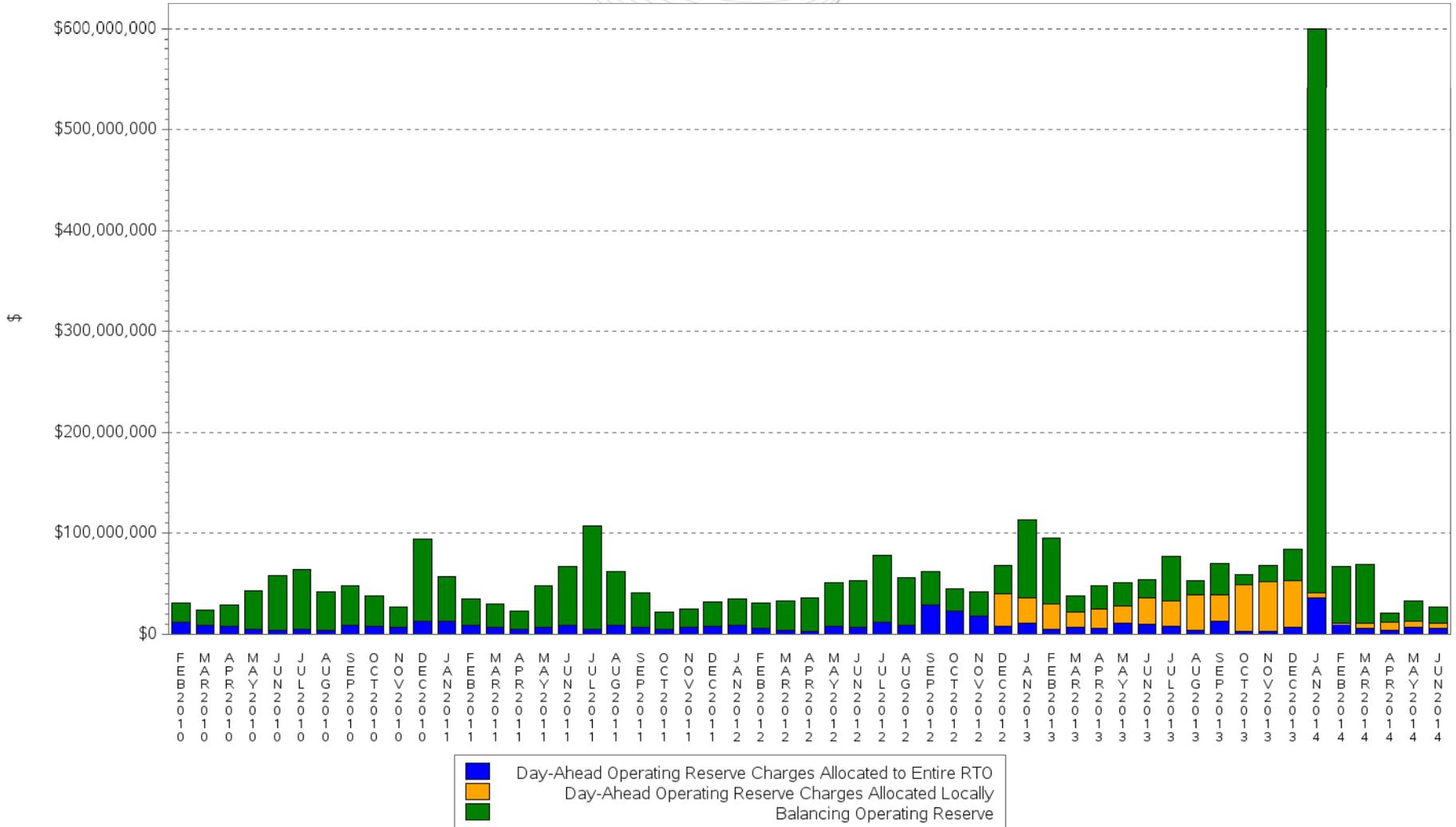


MIC Market Operations Report

July, 2014

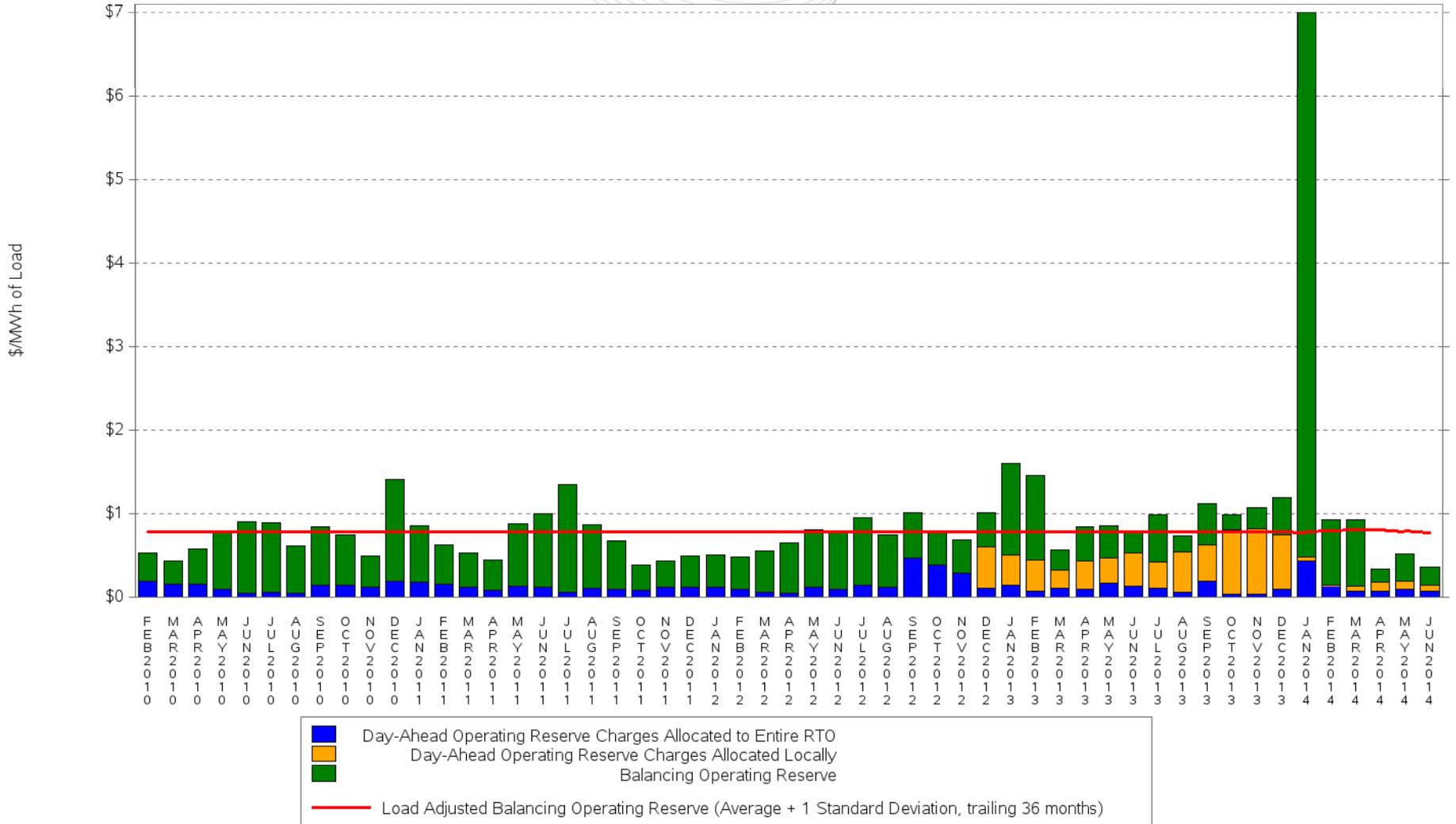
PJM Monthly Operating Reserve Costs





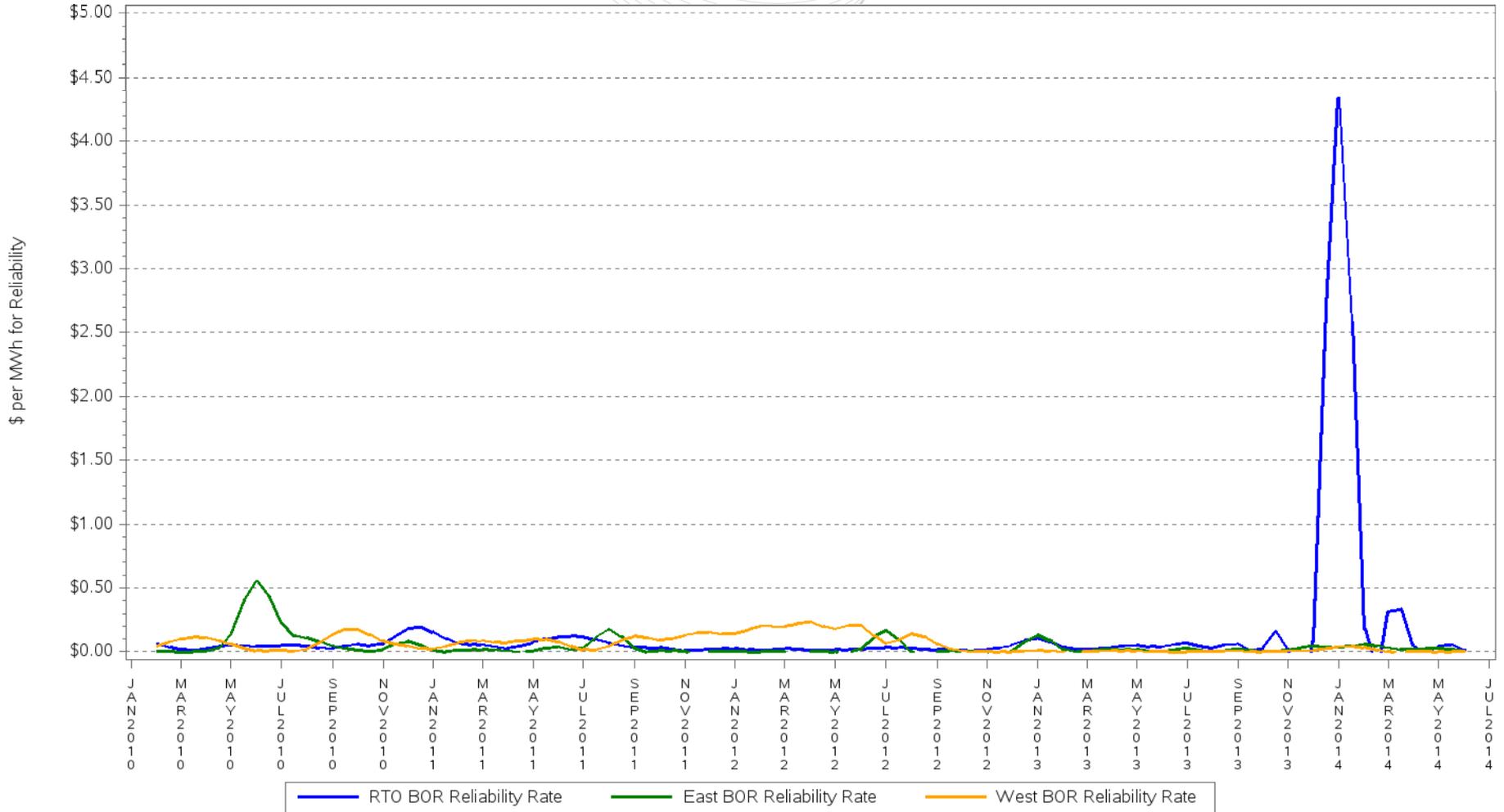
PJM Operating Reserve Costs

PJM Monthly Operating Reserve Costs - \$/MWh Load

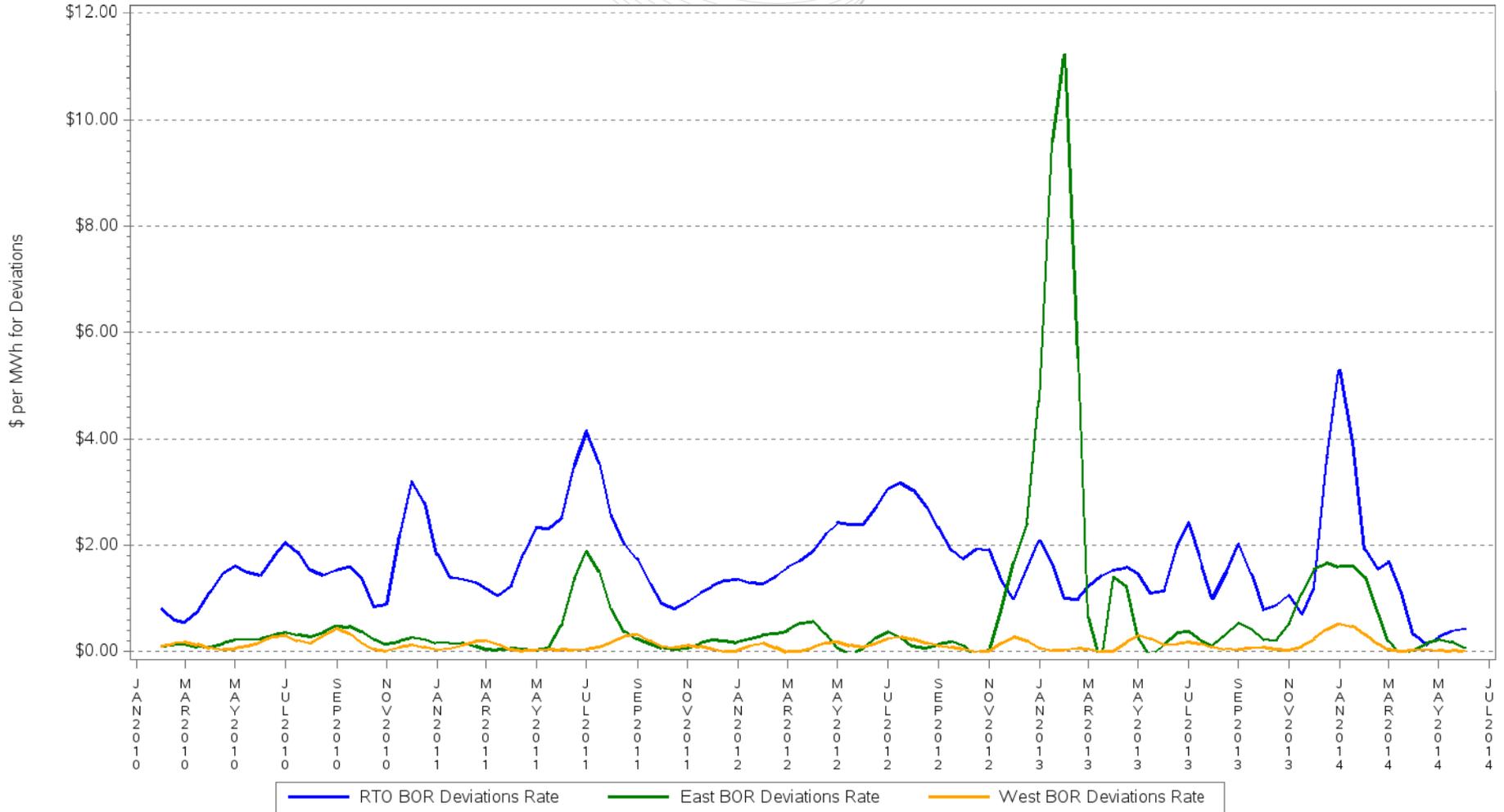


- Beginning in December 2008, the daily Balancing Operating Reserves (BOR) rate was replaced with six different BOR rates: RTO BOR for Reliability Rate, RTO BOR for Deviations Rate, East BOR for Reliability Rate, East BOR for Deviations Rate, West BOR for Reliability Rate, West BOR for Deviations Rate.
- Reliability rates are charged to all real-time load and exports, whereas deviation rates, as before, are charged only to real-time deviations. RTO rates are charged to the whole footprint, whereas East and West rate adders are charged based on location.
- The table in the following slide shows average daily balancing operating reserves rates for each month since the implementation of the new regime.

PJM Reliability Balancing Operating Reserve Rates



PJM Deviations Balancing Operating Reserve Rates



- Section 3.2.3(b)(iii) of Attachment K-Appendix of the PJM Open Access Transmission Tariff and the parallel provisions of Schedule 1 of the Operating Agreement provide, in relevant part, that:
 - PJM shall post on its Web site the aggregate amount of MW committed that meet the criteria referenced in subsections (b)(i) and (b)(ii) hereof.
- The table in the next slide depicting daily Balancing Operating Reserve quantities, with breakdown by region and by reason, is presented to comply with the above mentioned Tariff requirement. This table enhances the data that PJM had already been posting by way of the “PJM Average Committed MW Post Day Ahead” chart below in this report.
- These data will continue to be presented as part of the monthly MIC Market Operations Report in the future.



Balancing Operating Reserves

Daily Balancing Operating Reserve Quantities by Region and by Reason (all quantities are in MWh)

Date	Allocation by Region			Allocation by Reason				Total
	RTO	East	West	RA Reliability	RA Deviation	RE Reliability	RT Deviation	
6/1/2014	66,890	6,469			6,469	728	66,162	73,359
6/2/2014	25,757					1,383	24,374	25,757
6/3/2014	41,249					2,300	38,949	41,249
6/4/2014	15,491					1,141	14,350	15,491
6/5/2014	28,839					624	28,215	28,839
6/6/2014	38,473	87				3,302	35,258	38,561
6/7/2014	29,245					687	28,558	29,245
6/8/2014	30,088					289	29,799	30,088
6/9/2014	21,618	1,514				627	22,504	23,131
6/10/2014	2,808	1,519				1,982	2,344	4,326
6/11/2014	23,482					3,758	19,724	23,482
6/12/2014	22,294	3,495			2,702	5,115	17,971	25,789
6/13/2014	34,711	1,401				1,021	35,091	36,112
6/14/2014	59,582	1,218				20,566	40,233	60,800
6/15/2014	64,926	504	202			1,663	63,969	65,632
6/16/2014	19,908	194	163		163	1,567	18,535	20,265
6/17/2014	27,505		2,332		3,817	2,678	23,342	29,837
6/18/2014	6,700	1,404	196		2,673	2,686	2,941	8,300
6/19/2014	821	98				896	24	920
6/20/2014	57,507	656				2,883	55,280	58,163
6/21/2014	7,888					1,477	6,411	7,888
6/22/2014	28,465					542	27,923	28,465
6/23/2014	20,232	852				428	20,655	21,084
6/24/2014	36,605	725	31			1,473	35,888	37,361
6/25/2014	44,579	566	387			1,697	43,835	45,532
6/26/2014	19,920					1,543	18,377	19,920
6/27/2014	30,563					745	29,818	30,563
6/28/2014	66,640					3,654	62,986	66,640
6/29/2014	47,457					1,810	45,647	47,457
6/30/2014	24,932		900			5,224	20,608	25,832



Balancing Operating Reserves

Daily Balancing Operating Reserve Dollars by Region and by Reason

Date	Allocation by Region			Allocation by Reason				Total
	RTO	East	West	RA Reliability	RA Deviation	RE Reliability	RT Deviation	
6/1/2014	\$ 457,936	\$ 6,162			\$ 6,162	\$ 3,163	\$ 454,774	\$ 464,099
6/2/2014	\$ 1,123,716					\$ 83,561	\$ 1,040,155	\$ 1,123,716
6/3/2014	\$ 140,700					\$ 25,077	\$ 115,624	\$ 140,700
6/4/2014	\$ 26,353					\$ 16,689	\$ 9,664	\$ 26,353
6/5/2014	\$ 67,583					\$ 14,559	\$ 53,024	\$ 67,583
6/6/2014	\$ 251,631	\$ 3,572				\$ 126,635	\$ 128,567	\$ 255,202
6/7/2014	\$ 82,679					\$ 23,037	\$ 59,643	\$ 82,679
6/8/2014	\$ 77,404					\$ 1,461	\$ 75,943	\$ 77,404
6/9/2014	\$ 50,524	\$ 104,570				\$ 17,563	\$ 137,531	\$ 155,094
6/10/2014	\$ 33,899	\$ 95,927				\$ 102,170	\$ 27,657	\$ 129,827
6/11/2014	\$ 64,347					\$ 26,220	\$ 38,127	\$ 64,347
6/12/2014	\$ 70,514	\$ 108,598			\$ 70,978	\$ 21,701	\$ 86,433	\$ 179,112
6/13/2014	\$ 103,017	\$ 43,058				\$ 17,680	\$ 128,395	\$ 146,075
6/14/2014	\$ 208,453	\$ 28,753				\$ 50,932	\$ 186,274	\$ 237,206
6/15/2014	\$ 175,154	\$ 23,414	\$ 2,582			\$ 17,887	\$ 183,263	\$ 201,151
6/16/2014	\$ 92,445	\$ 54,205	\$ 8,397		\$ 8,397	\$ 67,127	\$ 79,523	\$ 155,047
6/17/2014	\$ 308,545		\$ 52,630		\$ 85,782	\$ 73,626	\$ 201,768	\$ 361,175
6/18/2014	\$ 252,501	\$ 183,294	\$ 8,073		\$ 26,155	\$ 202,599	\$ 215,114	\$ 443,868
6/19/2014	\$ 8,537	\$ 1,519				\$ 9,895	\$ 160	\$ 10,055
6/20/2014	\$ 219,294	\$ 28,323				\$ 54,343	\$ 193,273	\$ 247,616
6/21/2014	\$ 114,353					\$ 33,938	\$ 80,415	\$ 114,353
6/22/2014	\$ 109,393					\$ 5,400	\$ 103,993	\$ 109,393
6/23/2014	\$ 415,595	\$ 16,946				\$ 5,963	\$ 426,578	\$ 432,541
6/24/2014	\$ 202,625	\$ 7,498	\$ 953			\$ 73,094	\$ 137,983	\$ 211,077
6/25/2014	\$ 249,803	\$ 34,793	\$ 23,617			\$ 30,909	\$ 277,303	\$ 308,212
6/26/2014	\$ 179,482					\$ 51,342	\$ 128,141	\$ 179,482
6/27/2014	\$ 120,658					\$ 3,492	\$ 117,166	\$ 120,658
6/28/2014	\$ 246,663					\$ 78,816	\$ 167,847	\$ 246,663
6/29/2014	\$ 239,759					\$ 51,975	\$ 187,784	\$ 239,759
6/30/2014	\$ 298,425		\$ 50,168			\$ 74,383	\$ 274,211	\$ 348,593



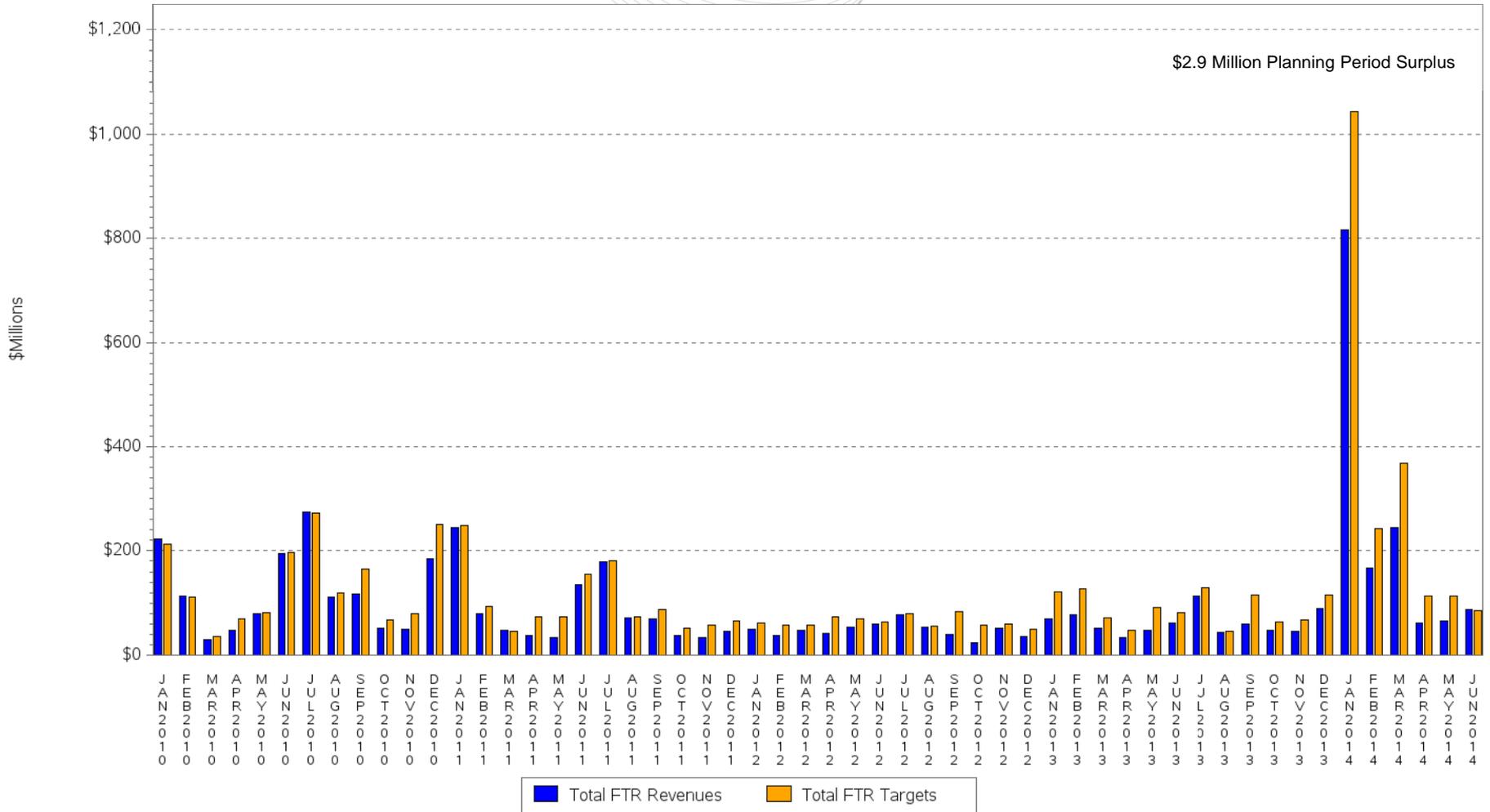
Balancing Operating Reserves

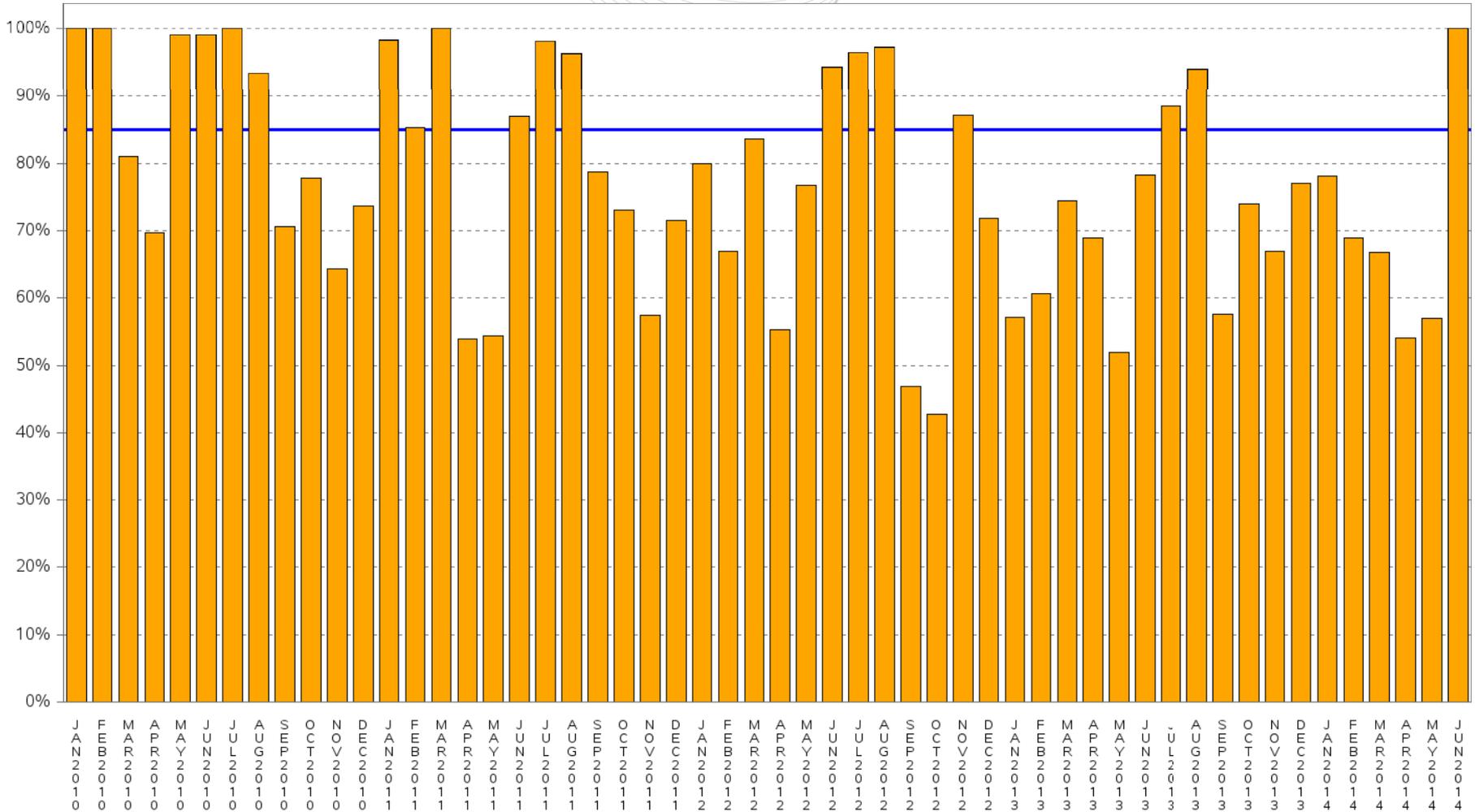
Daily BOR Lost Opportunity Cost Credits (\$)

Monthly BOR Lost Opportunity Cost Credits (\$)

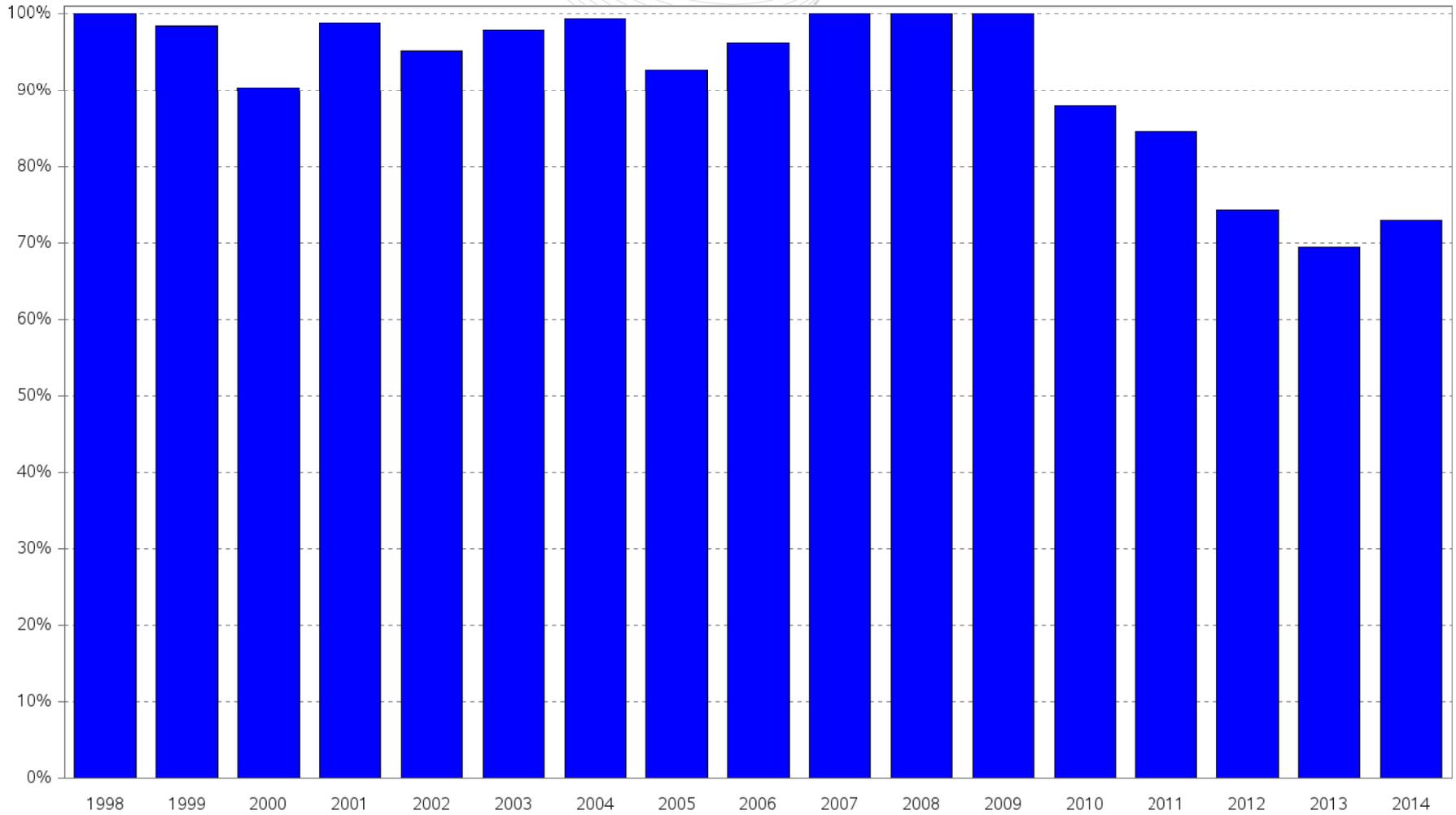
	Wind LOC	Total PJM LOC
1-Jun-14		28,920
2-Jun-14	97,326	414,747
3-Jun-14	3,582	312,815
4-Jun-14		45,086
5-Jun-14		150,820
6-Jun-14		253,261
7-Jun-14		235,917
8-Jun-14	31,762	115,610
9-Jun-14	37,351	359,375
10-Jun-14		642,581
11-Jun-14		317,085
12-Jun-14		57,097
13-Jun-14		114,696
14-Jun-14		2,305
15-Jun-14	147,069	208,979
16-Jun-14	43,934	794,874
17-Jun-14	26,189	1,055,231
18-Jun-14		1,013,775
19-Jun-14		136,956
20-Jun-14		43,117
21-Jun-14		160,870
22-Jun-14		111,754
23-Jun-14	1,690	178,988
24-Jun-14		714,835
25-Jun-14		312,917
26-Jun-14		195,332
27-Jun-14		51,160
28-Jun-14	23,149	45,979
29-Jun-14		49,755
30-Jun-14	2,550	262,984
Grand Total	\$414,602.14	\$8,387,819.51

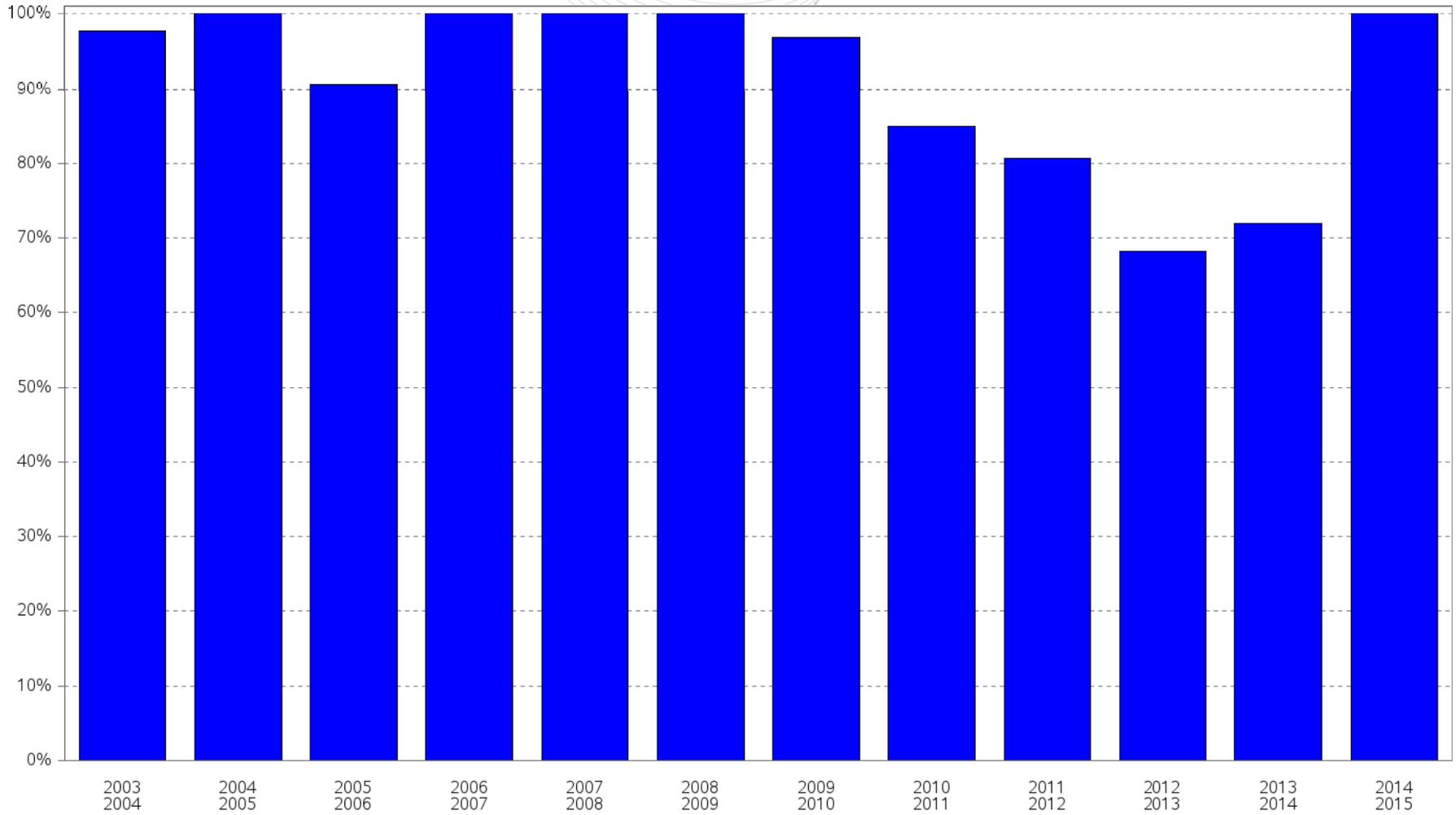
	Wind MWh Reduced	Wind LOC	Total PJM LOC
Jun-12	2,500	\$ 119,146	\$ 15,037,254
Jul-12	548	\$ 63,805	\$ 30,696,682
Aug-12	5,438	\$ 213,304	\$ 26,761,644
Sep-12	17,169	\$ 878,565	\$ 21,511,950
Oct-12	73,725	\$ 3,311,199	\$ 20,337,092
Nov-12	6,032	\$ 241,718	\$ 18,573,547
Dec-12	20,022	\$ 595,316	\$ 6,307,990
Jan-13	52,680	\$ 1,670,966	\$ 11,481,302
Feb-13	80,526	\$ 2,440,098	\$ 4,730,662
Mar-13	43,351	\$ 1,927,844	\$ 7,127,313
Apr-13	23,718	\$ 1,191,147	\$ 5,781,873
May-13	51,943	\$ 2,207,533	\$ 8,518,358
Jun-13	7,094	\$ 258,206	\$ 7,029,836
Jul-13	1,351	\$ 59,610	\$ 19,492,274
Aug-13	533	\$ 24,687	\$ 5,666,954
Sep-13	2,856	\$ 152,843	\$ 10,974,087
Oct-13	11,031	\$ 477,631	\$ 3,085,323
Nov-13	11,810	\$ 423,848	\$ 2,144,870
Dec-13	434	\$ 31,119	\$ 1,092,196
Jan-14	25,467	\$ 1,641,186	\$ 76,055,241
Feb-14	18,021	\$ 593,903	\$ 11,070,230
Mar-14	13,450	\$ 569,768	\$ 12,813,030
Apr-14	15,342	\$ 949,661	\$ 2,575,087
May-14	5,186	\$ 286,978	\$ 13,095,847
Jun-14	10,003	\$ 414,602	\$ 8,387,820



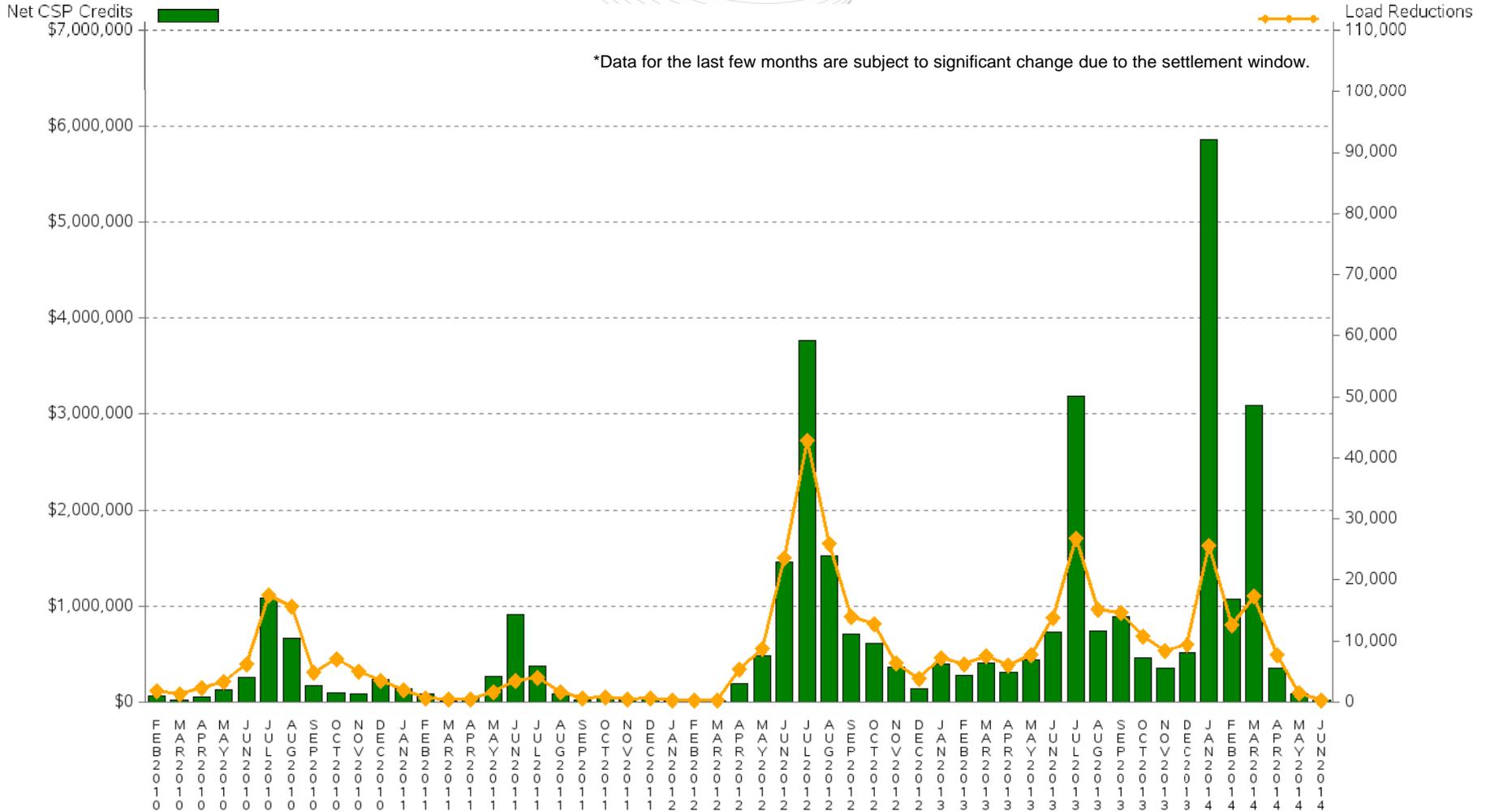


Period	Surplus/(Underfunding)	Payout
Month	\$2,855,556	100%
Year	(\$523,558,236)	74%
Planning-period	\$2,855,556	100%

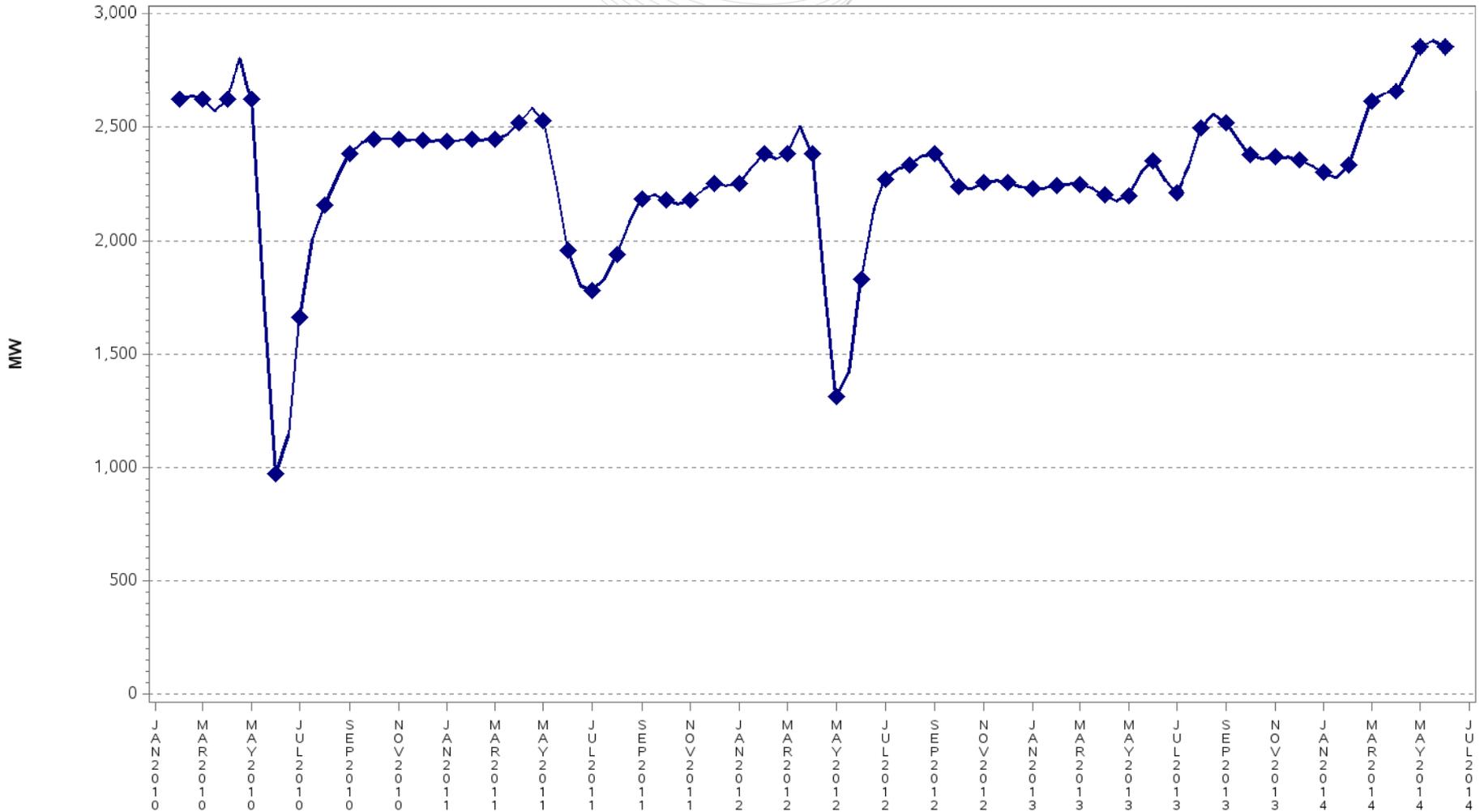




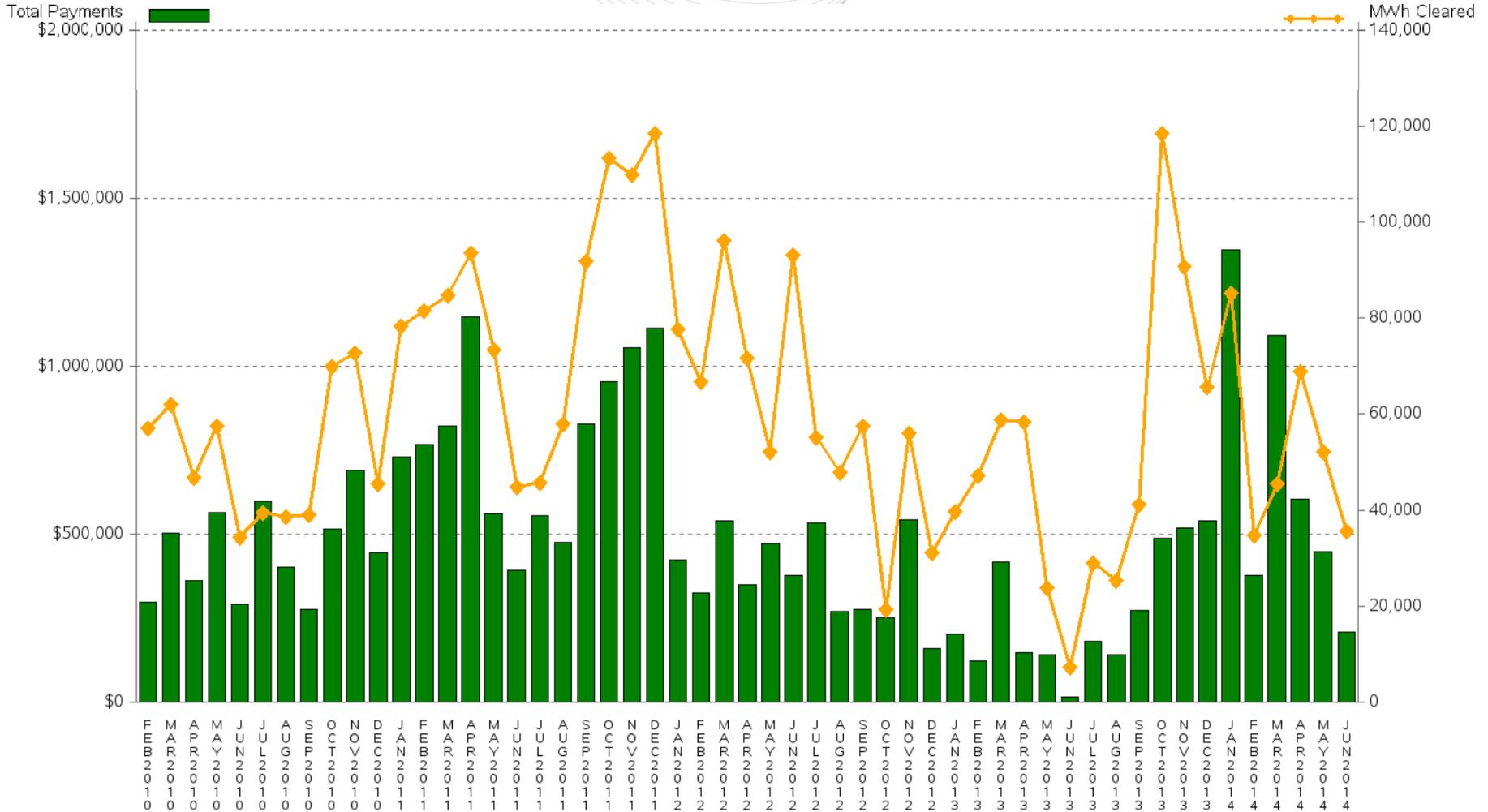
PJM Economic Demand Response Activity



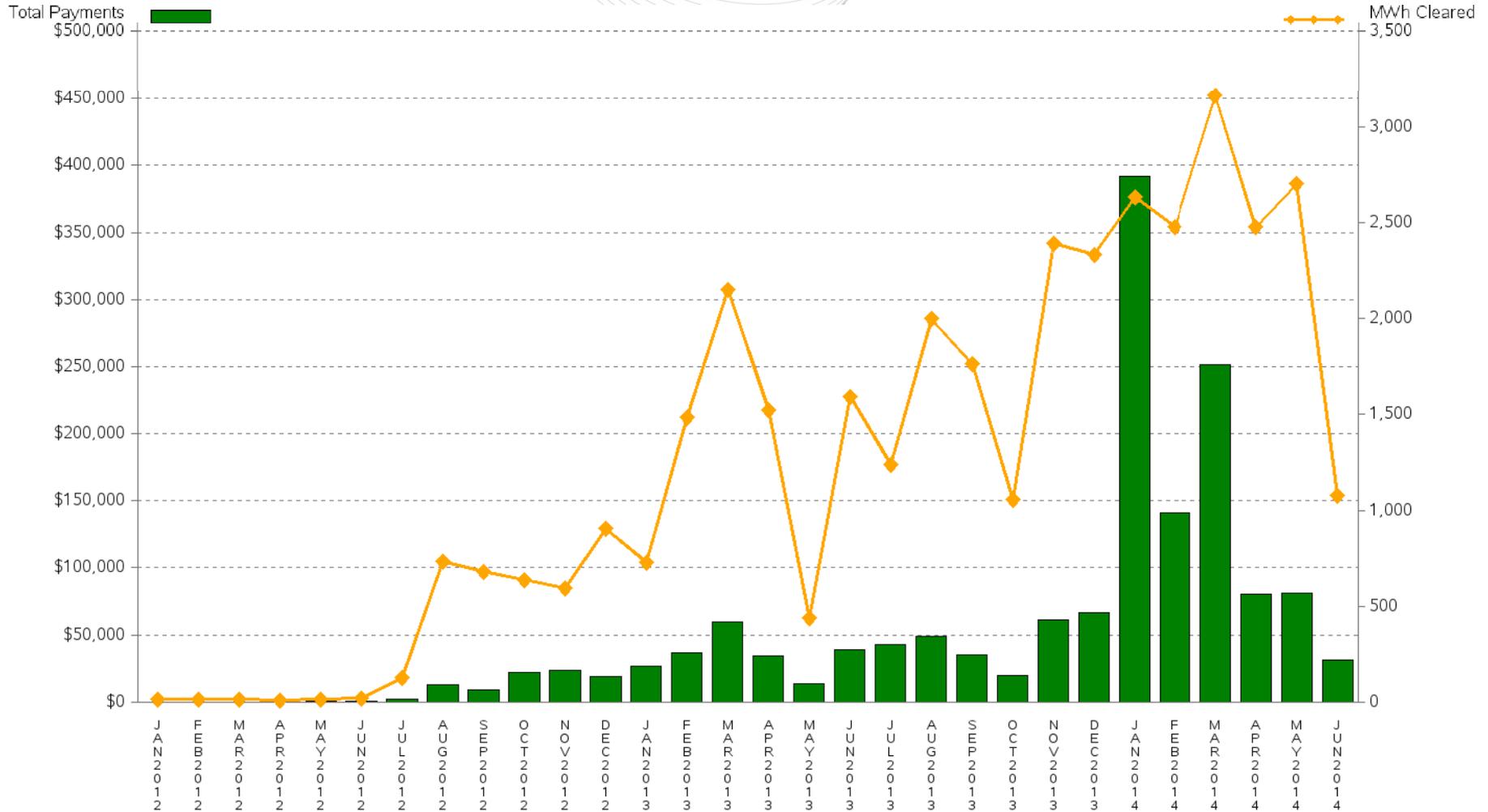
Total Registered MW in PJM's Economic Demand Response

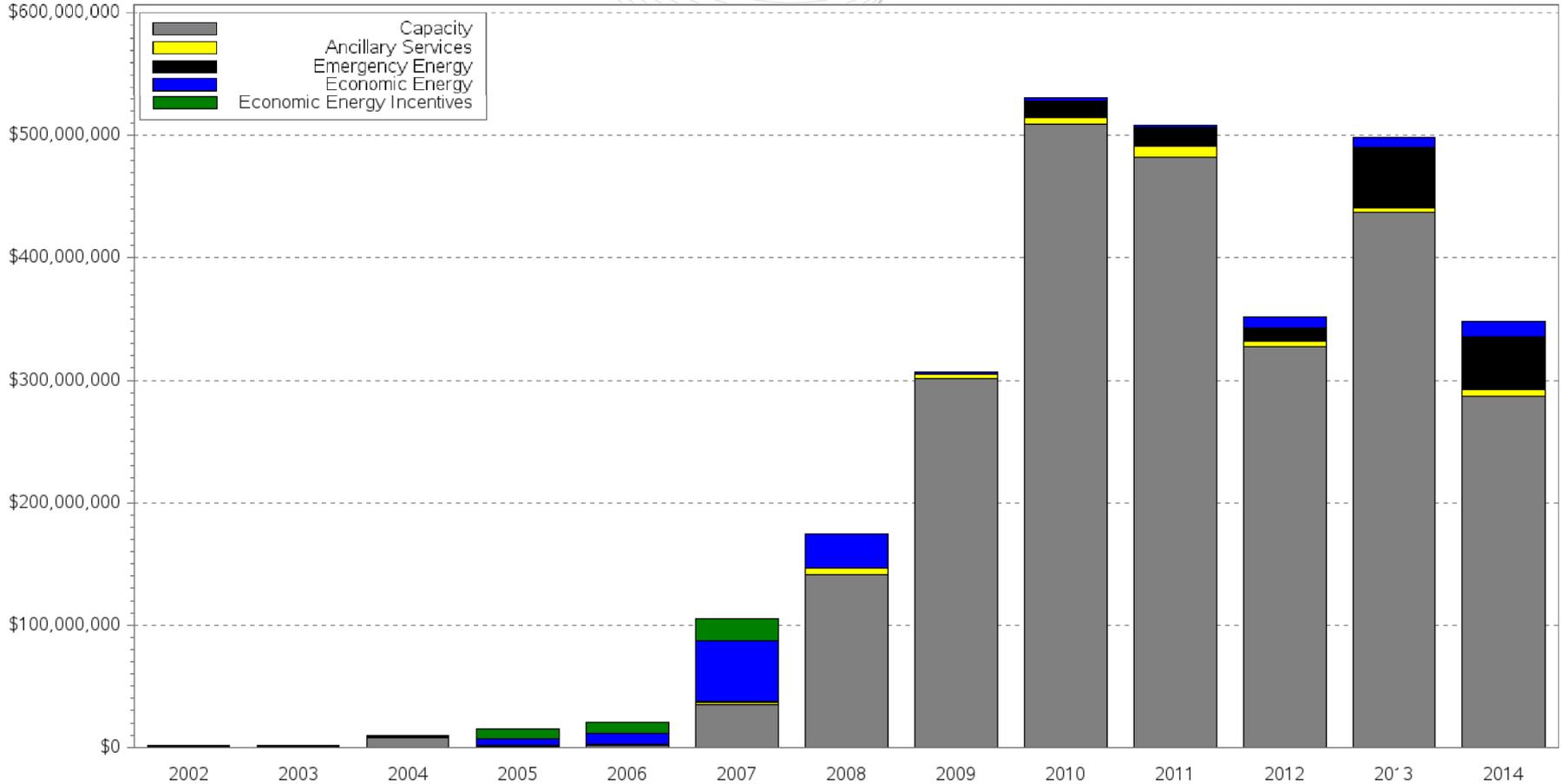


DSR Participation in PJM Synchronized Reserve Markets



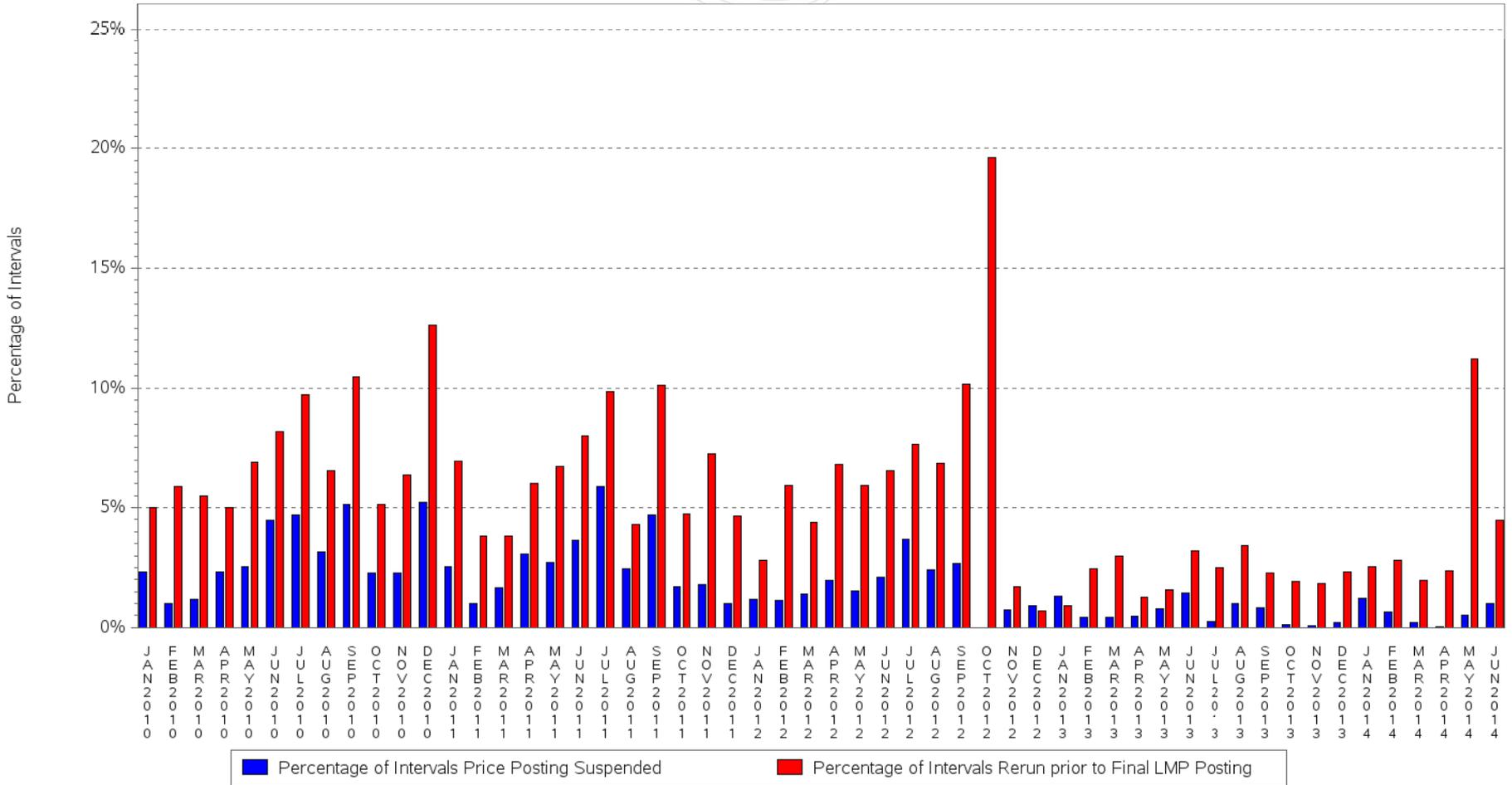
DSR Participation in PJM Regulation Markets



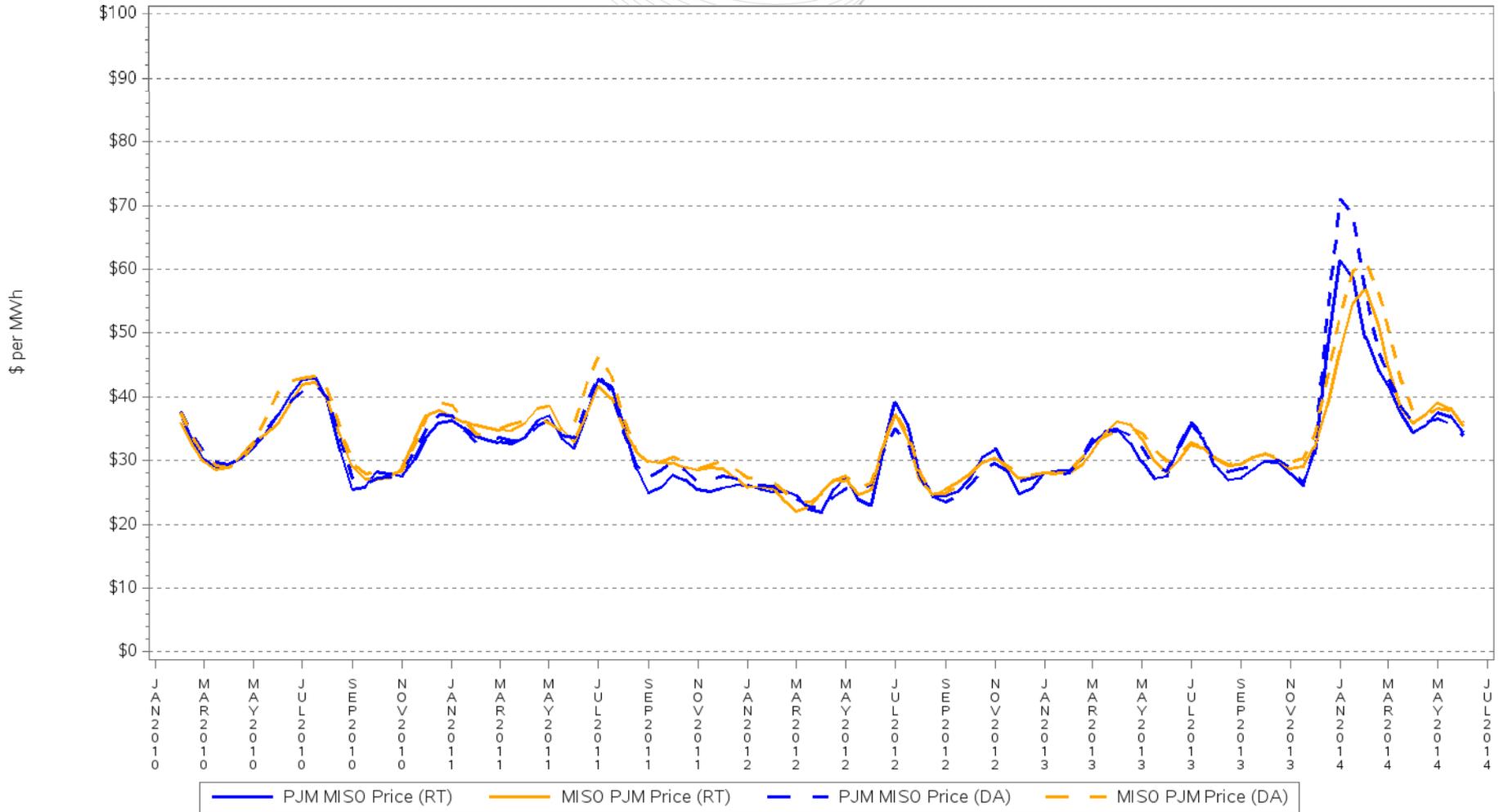


***Capacity revenue prior to RPM implementation on 6-01-2007 estimated based on average daily ALM capacity credits and weighted average daily PJM capacity market clearing price.**

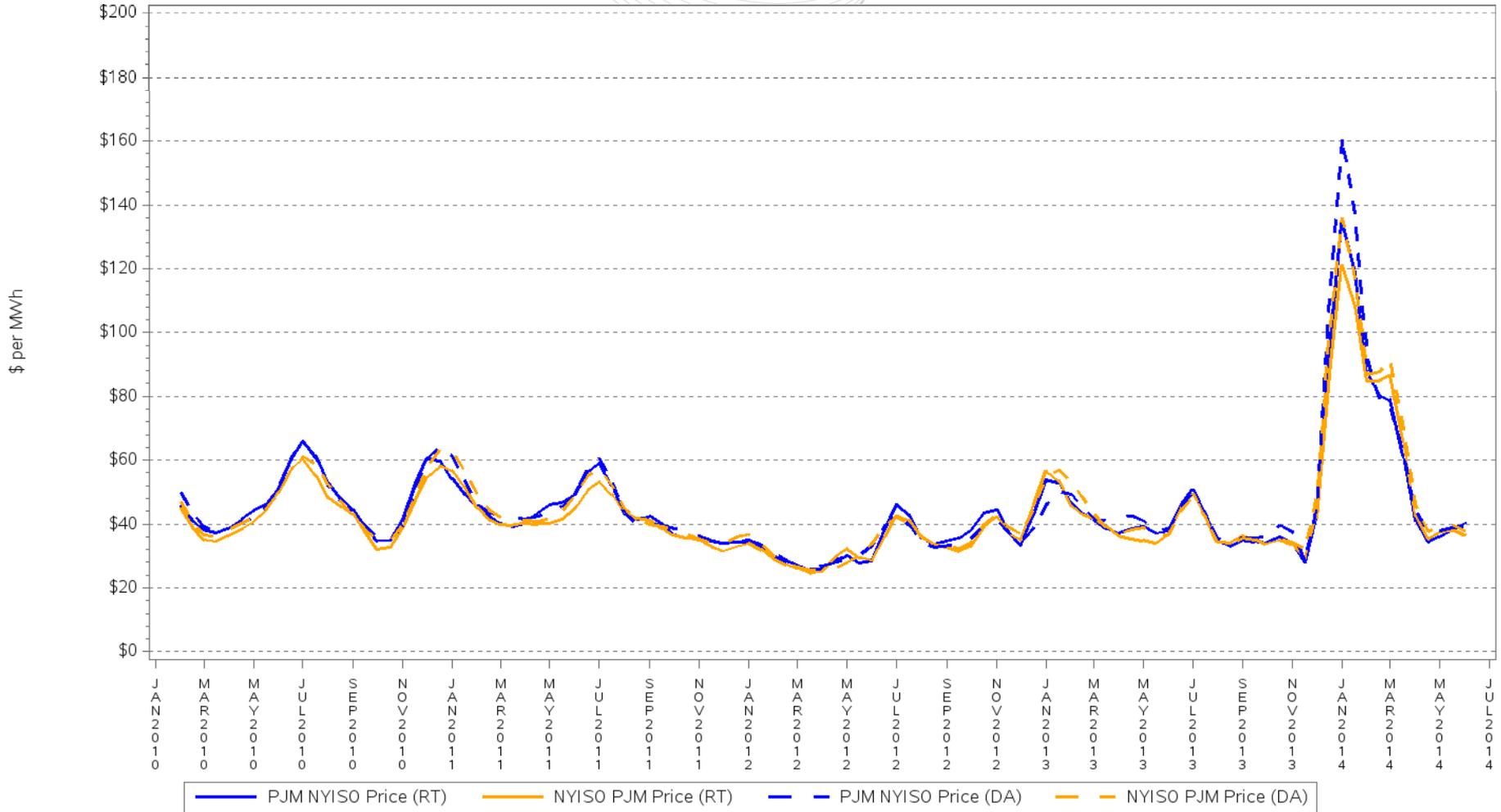
Price Posting Suspensions and Reruns Percentage of 5-Minute Intervals



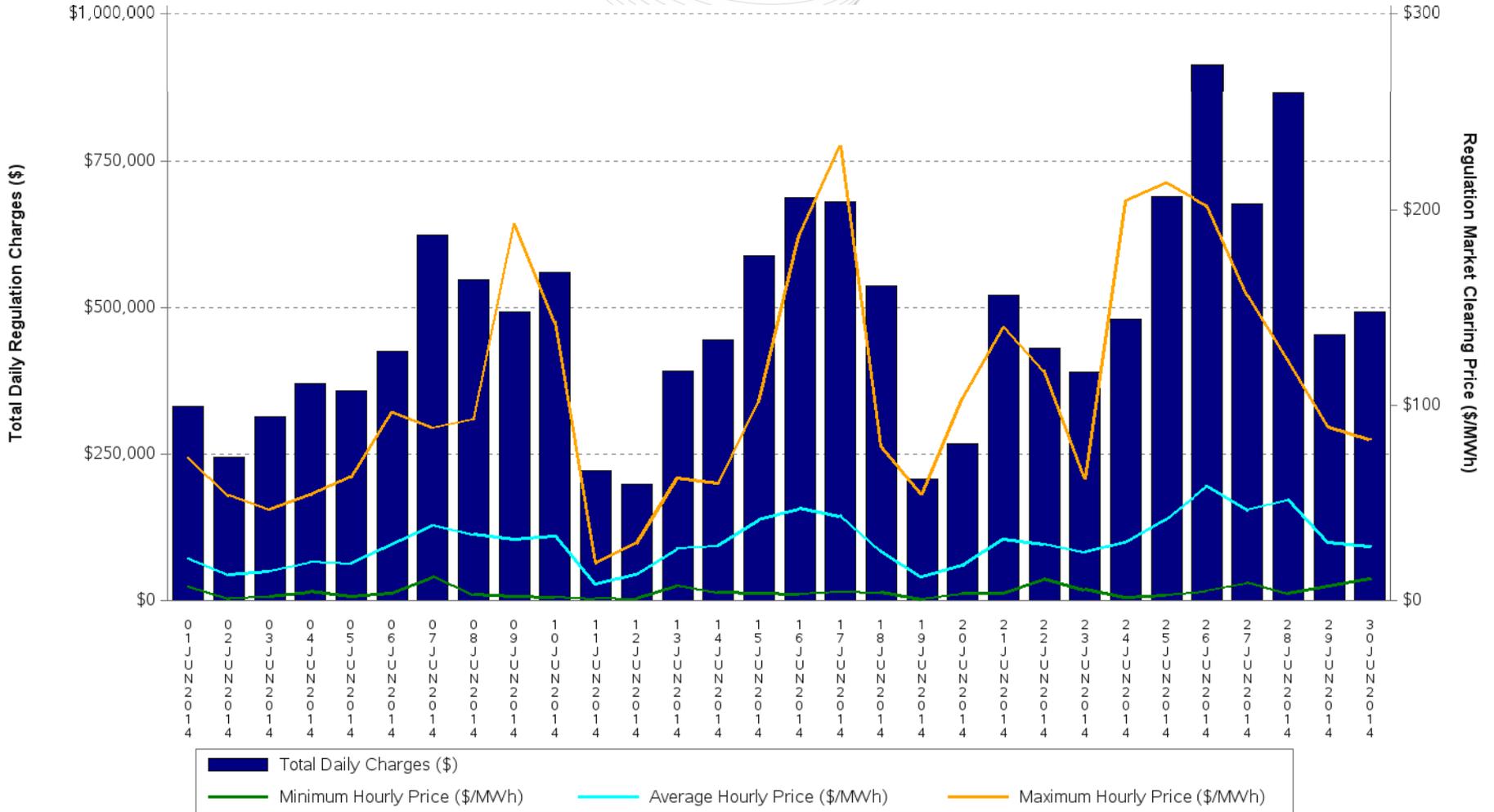
Monthly Average MISO Interface Prices



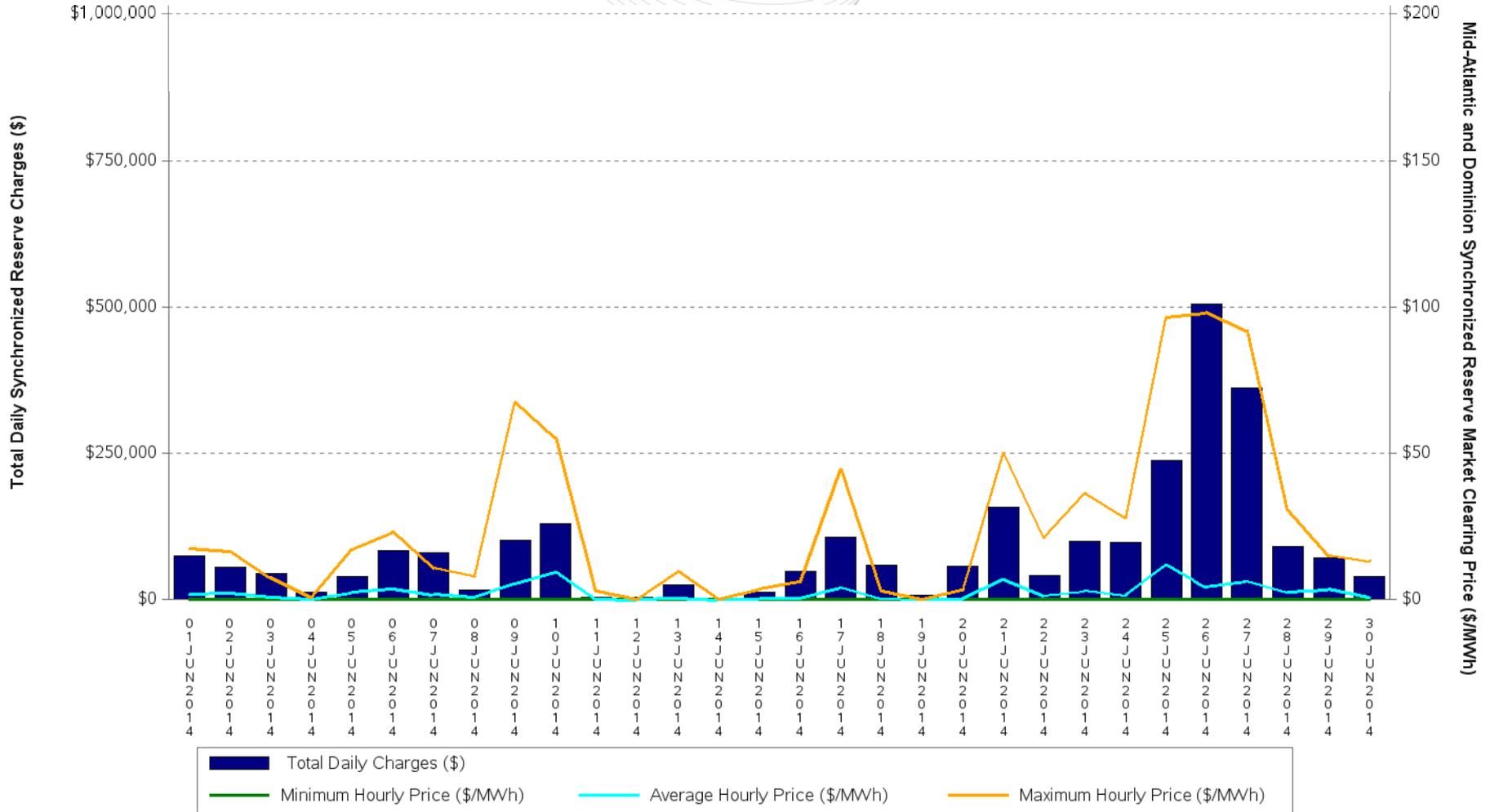
Monthly Average NYISO Interface Prices



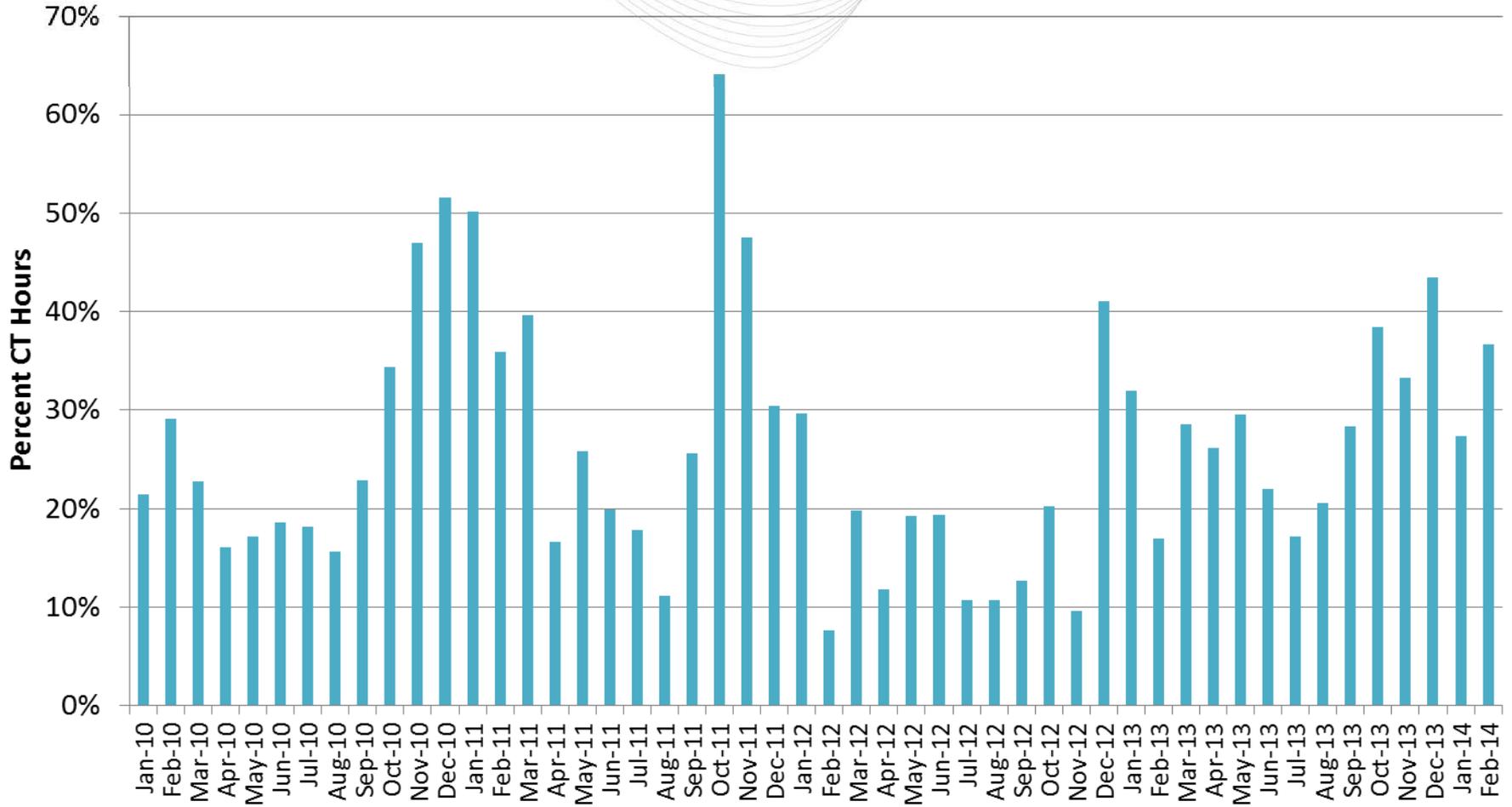
Regulation Market Daily Prices and Charges



Synchronized Reserve Market Daily Prices and Charges



% of Total CT Hours with LMP < Offer



Update Lagging

