



Total MWh Electricity Generated 2008⁹	9,690,666	1,999,503	1,782,808	2,150,077	2,211,204
% MW Generated From Coal	99.79%	98.65%	99.05%	91.46%	99.72%
SO₂ Emissions (Tons) 2008¹⁰	34,496	11,077	8,768	9,388	9,259
NOx Emissions (Tons) 2008¹¹	11,007	2,713	3,076	2,182	3,047
CO₂ Emissions (Tons) 2008¹²	10,173,134	2,080,066	1,801,802	2,356,386	2,589,844
Emissions Controls SO₂	Scrubbers at 2 of 3 units in operation by 2014 and 2015.	None	None	Permit to Install SO ₂ and mercury controls at Karn Units 1 and 2.	None
Emissions Controls NOx¹³	SCR installed; another to be operational by 2012.	None	None	None	None
Emissions Controls Particulates/Hg	Real-time mercury monitoring installed at most units; technology being tested.	None	None	None	None

2. REGULATORY AND OPERATIONAL RISKS RELATED TO CONTINUED RELIANCE ON COAL: Coal-burning utilities are being increasingly required to comply with the Clean Air Act, Clean Water Act, and other environmental laws governing air, water, and waste emissions.

Air

Although many regulations have been “on the books” for decades, we are seeing ever greater enforcement of these regulations in recent years due to litigation challenging the EPA as well as utility companies that will require significant capital expenditures to equip coal plants with the necessary controls.

- Consumers has received Notices of Violation (NOV) from the EPA issued against fourteen utility boilers that have exceeded the visible emission limits in their associated air permits.¹⁴
- CMS’ coal plants are subject to the Clean Air Transport Rule starting in 2014 that is designed to reduce SO₂ emissions by 71% below 2005 levels.

Air: New Source Review and Environmental Litigation

- In 2008 Consumers received a NOV for three of its coal-fired facilities alleging, among other things, violations of NSR and PSD permit requirements relating to ten projects from 1986 to 1998.
- Any modification of existing coal plants in response to NSR violations, or construction of new coal capacity, will require Consumers to comply with the EPA’s new GHG permitting program.



- “EPA could bring legal action against Consumers and/or Consumers could be required to install additional pollution control equipment at some or all of its coal-fueled electric generating plants [...]. Additionally, Consumers would need to assess the viability of continuing operations at certain plants.”¹⁵

Water

EPA is developing new rules for Cooling Water Intake Structures for new and existing generators and, by January 2014, will issue new rules regarding limitations on heavy metals in effluents. Such rules will likely impose significant costs CMS through mandated upgrades to plant water treatment equipment.

The EPA will issue new rules by July 2012 regarding limitations for effluents from coal-fired power plants.¹⁶

- CMS estimates capital expenditures of \$180 million between 2011 and 2018 to comply with future cooling water intake regulations, but does not disclose which plants will need to be converted to closed water systems.¹⁷
- According to the Michigan Department of Environmental Quality, arsenic concentrations at Karn Weadock are more than 44 times the federal primary MCL in groundwater outside of the landfill and the power plant property.¹⁸

Waste

The EPA is moving towards re-classifying coal ash as hazardous waste. CMS’ ponds would represent a significant material liability if this came to force.

- CMS produces 700,000 tons of coal ash annually.
- CMS’s dry storage facility at Karn Weadock has been leaking arsenic, boron, mercury and phosphorous into Saginaw Bay.¹⁹ Studies have found that the on-site damage to the groundwater is moving off-site and that there is off-site damage to surface water from the landfills.²⁰ Estimated clean-up for the bay is \$52MM.
- “Consumers estimates that it will incur expenditures of \$320 million from 2011 through 2018 to comply with future regulations relating to ash disposal.”²¹

3. CONSTRUCTION AND COST RECOVERY

In 2010, CMS deferred construction of a new 830 MW coal-fired plant at Karn-Weadock. Its construction was not economical.

If CMS decides to go ahead with construction at a later date, the company will be exposed to regional exponential rises in construction costs.

- Wisconsin Power & Light (“WPL”) announced a nearly 40% increase in the estimated cost of its proposed 300 MW Nelson Dewey 3 coal-fired power plant. The previous estimate had been prepared 18 months earlier.²²

Upon opening the new plant, CMS would have retired seven of its older coal-fired units. The fate of these units is not clear.

The company noted “continued operation of several existing generating units” as necessary with the



plant deferment.²³ Continued operation will expose CMS to significant regulatory, construction, and cost recovery risk as upgrades are made to maintain older facilities and move them into compliance.

4. A CONSENSUS AMONG INDUSTRY ANALYSTS: Studies since 2009 increasingly conclude that coal plants are uncertain, risky, volatile, costly investments requiring extra diligence.²⁴

CMS has not adequately addressed the material financial risks identified by industry analysts related to its exposure to coal.

In its Statement in Opposition to this Proposal CMS maintains that information about the financial risks of our company's continued reliance on coal can be found on the CMS website in the Balanced Energy Initiative (BEI) materials and in its 2010 Form 10-K.

However, the BEI does not address the financial risks of relying on an old, unscrubbed fleet of coal plants at a time when the cost of coal, environmental compliance costs and construction costs for coal plants are increasing, while low natural gas prices are exerting downward pressure on electricity rates.

Increasingly, analysts are in agreement that "the new rules [regulating mercury and other hazardous air pollutants from power plants] will require plants that lack emissions controls to engage in costly environmental retrofits, we expect they will force the early retirement of those units where such retrofits are uneconomic. Particularly vulnerable will be old, small coal-fired units, whose weak profit margins, low capacity factors and short remaining useful lives render it impossible to recover the required investment."²⁵

More specifically, CMS does not discuss the financial risks identified by industry analysts as arising from its coal fleet:

Bernstein Research found that CMS faces scrubber installation costs equal to 5% of its rate base, and the potential loss of 61% of its coal fired output due to EPA regulation of mercury and acid gases.²⁶

5. CONCLUSION:

Our company has not provided investors with sufficient information to enable them to determine whether the company recognizes and is properly managing the risks associated with its continued reliance on coal. In the absence of meaningful disclosure, investors have no way of fully assessing the risks and rewards from investing in various companies in the utilities sector, and are concerned about unpleasant shocks to shareholder value.

Vote "FOR" the Shareholder Proposal that asks CMS to Report on the Financial Risks of Reliance on Coal



- ¹ CMS Energy, “New and Cleaner Generation,” accessed 21 April 2011, available at: <http://www.consumersenergy.com/content.aspx?id=1512>
- ² CMS Energy, “2010 Form 10-K,” *U.S. Securities and Exchange Commission*, 24 February 2011, p. 18.
- ³ CMS Energy, “Coal Combustion Byproducts,” accessed 22 April 2011, available at: <http://www.consumersenergy.com/content.aspx?id=3254>.
- ⁴ CMS Energy, “2010 Form 10-K,” *U.S. Securities and Exchange Commission*, 24 February 2011, p. 50.
- ⁵ CMS Energy, “2010 Form 10-K,” *U.S. Securities and Exchange Commission*, 24 February 2011, p. 18.
- ⁶ CMS Energy, “New and Cleaner Generation,” accessed 21 April 2011, available at: <http://www.consumersenergy.com/content.aspx?id=1512>.
- ⁷ CMS Energy, “2009 Form 10-K,” *U.S. Securities and Exchange Commission*, 1 March 2010 p.70.
- ⁸ CMS Energy owns 96% of this plant. Emissions data is based on 96% ownership.
- ⁹ Natural Resources Defense Council, “Benchmarking Air Emissions of the 100 Largest Electric Power Producers in the United States, All 2008 Data,” accessed 20 April 2011, available at: http://www.nrdc.org/air/pollution/benchmarking/2008/benchmark2008_data.zip.
- ¹⁰ *Id.*
- ¹¹ *Id.*
- ¹² *Id.*
- ¹³ CMS does not specify which units have SCR – simply states that three units currently have them installed. See CMS Energy, “New and Cleaner Generation,” accessed 21 April 2011.
- ¹⁴ CMS Energy, “2010 Form 10-K,” *U.S. Securities and Exchange Commission*, 24 February 2011, p. 109.
- ¹⁵ *Id.*
- ¹⁶ http://www.environmentalintegrity.org/news_reports/documents/ConsentDecree.pdf
- ¹⁷ CMS Energy, “2010 Form 10-K,” *U.S. Securities and Exchange Commission*, 24 February 2011, , p. 26.
- ¹⁸ Michigan Department of Environmental Quality (MDEQ), “DEQ CE Karn Weadock Ground Water Monitoring,” 2009, available at http://www.michigan.gov/documents/deq/GSI_MZ_Monitoring_298496_7.pdf. Cited in Environmental Integrity Project and Earthjustice, “Out of Control: Mounting Damages from Coal Ash Waste Sites,” 24 February 2010, p. 28.
- ¹⁹ J. Kart, “State Says Saginaw bay Coal Ash Landfills Are Safe, Residents Disagree,” *Michigan Local News*, 13 October 2009, available at: http://www.mlive.com/news/bay-city/index.ssf/2009/10/state_says_saginaw_bay_coal_as.html
- ²⁰ Environmental Integrity Project and Earthjustice, “Out of Control: Mounting Damages from Coal Ash Waste Sites,” 24 February 2010, p. 28, available at: http://www.environmentalintegrity.org/news_reports/news_02_24_10.php
- ²¹ CMS Energy, “2010 Form 10-K,” *U.S. Securities and Exchange Commission*, 24 February 2011, p. 26.
- ²² Schlissel, David, Allison Smith, and Rachel Wilson. “Coal-Fired Power Plant Construction Costs.” Synapse Energy Economics. July 2008. Accessed 26 April 2011. <http://www.synapse-energy.com/Downloads/SynapsePaper.2008-07.0.Coal-Plant-Construction-Costs.A0021.pdf> p. 3
- ²³ CMS Energy, “2010 Form 10-K,” *U.S. Securities and Exchange Commission*, 24 February 2011,, pps. 64-65.
- ²⁴ Metin Celebi, Frank Graves, Gunjan Bethla and Lucas Brennan, *Potential Coal Plant Retirements Under Emerging Environmental Regulations*, Brattle Group, December 8, 2010; Deutsche Bank Climate Change Advisors, *Natural Gas and Renewables: A Secure Low Carbon Future Energy Plan for the United States*, November 2010; Bernstein Research, *U.S. Utilities Coal-Fired Generation Is Squeezed in the Vice of EPA Regulation: Who Wins and Who Loses?*, October 2010; Bernstein Research, *Black Days Ahead for Coal: EPA Air Emissions Regulation & the Outlook for Coal Fired Generation*, September 22, 2101; MJ Bradley and Analysis Group, *Ensuring A Clean, Modern Electric Generation Fleet while maintaining electric Reliability*, August 2010; Fahey, Jonathan, “Why Small Coal-Fired Plants Are Going Away,” *Forbes*, July 19, 2010; Bernstein Research, *U.S. Utilities: A Visit to Washington Finds Utility Lobbyists and Environmentalists Agreeing on the Grim Outlook for Coal*, March 9, 2010; Mark Kaplan, *Displacing Coal with Generation from Existing Natural Gas-Fired Power plants*, Congressional Research Service, January 19, 2010. See also: North American Electric Reliability Corporation (NERC), *2010 Special Reliability Scenario Assessment: Resource Adequacy and Impact of Potential U.S. Environmental Regulations*, October 2010; Mike Morris, CEO, American Electric, Power, *Power and Gas Leaders Conference*, Bank of America Merrill Lynch, New York, September 29, 2010; ICF International, *Clean Air Regulations: Impacts of EPA Proposed Rules*, September 16, 2010.
- ²⁵ Bernstein Research, “Bernstein Commodities & Power: No Light for Dark Spreads: How the Ruinous Economics of Coal-Fired Power plants Affect the Markets for Coal and Gas,” 18 February 2011, p. 5.
- ²⁶ Bernstein Research, “Black Days Ahead for Coal: EPA Air Emissions Regulations for the Energy & Power Markets,” 21 July 2010, p. 13.