

Bank of America/Merrill Lynch Megawatt Round-up Conference March 28, 2012

Edward R. Muller Chairman and CEO

Safe Harbor Statement



Forward-Looking Statements

This presentation contains statements, estimates or projections that are "forward-looking statements" as defined under U.S. federal securities laws. In some cases, one can identify forward-looking statements by words such as "will," "expect," "estimate," "think," "forecast," "guidance," "outlook," "plan," "lead," "project" or comparable words. Forward-looking statements are subject to certain risks and uncertainties that could cause actual results to differ materially from our historical experience and our present expectations or projections.

These risks include, but are not limited to:

- (i) legislative and regulatory initiatives or changes affecting the electric industry;
- (ii) changes in, or changes in the application of, environmental or other laws and regulations;
- (iii) failure of our generating facilities to perform as expected, including outages for unscheduled maintenance or repair;
- (iv) changes in market conditions or the entry of additional competition in our markets; and
- (v) those factors contained in our periodic reports filed with the SEC, including in the "Risk Factors" section of our most recent Annual Report on Form 10-K.

The forward-looking information in this document is given as of the date of the particular statement and we assume no duty to update this information. Our filings and other important information are also available on the Investor Relations page of our web site at www.genon.com.

GenOn and the Industry



- Cross-State Air Pollution Rule (CSAPR) stayed
- Mercury and Air Toxics Standards (MATS) compliance required in April 2015
- Expect to deactivate 3,140 MWs of the GenOn fleet as forecasted returns on investments necessary to comply with environmental regulations are insufficient
- PJM identified 15,531 MWs¹ of announced and projected retirements in PJM through 2015 related to environmental rules – approximately 8% of PJM's capacity
- Expect GenOn will invest ~\$586 \$726 million for major environmental controls over the next 10 years

We expect higher earnings from price increases resulting from industry retirements will more than offset reduced earnings from GenOn unit deactivations

Expected Changes in Generation Fleet GenOn.



Plant	Location	MWs	Expected Timing	Driver			
Units to be deactivated							
Elrama	PA	460	June 2012	MATC and market and ditions			
Niles	ОН	217	June 2012	MATS and market conditions			
Portland	PA	401	January 2015	Cumulative effect of various environmental regulations			
Avon Lake ¹	ОН	732	April 2015	MATS			
New Castle	PA	330	April 2015	MATS			
Shawville	PA	597	April 2015	Cumulative effect of various environmental regulations			
Titus	PA	243	April 2015	MATS			
Glen Gardner	NJ	160	May 2015	NJ High Energy Demand Day (HEDD) regulations			
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Subtotal	3,140

Other fleet reductions					
Indian River	FL	586	January 2012	Sold for \$11.5 million	
Vandolah	FL	630	May 2012	Tolling agreement expires	
Potomac River	VA	482	October 2012	Retiring based on agreement with the City of Alexandria, VA	
Contra Costa	CA	674	May 2013	Expected to retire upon expiration of PPA	

Total reductions 5,512

Fleet addition				
Marsh Landing	CA	719	Mid-2013	Under construction – on schedule and on budget

19,490 MWs of generating capacity after 2015

Our initial analysis indicates the forecasted return on environmental investments is insufficient. If the analysis is confirmed, we anticipate retiring the coal-fired units in 2015.

Expected Environmental Investments



Expect investments of ~\$586 - \$726 million in major controls over the next
 10 years to meet current and anticipated environmental rules

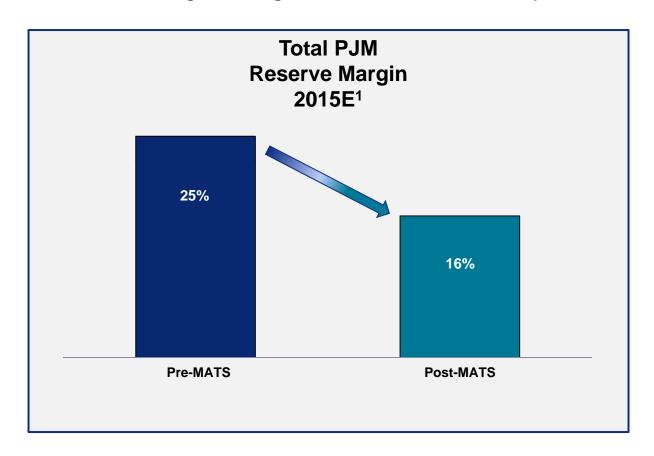
Plant	Location	Control Technology	Expected Timing	Driver	Investments (\$ millions)
Kendall	MA	Backpressure steam turbine + air-cooled condenser	2012 - 2014	Water regulations	\$32 - \$35
Gilbert Sayreville Werner	NJ	SCR	2012 - 2015	New Jersey HEDD regulations	\$129 - \$151
Conemaugh	PA	Scrubber upgrade + SCR	2012 - 2015	MATS	\$93 - \$102 ¹
Mandalay Ormond Beach	CA	Variable speed pumps	2018 - 2019	Water regulations	\$17 - \$20
Chalk Point - Unit 2 Dickerson	MD	SCR	2018 - 2021	More stringent PM _{2.5} and Ozone NAAQS	\$315 - \$418

Based on GenOn percentage (leased).

Impact of Environmental Rules



Supply and demand tightening as a result of industry deactivations in PJM

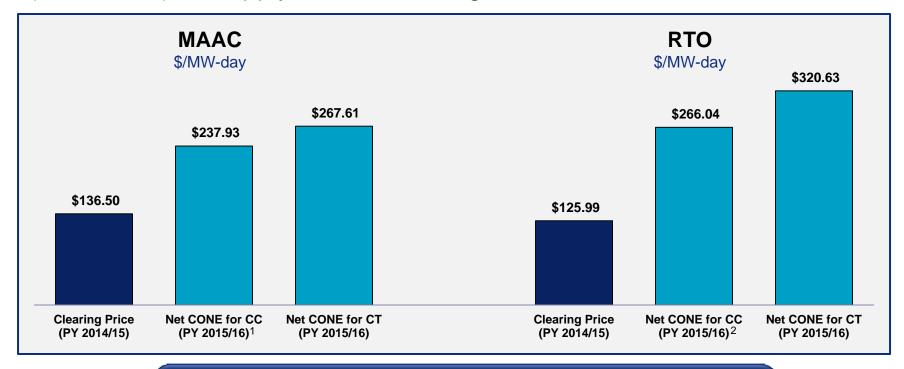


^{1.} Pre-MATS estimated reserve margin is prior to and Post-MATS is after the 15.5 GW of total announced and projected retirements in the PJM ISO "GO Response to EPA Rules Preliminary Summary Update" dated March 26, 2012. Post-MATS also includes retirements related to NJ High Energy Demand Day NOx limits and only known additions that are not likely sensitive to price.

Capacity Prices



 Over time, capacity prices should increase toward the Cost of New Entry (Net CONE) as supply and demand tightens



We expect higher earnings from increases in capacity prices

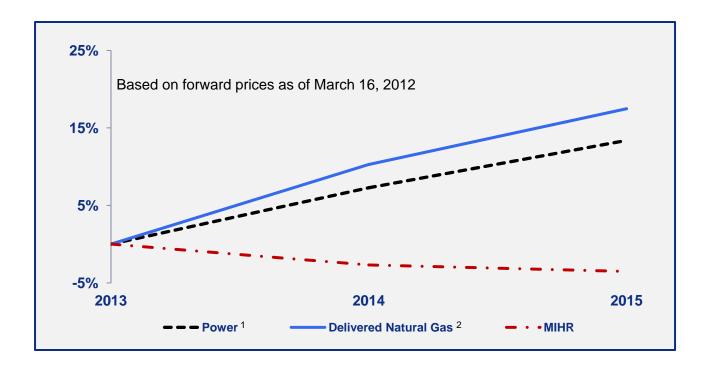
^{1.} MAAC Combined Cycle (CC) Net CONE is based on PJM Area 4 (Rest of MAAC).

^{2.} RTO CC Net CONE is based on PJM Area 3 (Rest of RTO, excluding Dominion).

Energy Prices



 Forward prices do not show an expansion in market implied heat rates (MIHRs) as a result of announced deactivations



Reduced supply generally leads to heat rate expansion

Summary



- GenOn will invest only if expected return exceeds cost of capital
- Expect to deactivate 3,140 MWs because forecasted returns on investments necessary to comply with environmental regulations are insufficient
- Expect investments of ~\$586 \$726 million for major environmental controls over the next 10 years
- After 2015, GenOn will have 19,490 MWs after giving effect to the deactivations, other fleet reductions and the addition of Marsh Landing

We expect higher earnings from price increases resulting from industry retirements will more than offset reduced earnings from GenOn unit deactivations



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