Xcel Energy

Financial Risks of Continued Reliance on Coal

Whereas:

Electric utility companies that rely on coal face numerous challenges and uncertainty regarding environmental compliance costs, coal price-volatility, and the cost of carbon capture and storage for coal plants. Industry analysts (Bernstein Research, Jeffries & Company, Standard & Poor's, Wood Mackenzie) have concluded that the cost of additional environmental control equipment for nitrous oxides (NOx), particulates and mercury may make it uneconomic to retrofit small, older coal plants. This unprecedented combination of forces has led Xcel and other utility companies such as Progress, Duke and others to announce retirements of over 30 coal plants by 2019.

Xcel plans to replace four coal-burning plants in Colorado with natural gas. "It will be more cost-effective to get off coal and turn toward natural gas than it is to retrofit a lot of these facilities," according to Xcel's vice president for environmental policy. (The New York Times, 29 November 2010, http://www.nytimes.com/2010/11/30/business/energy-environment/30utilities.html?_r=1&scp=1&sq=utilities%20shift%20to%20gas&st=cse)

However, our company, which is the leading producer of wind power in the U.S. and fifth in solar energy production, still depends on coal for 50% of its electricity generation. Twelve of Xcel's 14 coal plants were built prior to 1980.

Coal combustion for electricity is a major contributor to air pollution, accounting for one third of the NOx, 50% of the mercury, a hazardous air pollutant, and over 36% of the carbon dioxide (CO_2) emitted in the U.S. Older coal plants emit substantially more of these pollutants per Megawatt hour (MWh) than newer plants.

EPA is moving, in some cases pursuant to court order, to tighten regulation of the air, water and waste impacts of coal plants. EPA must issue new rules by 2014 governing wastewater from power plants, which are responsible for "a significant amount" of toxic pollutants such as mercury and arsenic discharged to surface waters. EPA's pending regulations on storage and disposal of coal combustion wastes will likely increase operating costs for coal plants.

EPA is also developing regulations for CO_2 and other greenhouse gas emissions. However, the lack of national climate policy to reduce CO_2 emissions further adds to economic uncertainty for coal plants. Commercial deployment of carbon capture and storage technology for coal plants, is 10 to 15 years away and "would increase electricity costs by about 30 to 80 percent," the U.S. Government Accountability Office reports.

Declining reserves of high quality central Appalachian coal, unprecedented price increases and coal price-volatility, versus abundant supplies and record low-prices for cleaner burning natural gas, and declining costs for wind and solar energy, make continued reliance on coal increasingly problematic.

Resolved:
Shareowners request that Xcel Energy's Board of Directors, at reasonable cost and omitting proprietary information, issue a report by November 2011 on the financial risks of continued reliance on coal

contrasted with increased investments in efficiency and cleaner energy, including assessment of the cumulative costs of environmental compliance for coal plants compared to alternative generating sources.