Fourth Quarter 2010 Earnings

March 1, 2011

Safe Harbor Statement

Forward-Looking Statements

This presentation contains statements, estimates or projections that constitute "forward-looking statements" as defined under U.S. federal securities laws. In some cases, one can identify forward-looking statements by terminology such as "will," "expect," "estimate," "think," "forecast," "guidance," "outlook," "plan," "lead," "project" or other comparable terminology. 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;
(v) the ability to integrate successfully the businesses following the merger and realize cost savings and any other synergies; and
(vi) 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.

Non-GAAP Financial Information

The following presentation includes "non-GAAP financial measures" as defined in Regulation G under the Securities Exchange Act of 1934, as amended. Reconciliations of these measures to the most directly comparable GAAP measures are contained herein. This presentation is available in the Investor Relations section of our web site at www.genon.com. Certain factors that could affect GAAP financial measures are not accessible on a forward-looking basis, but could be material to future reported earnings and cash flow.

Edward R. Muller

Chairman and CEO

Fourth Quarter 2010 Earnings

March 1, 2011

GenOn Energy

- Merger closed December 3, 2010
  - *Annual cost savings of $150 million starting in January 2012*
  - *Integration proceeding smoothly*

- Clear strategy
  - *Focus on operations*
  - *Hedge to reduce volatility in realized gross margin*
  - *Capital structure to manage through different commodity price environments*
  - *Prudent investment of capital*

- Approximately $3.1 billion of contracted and capacity revenue in 2011 – 2014 for which prices have been set

Leading IPP with over 24,000 MW of electric generating capacity

Initiating Guidance

($ millions)

Forward curves as of January 31, 2011	2011E	2012E
Adjusted EBITDA	$595	$559

2011E to 2012E

+

- Merger cost savings on track to achieve $150 million by 2012
- Higher realized energy gross margin

−

- Lower contracted and capacity revenue
- Lower hedge value

2011 is a transition year to full cost savings in 2012

Merger Cost Savings

GenOn

As of December 31, 2010

Categories	Target synergies ($ millions)	Annualized reductions achieved ($ millions)	% of Target
Labor	$ 93	$ 33	35%
Contracted services	16	-	-
IT systems	12	-	-
Insurance	9	8	89%
Legal	6	-	-
Atlanta office lease	4	-	-
Other	10	-	-
Total	**$150**	**$41**	**27%**

Market Update Since November 2010

As of February 25, 2011

Near term (April – December 2011)

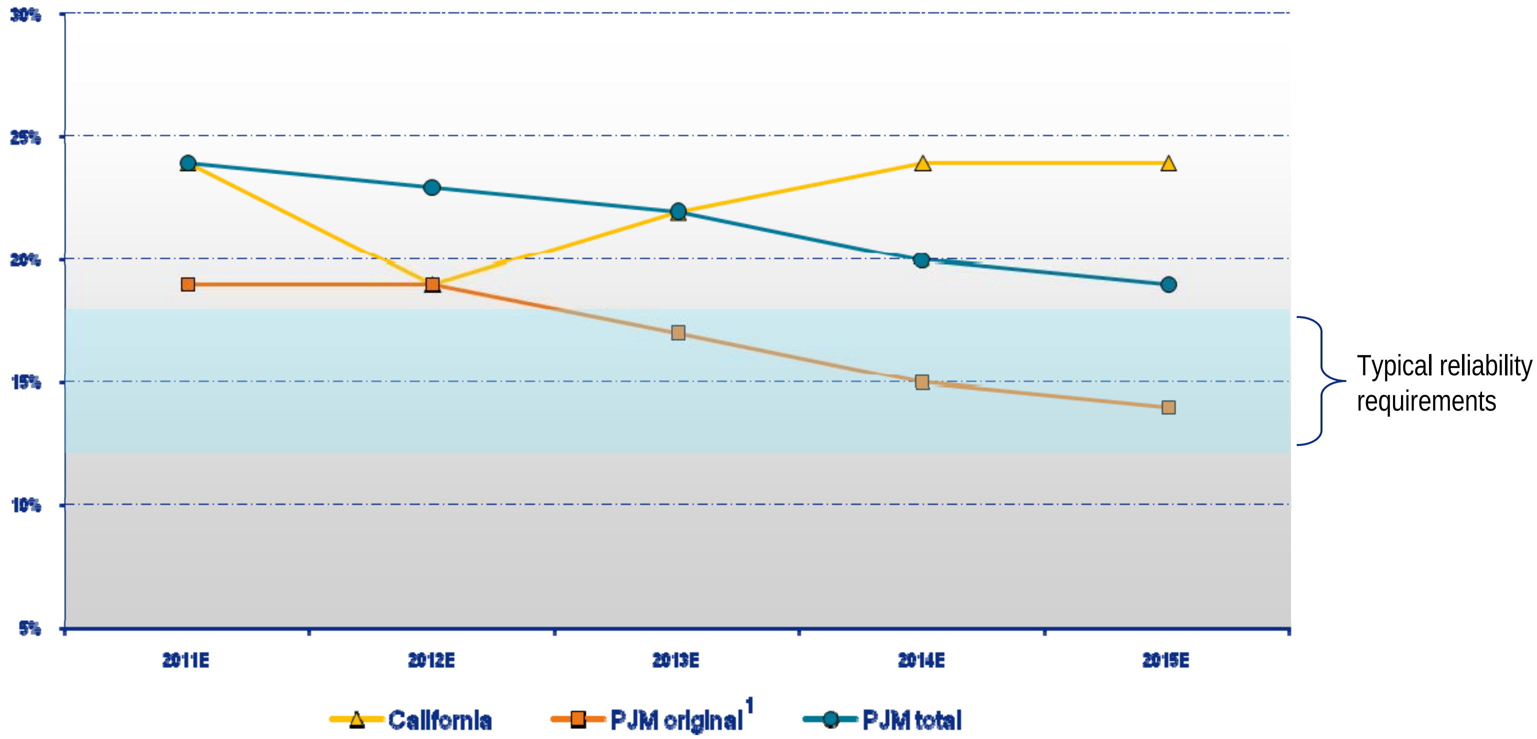
- Natural gas prices currently trade lower at ~ $4.25/mmBtu
- Power prices at PJM West have decreased to ~ $48.75/MWh
- NAPP coal prices have risen but not as sharply as CAPP; current NAPP prices ~ $65/ton
- Dark spreads decreased

Longer term (2012 – 2014)

- Natural gas prices decreased and currently range ~ $4.80 to $5.50/mmBtu
- Power prices in PJM West decreased and currently range ~ $50 to $55/MWh
- NAPP coal prices higher but still lower than CAPP; currently range ~ $66 to $71/ton
- Dark spreads decreased

Electricity Markets - Reserve Margins

GenOn forecasted reserve margins incorporating the latest information from each ISO



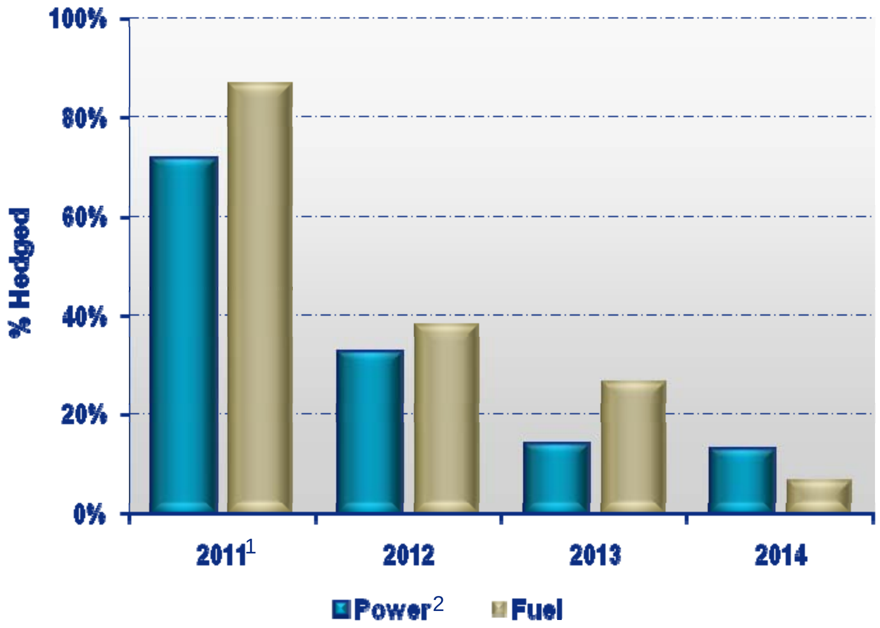
- Supply/demand expected to tighten in PJM

1. PJM original consists of substantially all of PA, NJ, MD and DE (EMAAC, SWMAAC and MAAC).

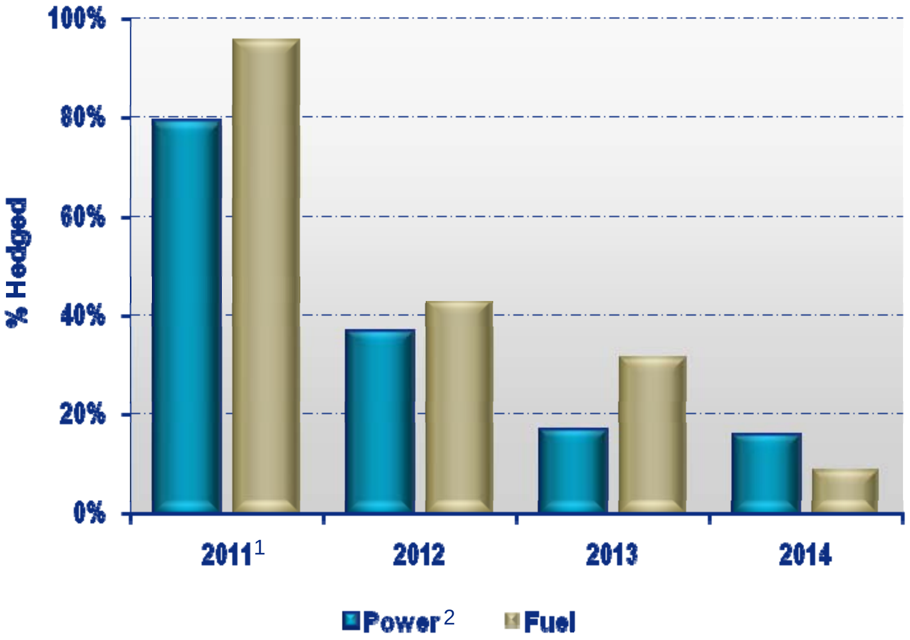
Hedge Levels

Based on expected generation as of January 31, 2011

Aggregate



Baseload Coal



1. 2011 represents balance of year (February - December).
2. Power hedges include hedges with both power and natural gas.

Marsh Landing Update

- On schedule and on budget
  - *Total project costs expected to be approximately $700 million including capital and financing costs*
  - *To be completed by mid-2013*
- $650 million project financing:
  - *$500 million construction and term loan*
  - *$150 million letter of credit facility*
- $42 million cash invested through December 31, 2010

J. William Holden
Executive Vice President and CFO

Fourth Quarter 2010 Earnings
March 1, 2011

Financial Implications of Merger

- Mirant is considered the acquirer for accounting purposes
  - *RRI's net assets adjusted to fair value of approximately $1.8 billion*
  - *Merger results in estimated gain on bargain purchase of $518 million*
  - *Financials reflect Mirant results through 12/2/10; GenOn results thereafter*
  - *REMA lease expense reduced from $60 million/year to $34 million/year; cash outlay unchanged*

- Merger-related costs estimated at $215 million
  - *Includes transaction costs of $87 million and merger costs of $128 million*
    - *$139 million incurred in 2010*
    - *$73 million estimated in 2011 and 2012*
    - *$3 million estimated in 2013 - 2016*

2010 Pro forma

($ millions)	Reported	RRI Energy (prior to merger)	Pro forma Adjustments	Pro forma
Net Loss	$ (50)	$ (488)	$ (208)	**$ (746)**
Discontinued operations income	-	(6)	-	**(6)**
Unrealized (gains) losses on derivatives	42	(69)	-	**(27)**
Gain on bargain purchase	(518)	-	518	**-**
Impairment losses	565	361	-	**926**
Potomac River settlement obligation	32	-	-	**32**
Western states litigation and similar settlements	-	17	-	**17**
Kern River settlement	-	(40)	-	**(40)**
Merger-related costs	114	25	(139)	**-**
Postretirement benefits curtailment gain	(37)	-	-	**(37)**
Other	15	(18)	(19)	**(22)**
Adjusted income (loss) from continuing operations	$ 163	$ (218)	$ 152	**$ 97**
Income taxes, interest, depreciation and amortization	475	445	(106)	**814**
Adjusted EBITDA	**$ 638**	**$ 227**	**$ 46**	**$ 911**

Debt and Liquidity

($ millions)	December 31, 2010
Debt	
Amortizing term loan due 2017	$698
Senior unsecured notes due 2014	575
Senior unsecured notes due 2017	725
Senior unsecured notes due 2018	675
Senior unsecured notes due 2020	550
GenOn Americas Generation:	
Senior notes due 2011	535
Senior notes due 2021	450
Senior notes due 2031	400
Capital leases due 2010-2015	22
Total continuing debt, excluding debt discharged and defeased	**$4,630**
Debt discharged and defeased[1]	1,500
Total debt[2]	$6,130
Cash and cash equivalents:	
GenOn (excluding GenOn Mid-Atlantic and REMA)	$2,179
GenOn Mid-Atlantic	202
REMA	21
Total cash and cash equivalents	$2,402
Less: restricted and reserved	(11)
Available cash and cash equivalents	$2,391
Revolver and letters of credit available[3]	521
Total available liquidity	**$2,912**

1. Funds on deposit are escrowed for the discharged and defeased debt.
2. Excludes unamortized debt discounts and adjustments to fair value of debt of $49 million.
3. Excludes availability under GenOn Marsh landing credit facility.

Guidance
(Forward curves as of January 31, 2011)

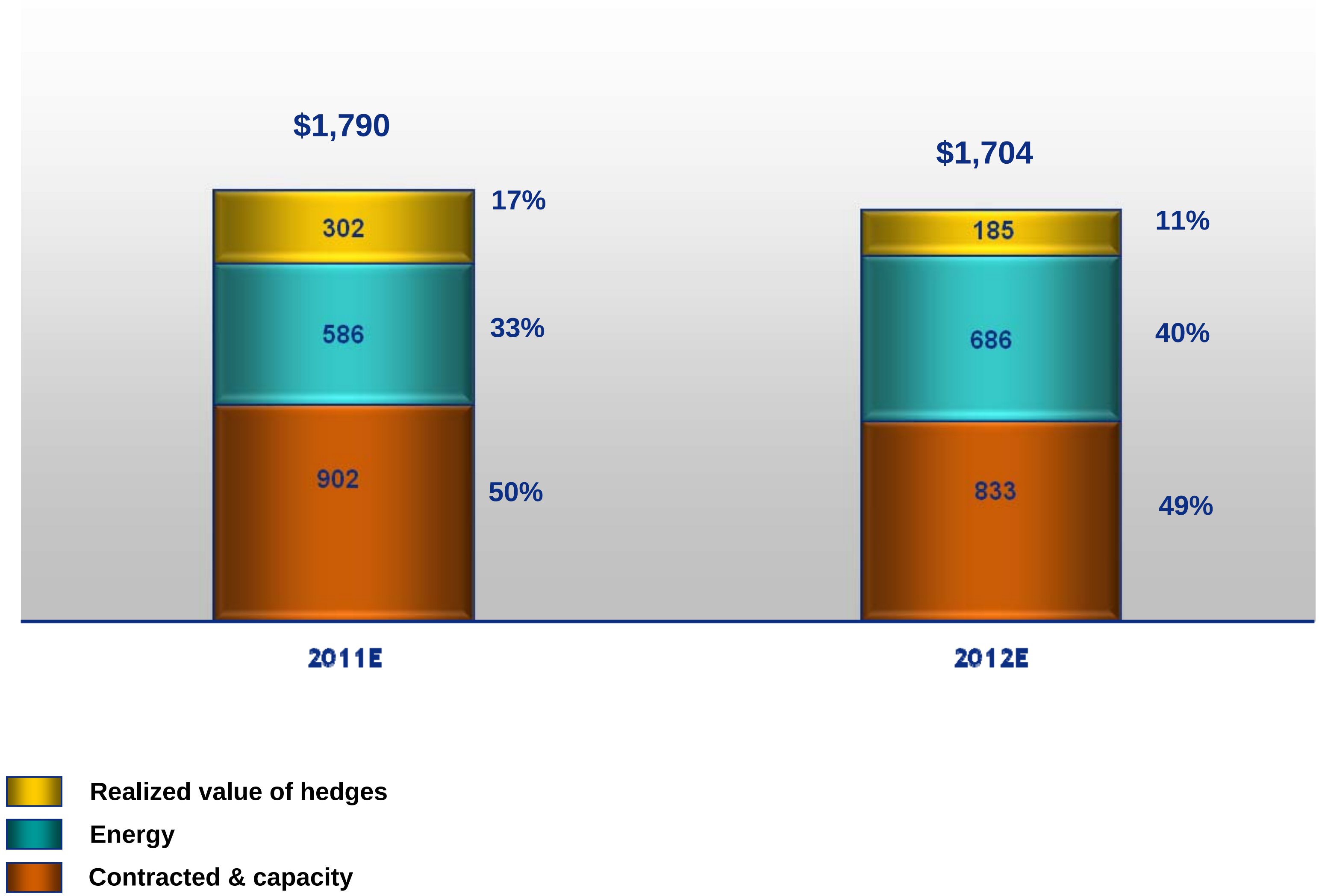
($ millions)	2011E	2012E
Adjusted gross margin[1]	$ 1,790	$ 1,704
Adjusted operating and other expenses[2]	(1,195)	(1,145)
Adjusted EBITDA	**$ 595**	**$ 559**
Cash interest, net[3]	(377)	(344)
Income taxes paid, net	(19)	-
Working capital and other changes	(238)	(30)
Adjusted net cash provided by (used in) operating activities	$ (39)	$ 185
Capital expenditures[3]	(592)	(432)
Adjusted free cash flow (deficit)	$ (631)	$ (247)
Maryland Healthy Air Act (MD HAA) capital expenditures	155	-
Marsh Landing working capital and capital expenditures[3]	243	246
Payment of merger-related costs	85	12
Adjusted free cash flow (deficit) excluding MD HAA cap ex and Marsh Landing	$ (148)	$ 11

Hedged adjusted gross margin	$1,502	$ 1,134
Adjusted operating and other expenses[2]	(1,195)	(1,145)
Hedged adjusted EBITDA	$ 307	$ (11)

1. Adjusted gross margin excludes unrealized gains and losses as well as lower of cost or market inventory adjustments.
2. Includes $34 million and $96 million of annual operating lease expense for REMA and GenOn Mid-Atlantic, respectively. Excludes merger-related costs and certain other items.
3. Capitalized interest from Marsh Landing is included in capital expenditures. All other capitalized interest is in Cash interest, net.

Adjusted Gross Margin Comparison
(Forward curves as of January 31, 2011)

($ millions)



Adjusted EBITDA Guidance Comparison
(Forward curves as of January 31, 2011)

($ millions)

2010 pro forma vs. 2011 guidance	
2010 pro forma	**$ 911**
Contracted and capacity	(204)
Energy gross margin	
Market price and generation changes	(196)
Energy Marketing	(25)
Realized value of hedges	(7)
Operating and other expenses	116
2011 guidance	**$ 595**

2011 vs. 2012 guidance	
2011 guidance	**$ 595**
Contracted and capacity	(69)
Energy gross margin	
Market price and generation changes	82
Energy Marketing	18
Realized value of hedges	(117)
Operating and other expenses	50
2012 guidance	**$ 559**

Guidance Sensitivities
(Forward curves as of January 31, 2011)

GenOn

Impact on Adjusted EBITDA ($ millions)	2011E	2012E
Adjusted EBITDA	**$595**	**$559**
Sensitivities:		
Natural gas[1,2] ($1/mmBtu change in average NYMEX price)	**$ 77**	**$ 219**
NYMEX $/mmBtu	$4.57	$4.98
Power[1,3] (500 Btu/kWh heat rate change)	**$ 37**	**$95**
Market Implied Heat Rate (MIHR), 7X24, Btu/kWh:		
PEPCO	9,549	9,080
PJM W	8,499	7,953
AEP - Dayton Hub	8,045	7,840

1. 2011 represents February – December.
2. Assumes MIHR and generation volumes are held constant.
3. Assumes fuel price and generation volumes are held constant.

Capital Expenditures

($ millions)	2011E	2012E
Maintenance	$ 111	$ 79
Environmental		
Maryland Healthy Air Act	155	-
Other	39	46
Construction		
Marsh Landing[1]	218	292
Other	52	4
Other	17	11
Total Capital Expenditures[2]	**$ 592**	**$ 432**

Expected normalized maintenance capital expenditures of ~$110 million/year

1. $405 million is expected to be project financed.
2. Excludes capitalized interest unrelated to Marsh Landing.

NOL Update

- GenOn's federal NOLs at December 31, 2010 are approximately $1.9 billion
  - *$1.3 billion former RRI*
  - *$ 0.6 billion former Mirant (as limited)*

  - Sufficient overlap of stockholders existed between Mirant and RRI, such that RRI did not experience an ownership change
  - *Generally, an ownership change occurs when there is >50% increase in ownership of a company's stock by new or existing 5% stockholders*
  - *The measurement period is 3 years*
  - *RRI is 48 percentage points toward an ownership change as a result of the merger*
  - *Former RRI NOLs can be used to offset future taxable income*

  - Mirant experienced an ownership change as a result of the merger
  - *Former Mirant NOLs are subject to a $54 million annual use limitation and will be available beginning December 2015 (5 years from the merger date)*

- Expect to pay, at most, federal Alternative Minimum Tax and some state tax for next 5 years

NOL Preservation

- To preserve the NOLs:
  - *Adopted a Stockholder Rights Agreement*
  - *Proposing a Charter Amendment*

- Stockholder Rights Agreement and the Charter Amendment require stockholder approval

- There is no assurance that the Stockholder Rights Agreement or Charter Amendment will prevent a subsequent ownership change

Key Points

- Merger closed December 3, 2010
  - *Annual cost savings of $150 million starting in January 2012*
  - *Integration proceeding smoothly*

- Clear strategy
  - *Focus on operations*
  - *Hedge to reduce volatility in realized gross margin*
  - *Capital structure to manage through different commodity price environments*
  - *Prudent investment of capital*

- Approximately $3.1 billion of contracted and capacity revenue in 2011 – 2014 for which prices have been set

Appendix

Fourth Quarter 2010 Earnings

March 1, 2011

Guidance Assumptions

Forward curves as of January 31, 2011	2011E (February – December) mmMWh[1]	2011E Market Price	2012E mmMWh	2012E Market Price
Eastern PJM				
Delivered gas price ($/mmbtu)		$ 5.21		$ 5.68
Delivered coal price ($/ton)		$ 97.04		$100.04
Pepco ($/MWh)				
On Peak	7.66	$ 58.18	7.44	$ 59.80
Off Peak	6.20	$ 41.73	6.68	$ 43.94
Total Eastern PJM	**13.86**		**14.12**	
% hedged	*88%*		*78%*	
Western PJM/MISO				
Delivered gas price ($/mmbtu)		$ 5.21		$ 5.68
Delivered coal price ($/ton)[2]		$ 92.78		$ 93.67
AD Hub ($/MWh)				
On Peak	7.15	$ 42.20	8.12	$ 44.09
Off Peak	6.47	$ 30.72	7.83	$ 32.83
PJM W ($/MWh)				
On Peak	4.19	$ 50.73	4.29	$ 51.67
Off Peak	3.02	$ 38.02	3.32	$ 38.97
Total Western PJM/MISO	**20.83**		**23.57**	
% hedged	*59%*		*6%*	
California	0.37		0.78	
Other	1.23		1.26	
Total expected generation	**36.29**		**39.73**	
% hedged	*72%*		*33%*	
Baseload coal expected generation	**31.02**		**33.74**	
% hedged	*79%*		*37%*	
Power hedged vs market[3]		**+$10.04/MWh**		**+$15.16/MWh**
Fuel hedged vs market[4]		**+$0.83/MWh**		**-$1.19/MWh**
Total impact of hedged vs market[3,4]		**+$10.86/MWh**		**+$13.97/MWh**

1. Year to date generation totaled 4.1 mmMWh through January 31, 2011.
2. Excludes Seward.
3. Power hedges include hedges with both power and natural gas.
4. Includes market value of coal, oil and gas hedges with hedge value allocated per MWh of power hedged.

Hedge Details

Forward curves as of January 31, 2011

$ millions	2011E	2012E	2013E	2014E
Power[1]	$ 273	$ 200	$ 204	$ 198
Fuel	29	(16)	4	1
Realized value of hedges	**$ 302**	**$185**	**$208**	**$199**

	2011E	2012E	2013E	2014E
Power[1]: mmMWh equivalents sold	26.2	13.2	5.5	5.6
Coal[2]: Average contract price ($/mmBtu) hedged (before delivery)	$ 2.64	$ 2.95	$ 2.74	$ 2.77

1. Power hedges include hedges for both power and natural gas.
2. Excludes Seward.

Fixed Contracted and Capacity

($ millions)

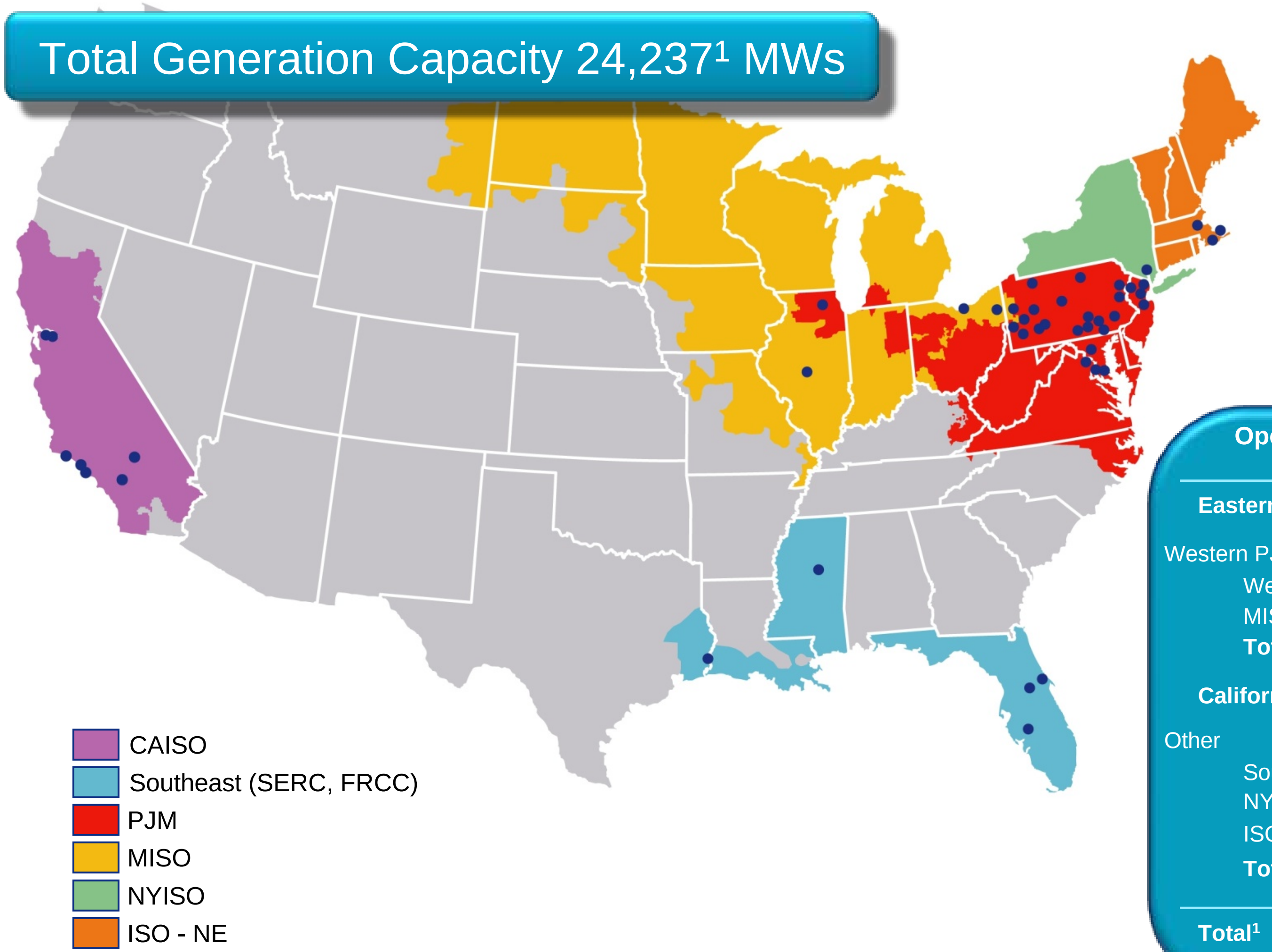
As of January 31, 2011

1. Includes capacity auction results for PJM and New York as well as contracted revenue for Osceola only through May 2014.

Generation Portfolio

GenOn

Total Generation Capacity 24,237[1] MWs



Operating Segment / Market		Net Capacity (MW)
Eastern PJM		**6,336**
Western PJM/MISO		
Western PJM	5,814	
MISO[2]	1,669	
Total Western PJM/ MISO		**7,483**
California[1]		**5,363**
Other		
Southeast	2,520	
NYISO	1,139	
ISO- NE	1,396	
Total Other		**5,055**
Total[1]		**24,237**

1. Excludes Potrero (362 MWs), which was shut down on February 28, 2011.
2. Approximately 1,300 MW of generating capacity will move from MISO to PJM in June 2011.

Geographic Location of GenOn PJM Assets
(Most Recently Cleared LDA)

Applicable PJM Region/LDA[1]	RTO	MAAC	EMAAC	PEPCO
GenOn Plants	Aurora	Blossburg	Gilbert	Chalk Point
	Avon Lake	Conemaugh	Glen Gardener	Dickerson
	Brunot Island	Hamilton	Sayreville	Morgantown
	Cheswick	Hunterstown	Werner	Potomac River
	Elrama	Keystone		
	New Castle	Mountain		
	Niles	Orrtanna		
		Portland		
		Seward		
		Shawnee		
		Shawville		
		Titus		
		Tolna		
		Warren		

1. Locational Delivery Area (LDA) from Planning Year 2013/14 auction.

Pro forma Generation

	Net MWh Generated	
	2010	**2009**
Baseload[1]		
Western PJM/MISO	19,317,102	19,812,421
Eastern PJM	14,271,374	13,499,543
California	N/A	N/A
Other	3,360,687	2,913,304
Total Baseload	**36, 949,163**	**36,225,267**
Intermediate[1,2]		
Western PJM/MISO	2,270,282	1,897,951
Eastern PJM	1,126,376	369,052
California	944,095	2,179,225
Other	394,995	673,052
Total Intermediate	**4,735,748**	**5,119,279**
Peaking[1]		
Western PJM/MISO	48,014	14,499
Eastern PJM	236,287	93,939
California	2,906	10,255
Other	288,933	293,626
Total Peaking	**576,139**	**412,318**
Total GenOn	**42,261,050**	**41,756,864**

1. Based on “design” capability.
2. Excludes Indian River, which was mothballed January 2010.

Debt Structure

GenOn

($ millions)

As of December 31, 2010

- SEC registrants
- Operating entities
- Borrowers and guarantors of secured revolving credit facility & term loan

GenOn Energy, Inc.[1]

Unsecured notes 7.625% due 2014	$ 575
$788 revolver due 2015[2]	-
Unsecured notes 7.875% due 2017	725
Amortizing term loan due 2017[2]	698
Unsecured notes 9.5% due 2018	675
Unsecured notes 9.875% due 2020	550

GenOn Marsh Landing

$150 Senior secured facility due 2017	-
$155 Senior secured term loan due 2017	-
$345 Senior secured term loan due 2023	-

GenOn Americas Generation

Senior Notes 8.3% due 2011	$535
Senior Notes 8.5% due 2021	$450
Senior Notes 9.125% due 2031	$400

REMA

Operating leases[3]

Other PJM/MISO, Southern California and Southeast

GenOn Mid-Atlantic

$22 capital lease

Operating leases[3]

New York, New England and Northern California Generating Assets

1. Excludes the discharged and defeased debt totaling $1.5 billion and unamortized debt discounts and adjustments to fair value of debt.
2. GenOn Americas, a direct subsidiary of GenOn Energy and GenOn Energy are co-borrowers of the credit facility debt.
3. The present values of lease payments for GenOn Mid-Atlantic and REMA operating leases are $927 million and $488 million, respectively.

Organizational Structure

GenOn

GenOn Energy, Inc.
(24,237 MWs)[1]

GenOn Marsh Landing
(760 MWs)[2]

- Marsh Landing

GenOn Americas Generation

GenOn Mid-Atlantic
(5,204 MWs)

- Chalk Point
- Dickerson
- Morgantown
- Potomac River

New York, New England and Northern California[1]
(4,520 MWs)

- Bowline
- Canal
- Contra Costa
- Kendall
- Martha's Vineyard
- Pittsburg

REMA
(3,419 MWs)

- Blossburg
- Conemaugh
- Gilbert
- Glenn Gardner
- Hamilton
- Hunterstown CT
- Keystone
- Mountain
- Orrtanna
- Portland
- Sayreville
- Shawnee
- Shawville
- Titus
- Tolna
- Warren
- Werner

Other PJM/MISO, Southern California and Southeast
(11,094 MWs)

- Aurora
- Avon Lake
- Brunot Island
- Cheswick
- Choctaw
- Coolwater
- Ellwood
- Elrama
- Etiwanda
- Hunterstown CCGT
- Indian River
- Mandalay
- New Castle
- Niles
- Ormond Beach
- Osceola
- Sabine
- Seward
- Shelby
- Vandolah

1. Excludes Potrero (362 MWs), which was shut down on February 28, 2011.
2. Under construction, expected to be complete mid- 2013.

Reg G: Adjusted Income from Continuing Operations to Adjusted EBITDA and Adjusted Gross Margin

($ millions)	2010A	2010 Pro forma	2011E	2012E
Net loss	**$ (50)**	**$ (746)**	**$ (565)**	**$ (398)**
Income from discontinued operations	-	(6)	-	-
Loss from continuing operations	$ (50)	$ (752)	$ (565)	$ (398)
Unrealized (gains) losses on derivatives	42	(27)	308	191
Impairment losses	565	926	-	-
Potomac River settlement obligation	32	32	-	-
Kern River settlement	-	(40)	-	-
Western states litigation and similar settlements	-	17	-	-
Gain on bargain purchase	(518)	-	-	-
Merger-related costs	114	-	63	10
Mirant's accelerated vesting of stock-based compensation	24	-	-	-
Lower of cost or market inventory adjustments, net	(4)	(22)	-	-
Postretirement benefits curtailment gain	(37)	(37)	-	-
Loss on early extinguishment of debt	9	-	-	-
Reimbursement of prepaid interest	(14)	-	-	-
Other	-	-	11	-
Adjusted income (loss) from continuing operations	**$ 163**	**$ 97**	**$ (183)**	**$ (197)**
Provision (benefit) for income taxes	(2)	(2)	-	-
Interest expense, net	253	427	418	357
Depreciation and amortization	224	389	360	399
Adjusted EBITDA	**$ 638**	**$ 911**	**$ 595**	**$ 559**
Adjusted operating and other expenses			1,195	1,145
Adjusted Gross Margin			**$ 1,790**	**$ 1,704**
Unrealized losses on derivatives			(308)	(191)
Gross Margin			$ 1,482	$1,513

Reg G: Cash Flow from Operations to Adjusted EBITDA Guidance

GenOn

($ millions)

	2011E	2012E
Net cash provided by (used in) operating activities from continuing operations[1]	**$ (35)**	**$ 188**
Capitalized interest	(4)	(3)
Adjusted net cash provided by (used in) operating activities	**$(39)**	**$185**
Income taxes paid, net	19	-
Cash interest, net	377	344
Working capital and other changes	238	30
Adjusted EBITDA	**$ 595**	**$ 559**

1. Represents the most directly comparable GAAP measure for our liquidity measures. See Guidance slide for a reconciliation of adjusted free cash flow (deficit) and adjusted free cash flow (deficit) excluding MD HAA cap ex and Marsh landing to Adjusted EBITDA.