

Financial Risks of Continued Reliance on Coal

Whereas: Electric utility companies that rely on coal face challenges and uncertainties regarding environmental compliance costs, coal price-volatility, and the cost of carbon capture and storage. This unprecedented combination of forces has led utility companies such as Progress, Duke and Xcel to announce coal plant retirements.

Coal combustion for electricity is a major contributor to air pollution, accounting for one third of nitrous oxides (NOx), 50% of mercury, a hazardous air pollutant, and over 36% of carbon dioxide (CO₂) emitted in the U.S. Older coal plants emit more of these pollutants per Megawatt hour (MWh) than newer plants.

PSEG operates five coal generation facilities in Mercer and Hudson, NJ, Conemaugh and Keystone, PA, and Bridgeport Harbour, CT. The coal fleet was built between 1960-1971, making the oldest plant fifty years old. While coal accounted for only 15% of our company's electricity production in 2009, it is responsible for several of our company's environmental risks:

- NJ's environmental agency ruled in October 2008 that the Hudson plant's outdoor coal storage presented a hazard to groundwater.
- Stricter limits on NOx emissions in NJ will lead to retirement of 5 units (800 MW) in Hudson and Mercer by 2015.
- If CT does not reissue NOx emission reduction credits in sufficient volumes then costs of reducing emissions may be prohibitive.
- If PA caps mercury permits to align with the most stringent standards, Keystone and Conemaugh may not be able to achieve necessary reductions.

The U.S. Environmental Protection Agency (EPA) is moving, in some cases under court order, to tighten regulation of air, water and waste impacts of coal plants. Industry analysts (e.g., Bernstein Research, Jeffries & Company, Standard & Poor's) have concluded that the cost of additional environmental control equipment for NOx, particulates and mercury may make it uneconomic to retrofit small, older coal plants. Pending EPA regulations governing storage and disposal of coal combustion wastes will likely increase operating costs for coal plants.

EPA is also developing regulations for CO₂ and other greenhouse gas emissions. However, the lack of national climate policy to reduce CO₂ 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 the PSEG Board, at reasonable cost and omitting proprietary information, issue a report by November 2011 on financial risks of continued reliance on coal contrasted with increased investments in efficiency and cleaner energy. Such report should assess the cumulative costs of environmental compliance for coal plants compared to alternative generating sources.