

# FMU Statistics through Q3 2013

MIC: FMU Adder Group

Date: December 4, 2013

Joseph Bowring



Monitoring Analytics

**Table 3-9 Offer capping statistics for energy: January through September, 2009 to 2013**

(Jan - Sep)	Real Time		Day Ahead	
	Unit Hours Capped	MW Capped	Unit Hours Capped	MW Capped
2009	0.5%	0.1%	0.1%	0.0%
2010	1.2%	0.3%	0.3%	0.1%
2011	0.7%	0.3%	0.0%	0.0%
2012	1.1%	0.6%	0.1%	0.1%
2013	0.5%	0.2%	0.2%	0.1%

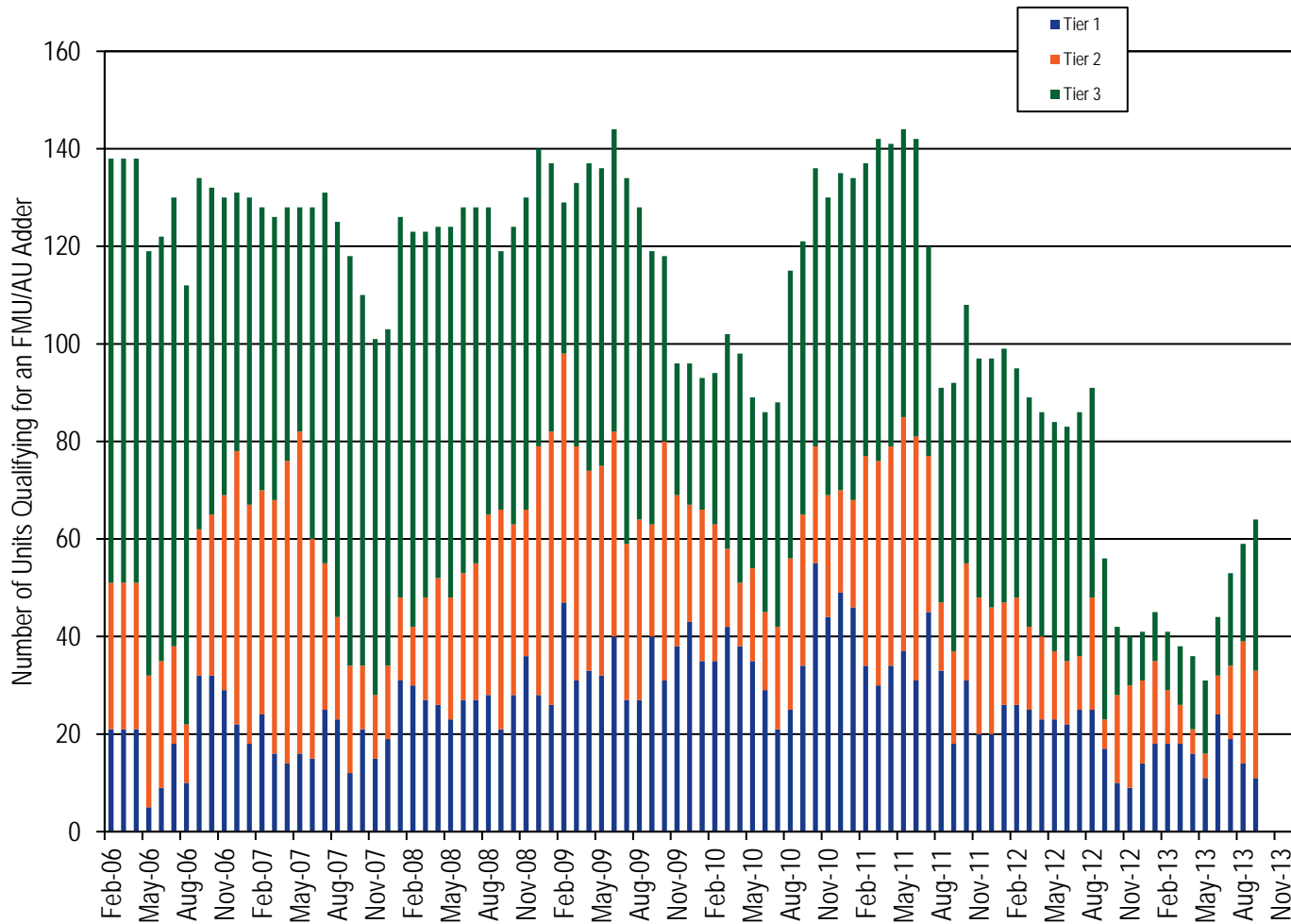
**Table 3-10 Offer capping statistics for energy and reactive support: January through September, 2009 to 2013**

(Jan - Sep)	Real Time		Day Ahead	
	Unit Hours Capped	MW Capped	Unit Hours Capped	MW Capped
2009	0.5%	0.1%	0.1%	0.0%
2010	1.2%	0.3%	0.3%	0.1%
2011	0.8%	0.3%	0.0%	0.0%
2012	1.1%	0.7%	0.2%	0.1%
2013	2.2%	1.9%	2.4%	1.8%

**Table 3-34 Number of frequently mitigated units and associated units (By month): 2012 and January through September, 2013**

	FMUs and AUs							
	2012				2013			
	Tier 1	Tier 2	Total Eligible		Tier 1	Tier 2	Total Eligible	
			Tier 3 for Any Adder			Tier 3 for Any Adder		
January	26	21	52	99	18	17	10	45
February	26	22	47	95	18	11	12	41
March	25	17	47	89	18	8	12	38
April	23	17	46	86	16	5	15	36
May	23	14	47	84	11	5	15	31
June	22	13	48	83	24	8	12	44
July	25	11	50	86	19	15	19	53
August	25	23	43	91	14	25	20	59
September	17	6	33	56	11	22	31	64
October	10	18	14	42				
November	9	21	10	40				
December	14	17	10	41				

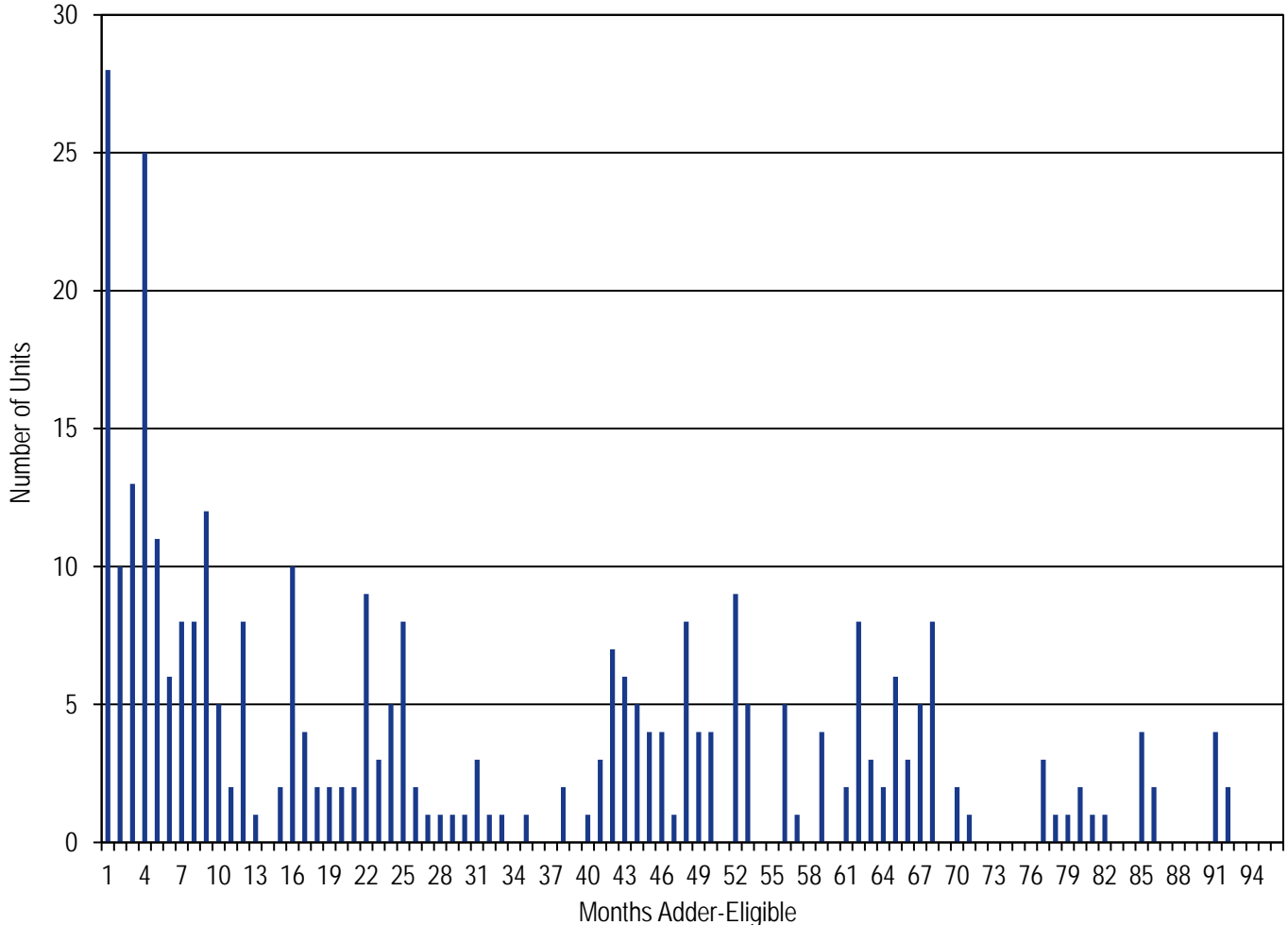
# Figure 3-5 Frequently mitigated units and associated units (By month): February, 2006 through September, 2013



**Table 3-35 Frequently mitigated units and associated units total months eligible: 2012 and January through September, 2013**

Months Adder-Eligible	FMU & AU	
	2012	2013
1	25	16
2	12	10
3	4	11
4	9	7
5	2	1
6	4	1
7	14	1
8	16	10
9	15	24
10	5	
11	2	
12	25	
<b>Total</b>	<b>188</b>	<b>81</b>

**Figure 3-6 Frequently mitigated units and associated units total months eligible: February, 2006 through September, 2013**



# Frequently mitigated units at risk of retirement

FMU Units At Risk	No. of Units	MW
Units that have received FMU payments since 2011	263	22,989
Units retired or scheduled to retire	86	8,021
Remaining FMU units	177	14,968
Units that did not cover ACR	13	1,420
Units for which FMU revenue determined if ACR costs were covered	0	0
Additional FMU units that did not clear the 16/17 BRA or cleared significantly less than in previous years	5	115



# Impact of FMU Adder on Zonal Load Weighted LMP

Element	FMU Adder's Contribution to Real Time LMP	2013 (Jan-Sep)	
		Load Weighted Real Time LMP	Percent
AECO	\$1.08	\$42.09	2.6%
AEP	\$0.96	\$36.31	2.6%
APS	\$0.84	\$38.52	2.2%
ATSI	\$0.87	\$44.63	2.0%
BGE	\$1.09	\$44.55	2.4%
COMED	\$0.75	\$34.01	2.2%
DAY	\$0.83	\$36.91	2.3%
DEOK	\$0.79	\$35.02	2.3%
DOM	\$1.07	\$41.77	2.6%
DPL	\$1.07	\$43.13	2.5%
DUQ	\$0.77	\$36.44	2.1%
EKPC	\$1.16	\$35.06	3.3%
JCPL	\$2.20	\$44.45	5.0%
METED	\$0.96	\$40.70	2.4%
PECO	\$0.84	\$40.44	2.1%
PENELEC	\$1.00	\$39.51	2.5%
PEPCO	\$1.06	\$43.72	2.4%
PPL	\$0.83	\$40.19	2.1%
PSEG	\$1.38	\$45.47	3.0%
RECO	\$1.61	\$47.74	3.4%
PJM	\$0.98	\$39.75	2.5%



# FMU Adder and Reactive Units

- **Some units are scheduled noneconomically for local voltage issues or for reactive interface control.**
- **These units are offer capped if their price-based offer is greater than their cost-based offer.**
- **These units become eligible for FMU adders if capped for more than 60 percent of run hours over a rolling 12 month period.**



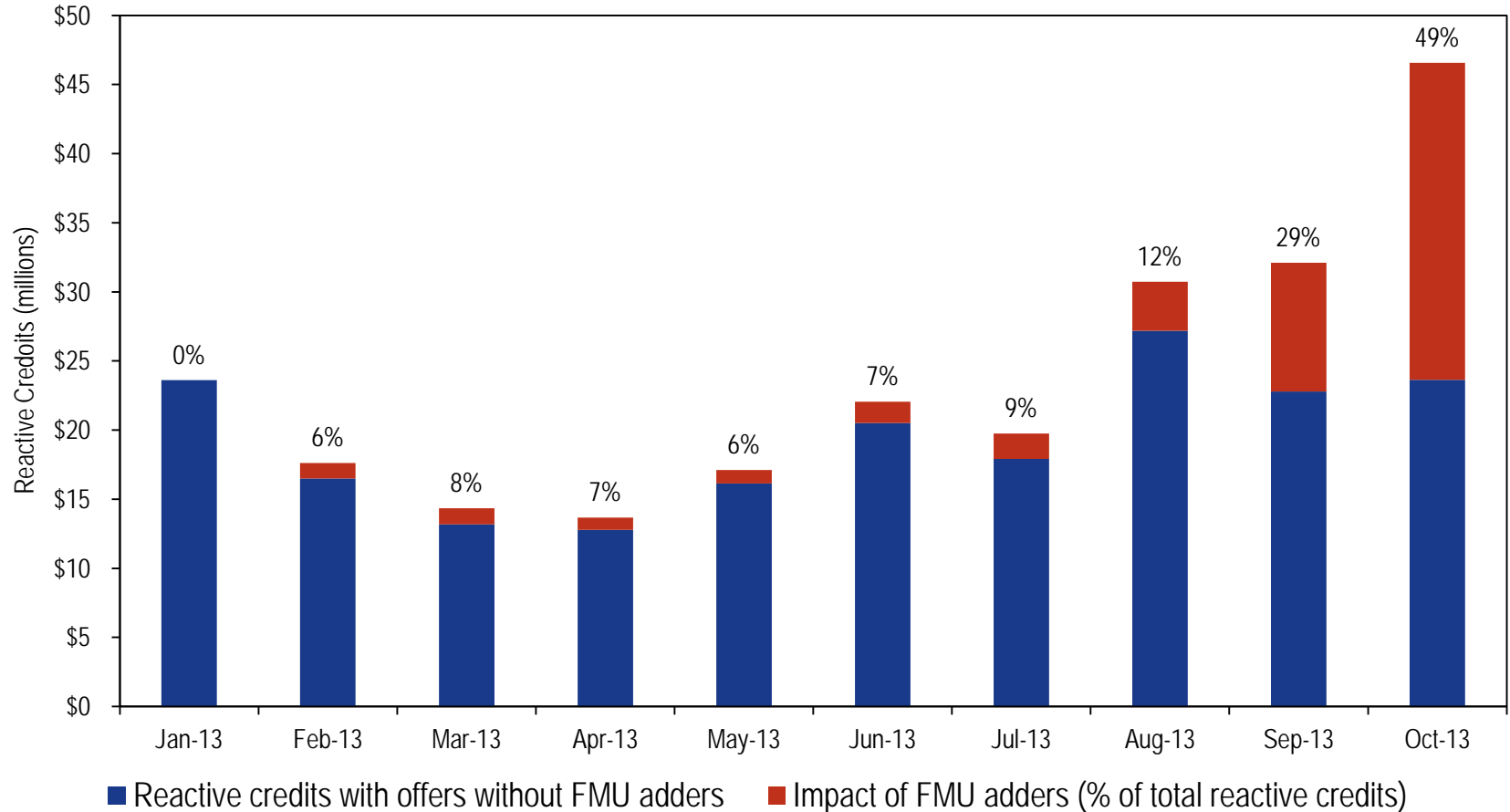
# FMU Adder and Reactive Units

- **These units receive a make whole payment whenever their offer is not covered by LMP revenues.**
- **These payments can be day-ahead operating reserve credits or reactive services credits.**
- **The make whole costs of these units is allocated to real-time load in the zone or zones where the service was provided.**
- **If the reactive service is for transmission lines equal or greater than 500 kV, then real-time load in the entire RTO is allocated the corresponding reactive services charges.**



# FMU Adder and Reactive Charges

- Reactive Services Charges (Jan – Oct 2013)



**Monitoring Analytics, LLC**  
**2621 Van Buren Avenue**  
**Suite 160**  
**Eagleville, PA**  
**19403**

**(610) 271-8050**

**MA@monitoringanalytics.com**

**www.MonitoringAnalytics.com**

