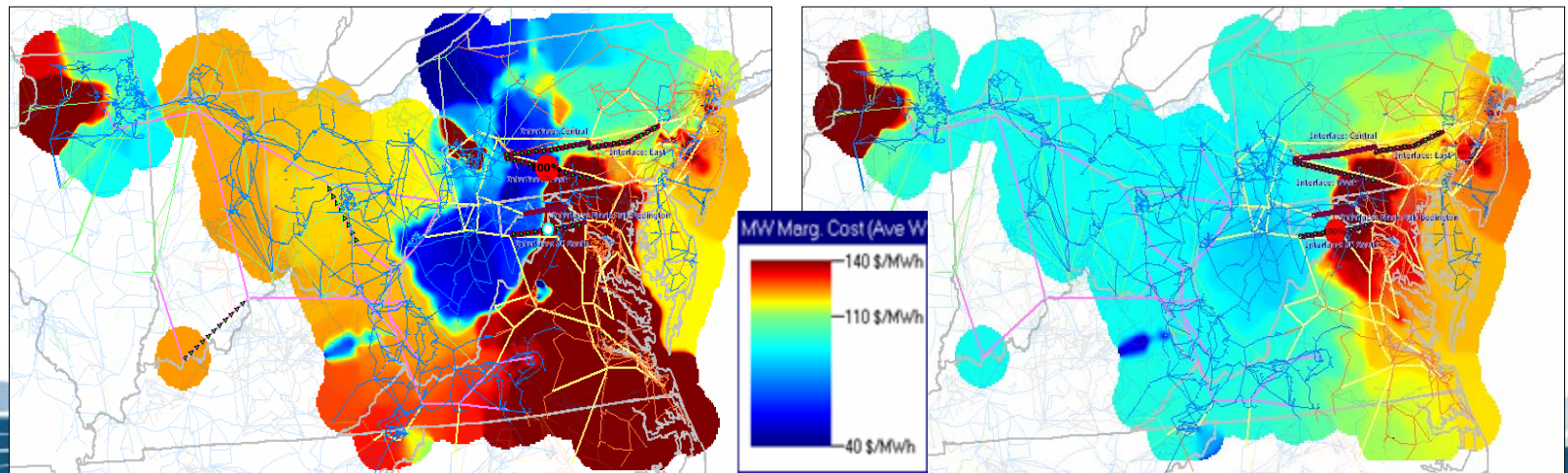


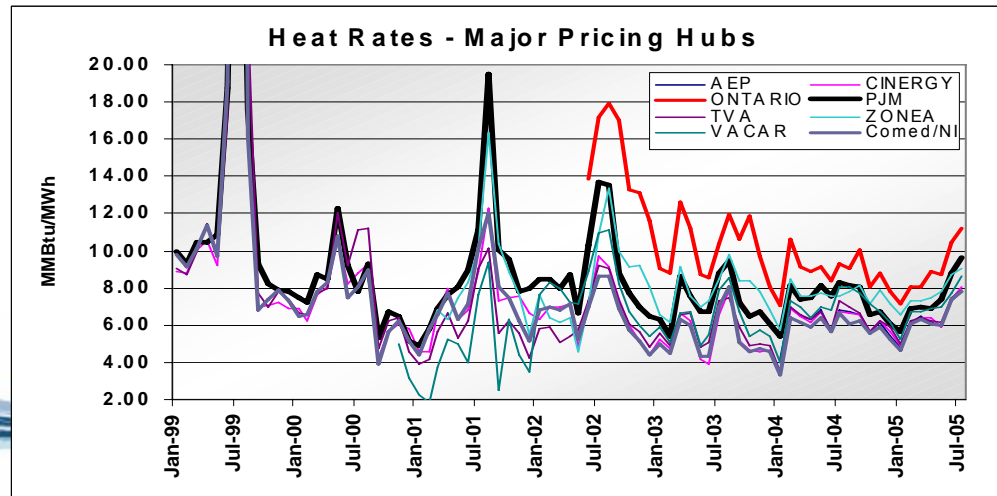
- Lower energy prices across the expanded PJM region
  - ESAI's technical study: region-wide energy price without integration would be \$0.78/MWh higher in 2005 than with integration.
  - Spreading these savings over the total PJM RTO's energy demand of 700 terawatt-hours (TWh) per year yields aggregate savings of over **\$500 million per year.**



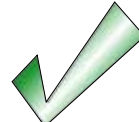
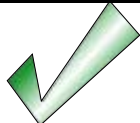


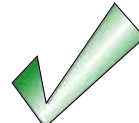
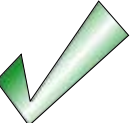


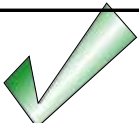









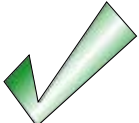






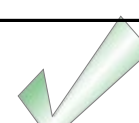
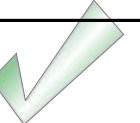
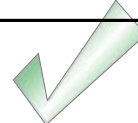
Pre-Integration Price Pattern

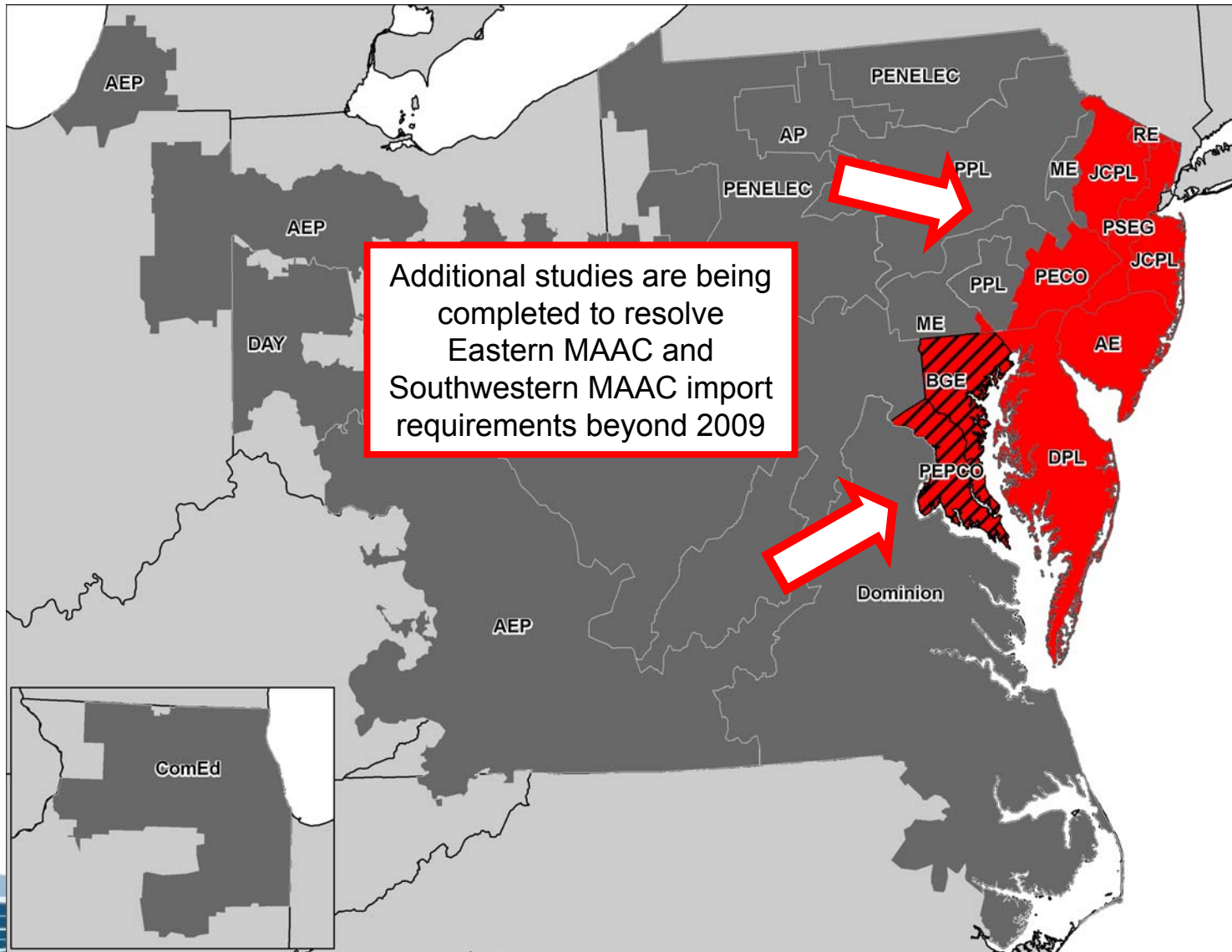
Post-integration Energy Price Pattern

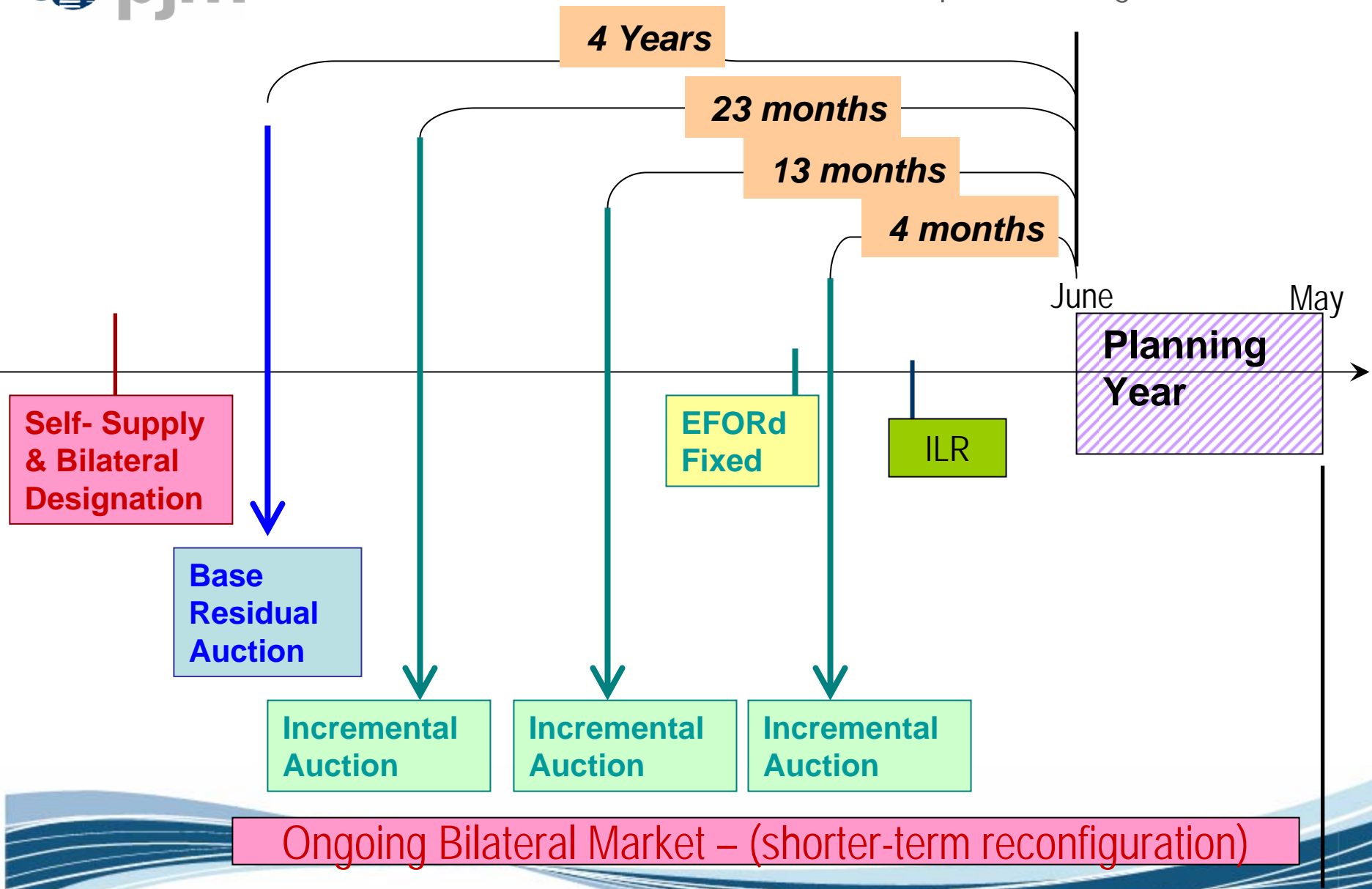


- Heat rates decline
  - Provides fuel adjusted measure of efficiency
  - Equivalent heat rate at Western Hub reduced from 11 MMBTU/ MWh in 1999 to 7.3 MMBTU/MWh in 2004

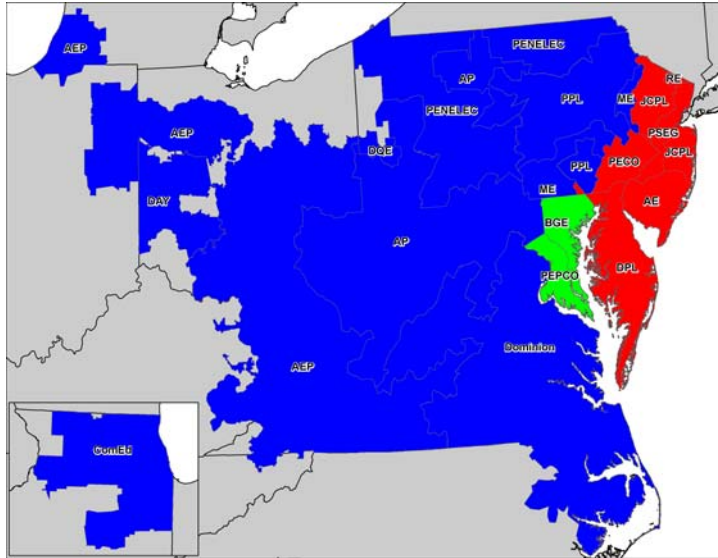


Revenue Opportunity	Central Station Generation (PJM)		PJM (January 2005)	PJM (as of December 31, 2005)	PJM with approval of RPM	PJM with addition of Forward Energy
Real-Time/ Spot Energy Sales		→				
Day-Ahead Energy Sales		Demand Side Response				
Forward Energy Sales			No 	No 	No 	Forward Energy Reserve 
Forward Capacity Sales	RPM will enhance 	→	Limited 	Limited 	RPM auction 	RPM auction 
Energy & Capacity payment for emergencies		→	Not in all cases 			
Ancillary Services	Spin, regulation, etc... 	→	No 			

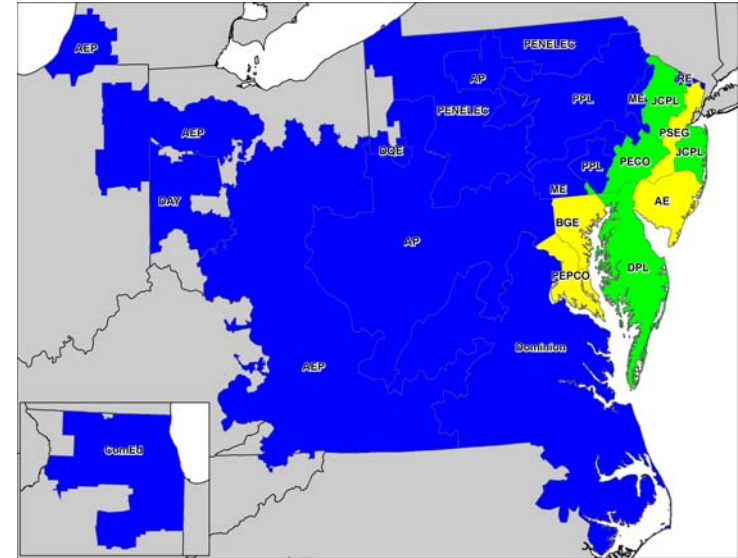




## May 2007 – June 2008

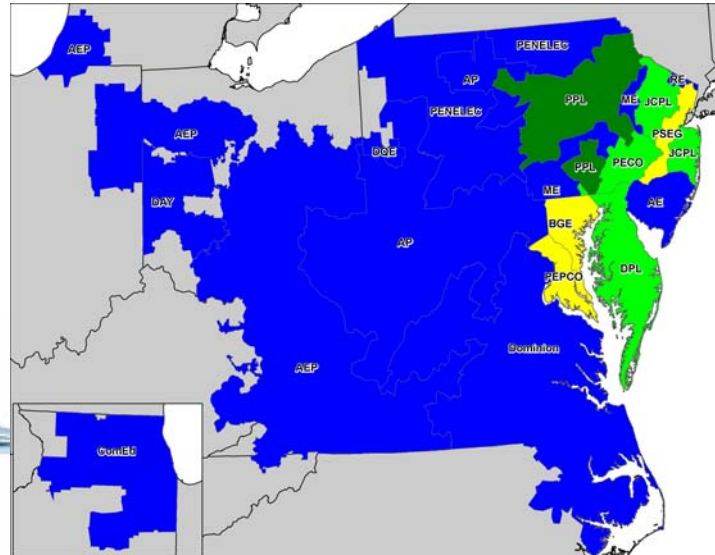


## May 2008 – June 2009

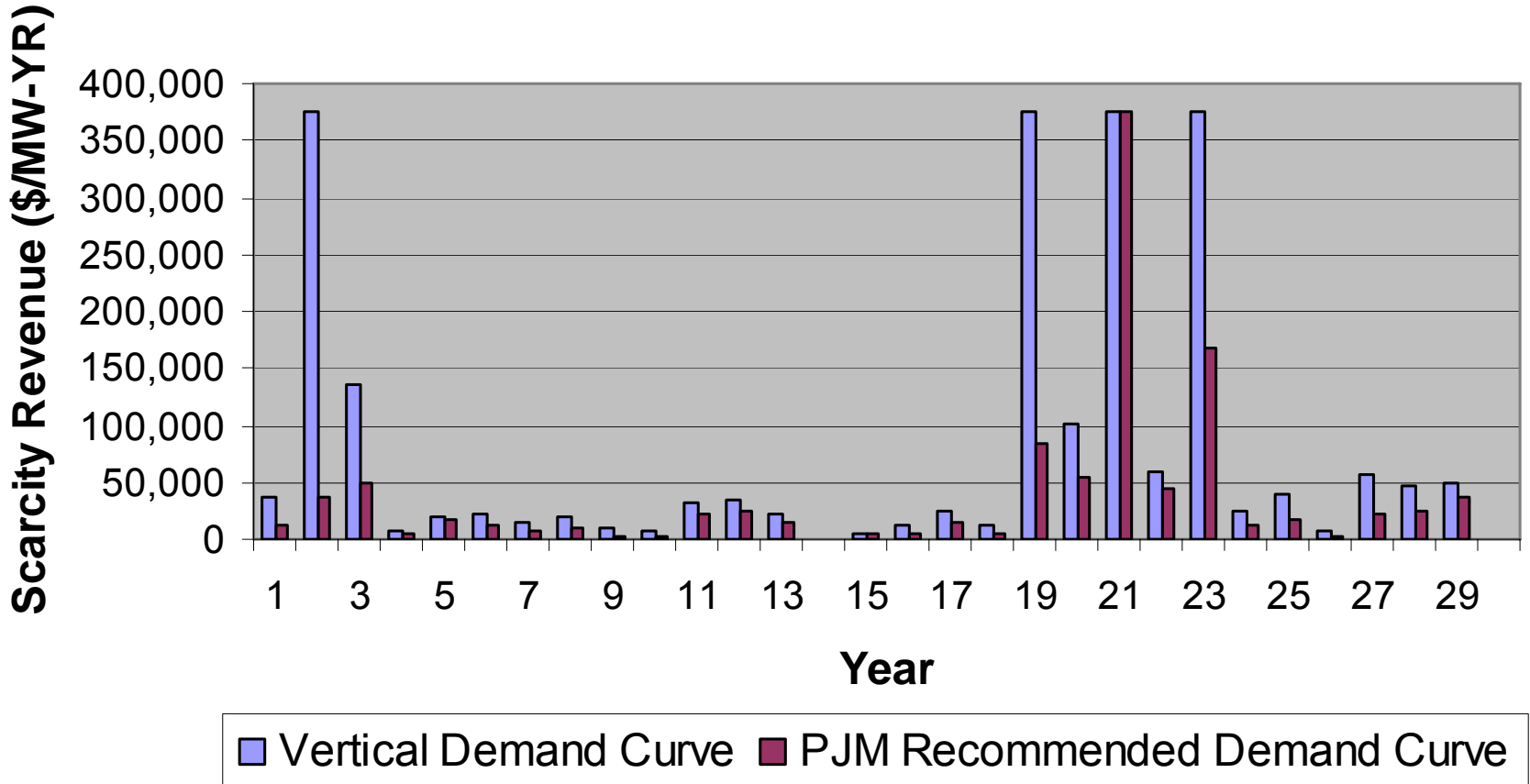


## May 2009 – June 2010

Value of Capacity (\$/MW-day)



# Scarcity Prices: PJM Recommended Demand Curve vs. Vertical Demand Curve at Target Reserve



# Capacity Prices: PJM Recommended Demand Curve vs. Vertical Demand Curve at Target Reserve

