUG-16-2010 19:39	Mid-Atlantic	11	MAY-29-2011 09:04	RFC	7
MAY-17-2009 07:41	RFC	5	SEP-15-2010 11:20	RFC	13	MAY-31-2011 16:36	RFC	27
MAY-21-2009 21:37	RFC	13	SEP-22-2010 15:28	Mid-Atlantic	24	JUN-03-2011 14:23	RFC	7
JUN-18-2009 17:39	RFC	12	OCT-05-2010 17:20	RFC	10	JUN-06-2011 22:02	Mid-Atlantic	9
JUN-30-2009 00:17	Mid-Atlantic	8	OCT-16-2010 03:22	Mid-Atlantic	10	JUN-23-2011 23:26	RFC	8
JUL-26-2009 19:07	RFC	18	OCT-16-2010 03:25	RFCNonMA	7	JUN-26-2011 22:03	Mid-Atlantic	10
JUL-31-2009 02:01	RFC	6	OCT-27-2010 10:35	RFC	7	JUL-10-2011 11:20	RFC	10
AUG-15-2009 21:07	RFC	17	OCT-27-2010 12:50	Mid-Atlantic	10	JUL-28-2011 18:49	RFC	12
SEP-08-2009 10:12	Mid-Atlantic	8	NOV-26-2010 14:24	RFC	13	AUG-02-2011 01:08	RFC	6
SEP-29-2009 16:20	RFC	7	NOV-27-2010 11:34	RFC	8	AUG-18-2011 06:45	Mid-Atlantic	6
OCT-01-2009 10:13	RFC	11	DEC-08-2010 01:19	RFC	11	AUG-19-2011 14:49	RFC	5
OCT-18-2009 22:40	Mid-Atlantic	8	DEC-09-2010 20:07	RFC	5	AUG-23-2011 17:52	RFC	7
OCT-26-2009 01:01	RFC	7	DEC-14-2010 12:02	Mid-Atlantic	24	SEP-24-2011 15:48	RFC	8
OCT-26-2009 11:05	RFC	13	DEC-16-2010 18:40	Mid-Atlantic	20	SEP-27-2011 14:20	RFC	7
OCT-26-2009 19:55	RFC	8	DEC-17-2010 22:09	Mid-Atlantic	6	SEP-27-2011 16:47	RFC	9
NOV-20-2009 15:30	RFC	8	DEC-29-2010 19:01	Mid-Atlantic	15	OCT-30-2011 22:39	Mid-Atlantic	10
DEC-09-2009 22:34	Mid-Atlantic	34						
DEC-09-2009 22:37	RFCNonMA	31						
DEC-14-2009 11:11	Mid-Atlantic	8						



**Figure 6-15 Hourly components of DASR clearing price: January through November 2011 (New Figure)**



**Table 7-3 Monthly PJM congestion charges (Dollars (Millions)):  
January through November, 2010 and 2011 (See 2010 SOM, Table  
7-3)**

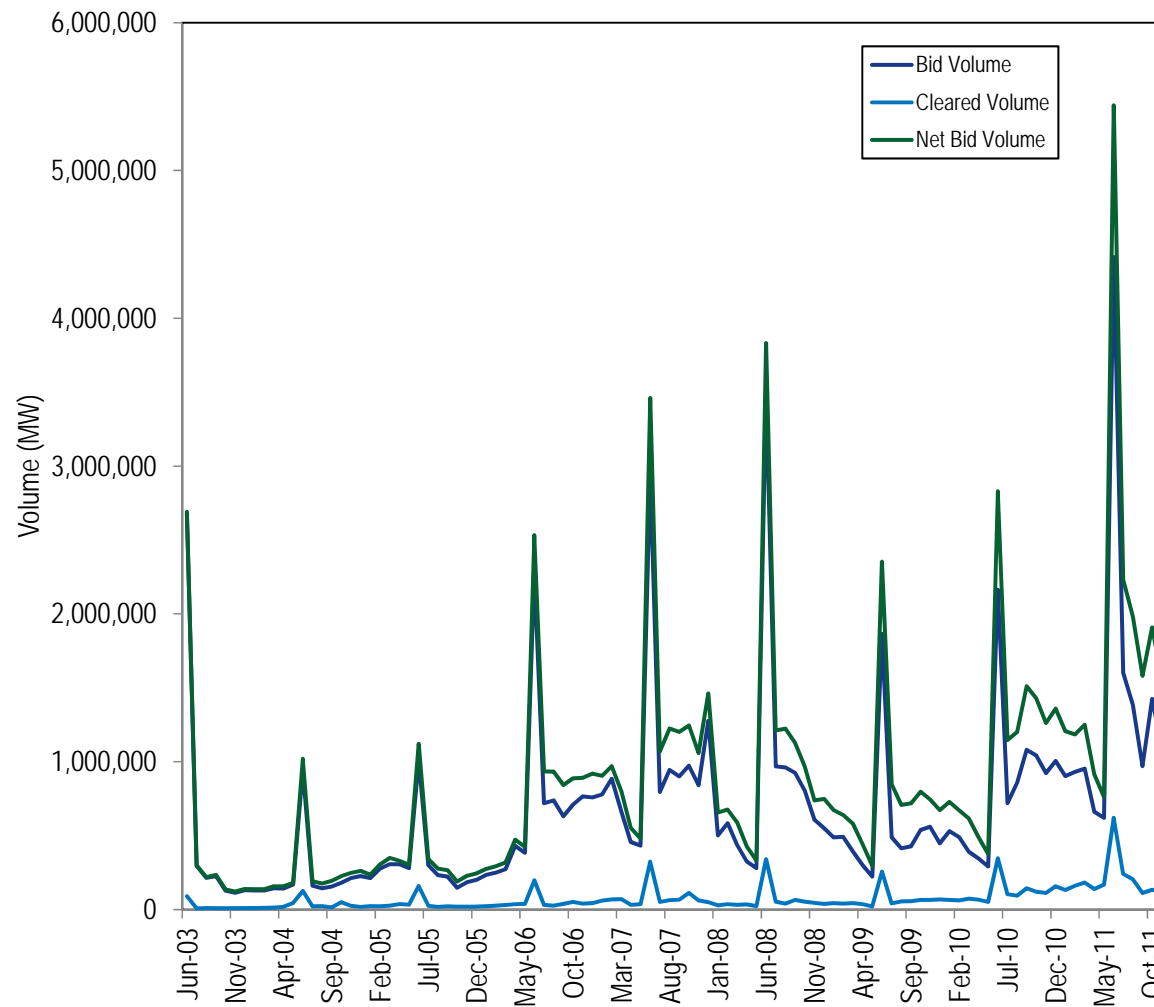
	2010	2011	Change	Percent Change
Jan	\$218.3	\$241.5	\$23.2	10.6%
Feb	\$106.4	\$74.0	(\$32.4)	(30.4%)
Mar	\$20.4	\$44.1	\$23.7	116.4%
Apr	\$42.5	\$38.9	(\$3.6)	(8.5%)
May	\$68.5	\$35.1	(\$33.4)	(48.8%)
Jun	\$188.5	\$124.8	(\$63.6)	(33.8%)
Jul	\$268.9	\$161.1	(\$107.8)	(40.1%)
Aug	\$105.1	\$60.0	(\$45.2)	(42.9%)
Sep	\$119.9	\$66.2	(\$53.7)	(44.8%)
Oct	\$50.3	\$38.7	(\$11.7)	(23.2%)
Nov	\$52.0	\$37.5	(\$14.5)	(27.9%)
Total	\$1,240.8	\$921.8	(\$318.9)	(25.7%)

**Table 8-4 Monthly Balance of Planning Period FTR Auction market volume: January through November 2011 (See 2010 SOM, Table 8-11)**

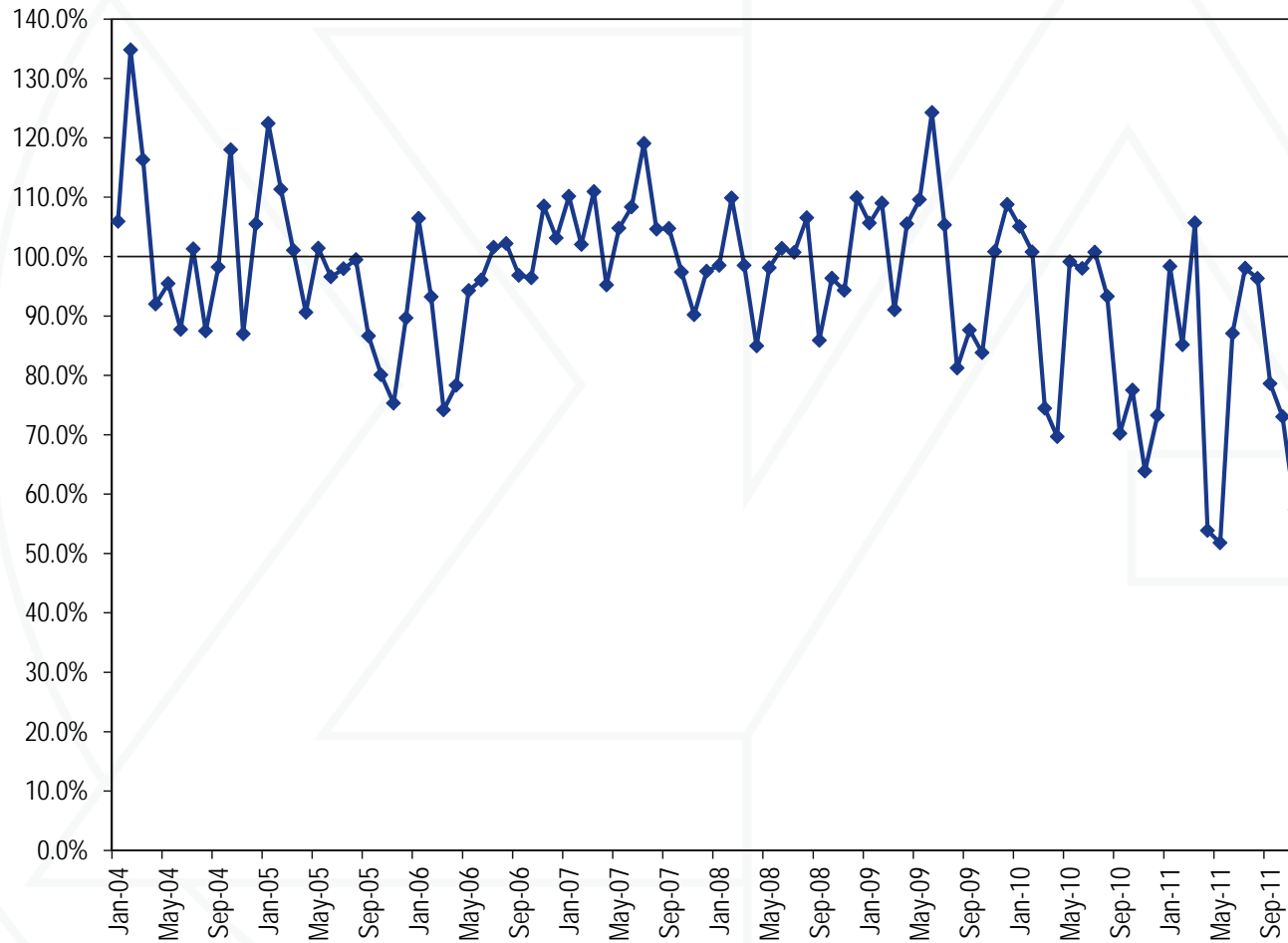
Monthly Auction	Hedge Type	Trade Type	Bid and Requested Count	Bid and Requested Volume (MW)	Cleared Volume (MW)	Cleared Volume	Uncleared Volume (MW)	Uncleared Volume
Jan-11	Obligations	Buy bids	189,084	1,101,808	164,743	15.0%	937,065	85.0%
		Sell offers	50,981	261,888	28,189	10.8%	233,699	89.2%
	Options	Buy bids	1,040	105,293	8,691	8.3%	96,602	91.7%
		Sell offers	2,927	43,161	12,380	28.7%	30,781	71.3%
Feb-11	Obligations	Buy bids	185,625	1,090,475	181,977	16.7%	908,497	83.3%
		Sell offers	41,609	220,079	20,957	9.5%	199,122	90.5%
	Options	Buy bids	959	93,909	9,372	10.0%	84,537	90.0%
		Sell offers	2,555	33,140	9,643	29.1%	23,497	70.9%
Mar-11	Obligations	Buy bids	192,349	1,154,132	216,165	18.7%	937,967	81.3%
		Sell offers	48,727	256,121	30,492	11.9%	225,629	88.1%
	Options	Buy bids	1,026	96,152	7,254	7.5%	88,898	92.5%
		Sell offers	2,351	41,200	10,587	25.7%	30,613	74.3%
Apr-11	Obligations	Buy bids	149,735	847,575	164,278	19.4%	683,297	80.6%
		Sell offers	37,737	220,966	22,108	10.0%	198,858	90.0%
	Options	Buy bids	919	66,008	5,387	8.2%	60,621	91.8%
		Sell offers	1,834	32,136	9,327	29.0%	22,810	71.0%
May-11	Obligations	Buy bids	138,353	741,926	189,851	25.6%	552,075	74.4%
		Sell offers	27,642	122,217	13,661	11.2%	108,556	88.8%
	Options	Buy bids	759	20,612	2,485	12.1%	18,127	87.9%
		Sell offers	1,184	19,631	9,065	46.2%	10,566	53.8%
Jun-11	Obligations	Buy bids	332,116	1,924,420	312,144	16.2%	1,612,276	83.8%
		Sell offers	135,073	585,528	40,839	7.0%	544,689	93.0%
	Options	Buy bids	7,625	256,153	11,013	4.3%	245,140	95.7%
		Sell offers	18,794	103,002	24,097	23.4%	78,904	76.6%
Jul-11	Obligations	Buy bids	343,986	2,085,575	286,143	13.7%	1,799,432	86.3%
		Sell offers	124,629	554,483	37,933	6.8%	516,549	93.2%
	Options	Buy bids	3,239	147,732	13,337	9.0%	134,395	91.0%
		Sell offers	12,897	76,029	20,259	26.6%	55,770	73.4%
Aug-11	Obligations	Buy bids	310,562	1,830,992	252,468	13.8%	1,578,524	86.2%
		Sell offers	117,597	529,879	40,335	7.6%	489,545	92.4%
	Options	Buy bids	3,070	150,896	6,736	4.5%	144,160	95.5%
		Sell offers	10,680	66,968	14,427	21.5%	52,541	78.5%
Sep-11	Obligations	Buy bids	255,744	1,352,484	180,231	13.3%	1,172,252	86.7%
		Sell offers	111,846	538,916	54,686	10.1%	484,230	89.9%
	Options	Buy bids	3,368	228,757	4,942	2.2%	223,815	97.8%
		Sell offers	10,816	73,140	17,741	24.3%	55,399	75.7%
Oct-11	Obligations	Buy bids	277,059	1,492,587	188,474	12.6%	1,304,113	87.4%
		Sell offers	91,184	430,188	46,727	10.9%	383,461	89.1%
	Options	Buy bids	3,342	416,369	4,336	1.0%	412,033	99.0%
		Sell offers	9,610	54,706	11,430	20.9%	43,276	79.1%
Nov-11	Obligations	Buy bids	245,707	1,254,959	170,134	13.6%	1,084,825	86.4%
		Sell offers	86,993	414,939	43,839	10.6%	371,101	89.4%
	Options	Buy bids	2,963	307,806	3,325	1.1%	304,481	98.9%
		Sell offers	7,571	49,692	11,915	24.0%	37,777	76.0%
2010/2011*	Obligations	Buy bids	2,378,154	12,888,263	1,975,624	15.3%	10,912,639	84.7%
		Sell offers	709,605	3,448,995	311,688	9.0%	3,137,308	91.0%
	Options	Buy bids	16,090	1,403,272	67,536	4.8%	1,335,736	95.2%
		Sell offers	60,091	568,271	147,251	25.9%	421,021	74.1%
2011/2012**	Obligations	Buy bids	1,965,245	10,999,601	1,543,888	14.0%	9,455,713	86.0%
		Sell offers	761,384	3,504,363	314,027	9.0%	3,190,336	91.0%
	Options	Buy bids	27,008	1,767,474	46,102	2.6%	1,721,372	97.4%
		Sell offers	77,128	480,419	113,416	23.6%	367,003	76.4%

\* Shows Twelve Months for 2010/2011; \*\* Shows six months ended 31-Nov-2011 for 2011/2012

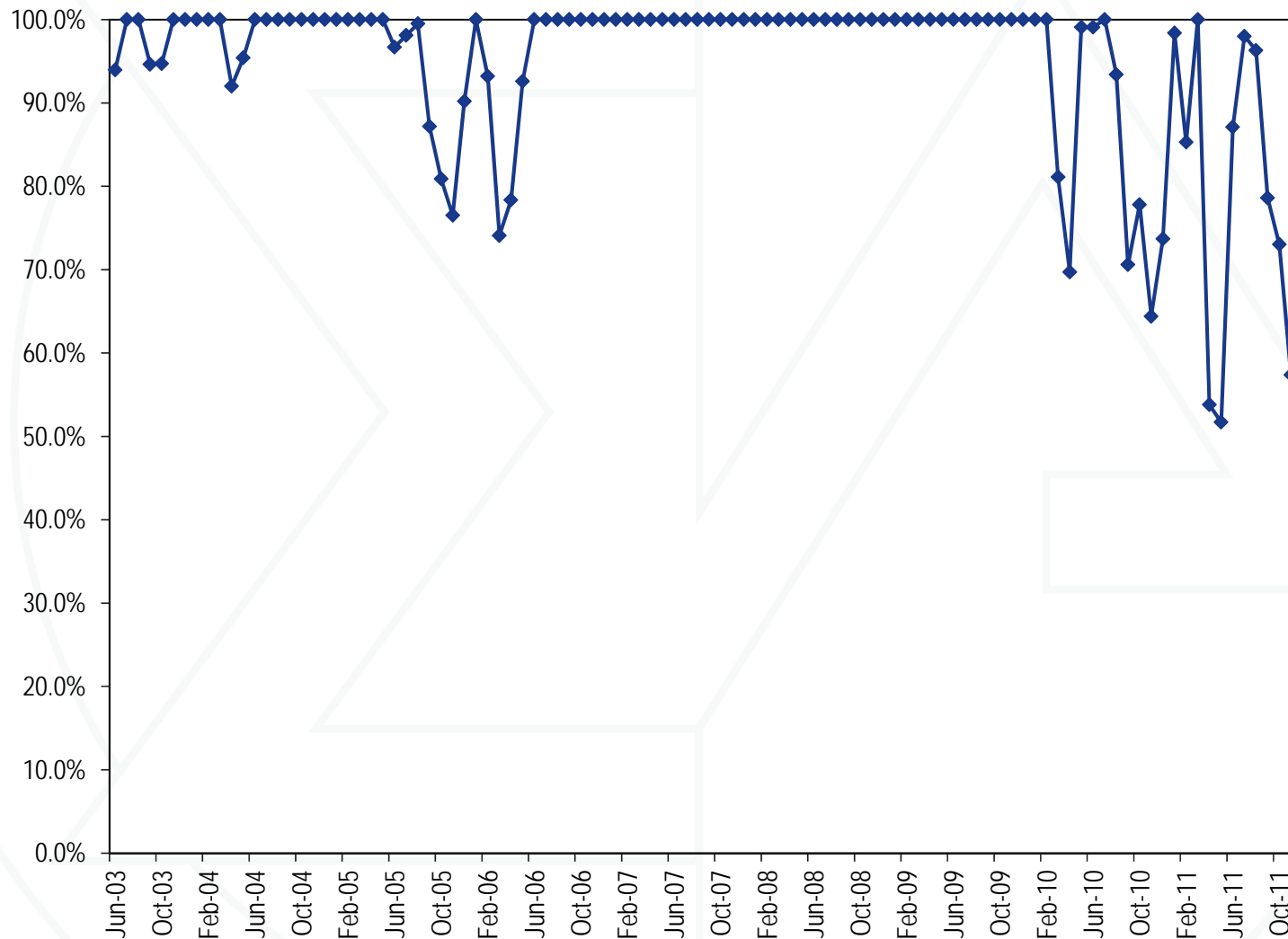
**Figure 8-1 Annual and Monthly FTR Auction bid and cleared volume: June 2003 through November 2011 (New Figure)**



**Figure 8-4 Original FTR payout ratio with adjustments by month, excluding excess revenue distribution: January 2004 to November 2011 (New Figure)**



**Figure 8-5 FTR payout ratio by month: June 2003 to November 2011 (See 2010 SOM, Figure 8-9)**





## Key Legal/Regulatory Matters

- **DC Energy Complaint (EL12-8-000)**
- **Exelon/CEG Merger (EC11-83-000; MdPSC Case No. 9271)**
- **NJ Capacity Procurement (BPU Case No. EO11050309)**
- **Black Start Filing (ER11- 4402-000)**



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