

Testimony on EPA's Proposed Rule for
“National Emission Standards for Hazardous Air Pollutants From
Coal-and Oil-Fired Electric Utility Steam Generating Units and
Standards of Performance for Fossil-Fuel-Fired Electric Utility,
Industrial-Commercial-
Institutional, and Small Industrial- Commercial-Institutional Steam
Generating Units”
Docket Number EPA–HQ–OAR–2009–0234

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My name is Mark MacLeod and I am the Director, Special Projects with Environmental Defense Fund (EDF), a non-partisan environmental organization with more than 700,000 members nationwide. EDF is dedicated to working towards innovative cost-effective solutions to environmental problems, building on a foundation of sound science, economics, and law.

Thank you for the opportunity to testify today. EPA's Proposed Mercury and Air Toxics Rule for power plants will provide long overdue health protections for all Americans. EDF supports EPA's Proposed Rule, yet given the availability of cost-effective, made-in-America, technology solutions, urges the agency to strengthen the standards for coal-fired power plants to secure even greater health and environmental benefits.

Background

Over two decades ago, the U.S. Congress took the vital step of identifying mercury and other toxic contaminants as harmful and hazardous air pollutants as part of the 1990 Clean Air Act Amendments. In the year 2000, after years of careful study, the EPA determined that it was “appropriate and necessary” to control mercury and other toxic air contaminants from power plants. Now, over twenty years after the Clean Air Act Amendments, EPA's Proposed Rule represents a long overdue and critical step in the right direction towards protecting American human health by reducing mercury and air toxics from the largest unregulated source: coal-fired power plants.

Health and Environmental Benefits of the Proposed Rule

Mercury is a toxic heavy metal that contaminates water bodies across the nation, threatens the development of newborns and children, and contributes to the risk of heart disease. Human exposure through consumption of contaminated fish and shellfish can harm the brain, heart, kidneys, lungs, and immune system of people of all ages. Unborn babies and young children are particularly vulnerable, since mercury exposure can impair normal brain development, reducing IQ and damaging the ability to think and learn later in life. Hundreds of thousands of U.S. newborns are affected by mercury each year.¹ According to the EPA's National Listing of Fish Advisories, in 2008 nearly half of all U.S. river-miles and lake-acres were under water contamination advisories – 80% of which were issued because of mercury contamination (that's some 17 million lake-acres and 1.3 million river-miles under mercury-related contamination advisories).²

According to EPA, the Proposed Rule will prevent 91% of the mercury in coal burned in power plants from being emitted into the air. The health benefits of these regulations will benefit Americans across the country. EPA estimates that when carried out these pollution reductions will annually prevent up to 17,000 premature deaths, 11,000 heart attacks, 120,000 asthma attacks, over 12,000 hospital and emergency room visits, 4,500 cases of chronic bronchitis, and various other health benefits each year. These benefits are particularly critical for minority and low income populations who are disproportionately impacted by asthma and other health conditions.³

A Word on Reliability

Unfortunately, many in the electricity industry are raising the specter of a national reliability crisis as a means to weaken and/or delay EPA's long overdue rules. The first major report in this campaign was the Edison Electric Institute's report "Potential Impacts of Environmental Regulation on the U.S. Generation Fleet" which warned of economic and reliability impacts of upcoming EPA powerplant rules. Recently, a peer review of the EEI report was conducted by Susan Tierney and Charles Cicchetti. The peer review authors conclude that "the EEI Report was based upon worst-case assumptions which have not materialized and upon climate change legislation never enacted into law. The EEI Report does not adequately distinguish between the non-environmental drivers of changes in the electricity industry and the various EPA rulemakings. There is also inadequate discussion of the non-traditional alternatives available to meet system requirements or of various initiatives underway to strengthen the resiliency and reliability of the electricity network."

¹ Kathryn R. Mahaffey, NHANES 1999-2002 Update on Mercury & Northeast Regional Mercury Conference, U.S. EPA, April 2006

² EPA, National Listing of Fish Advisories, 2008
http://water.epa.gov/scitech/swguidance/fishshellfish/fishadvisories/upload/2009_09_22_fish_advisories_nlfaslides.pdf

³ Regulatory Impact Analysis of the Proposed Toxics Rule: Final Report, March 2011.

Similarly, in recent public testimony before the House Energy and Commerce Committee, Tom Fanning, CEO of Southern Company stated “The reliability of the nation’s electric generating system is at risk because of the number of new rules and regulations applicable to power plants” and “EPA appears not to take this problem seriously.” Yet in a more private conference call with investors, when asked “what's the penalty for not reaching the timeline?” and “do you need to shut down or are there fines?” Mr. Fanning said “...Lisa Jackson, she I think recognizes that the EPA – last thing they want us to create a reliability crises” and “I think what you would do is enter into a set of individual consent decrees with just as company-by-company.”

Some utilities often cite a 2010 report by the North American Electric Reliability Corporation, failing to mention that the report assumes no industry actions in the near term to address compliance issues or market response. Utilities also fail to mention that the report lists a suite of tools that regulators, system operators, and industry participants should employ to ensure Planning Reserve Margins are maintained while forthcoming EPA regulations are implemented. (see appendix)

What would cause a reliability crisis would be the realization of a self-fulfilling prophecy. We will encounter a reliability crisis if utilities:

- Fail to order equipment on a timely basis,
- Fail to work with planning councils to coordinate outage schedules to install retrofits,
- Continue to spend their time seeking wholesale regulatory relief rather than identifying that small set of plants in specific geographic locations that may need special treatment.

Happily, other utilities are stepping up to the plate - interested more in progress than creating fear. The CEOs of eight utilities wrote a letter to the Wall Street Journal in December, saying in part, “The electric sector has known that these rules were coming. Many companies, including ours, have already invested in modern air-pollution control technologies and cleaner and more efficient power plants. For over a decade, companies have recognized that the industry would need to install controls to comply with the act's air toxicity requirements, and the technology exists to cost effectively control such emissions, including mercury and acid gases.... Contrary to the claims that the EPA's agenda will have negative economic consequences, our companies' experience complying with air quality regulations demonstrates that regulations can yield important economic benefits, including job creation, while maintaining reliability.”

Environmental Defense Fund urges the EPA to finalize the proposed rule in a timely manner and bring about these long delayed health protections for all Americans. And we urge utilities in Georgia and across the nation to stop stoking fears of a national reliability crisis and instead work with regulators and local citizens to ensure that we provide for reliability and healthy Americans.

Reliability Assessment

Industry Actions: Tools and Solutions for Mitigating Resource Adequacy Issue

In addition to the potential for waivers or extensions, a variety of tools and solutions can help mitigate significant reliability impacts resulting from resource adequacy concerns created by this scenario assessment. They include, but are not limited to:

Advancing In-service Dates of Future or Conceptual Resources

- Generation resources may be able to advance their in-service dates where sufficient lead time is given.
- Accelerated construction may be possible.
- Existing market tools, such as forward capacity markets and reserve sharing mechanisms, can assist in signaling resource needs. Price signalling will be important in developing new resources.

Addition of New Resources Not yet Proposed

- Smaller, combustion turbines or mobile generation units can be added to maintain local reliability where additional capacity is needed.
- Additional distributed generation may also mitigate local reliability issues.

Increased Demand-Side Management and Conservation

- Increased Energy Efficiency may offset future demand growth.
- Increasing available Demand Response resources can provide planning and operating flexibility by reducing peak demand.

Early Action to Mitigate Severe Losses

- Planning and constructing retrofits immediately will aid in preventing the potential for construction delays and overflows, mitigating the risk of additional unit loss.
- Managing retrofit timing on a unit basis will keep capacity supply by region stable..

Increase in Transfers

- Regions/subregions that have access to a larger pool of generation may be able to increase the amount of import capacity from areas with available capacity, transfer capability is sufficient, and deliverability is confirmed.
- Additional transmission or upgrades may enable additional transactions to provide additional resources across operating boundaries.

Developing or Exploring Newer Technologies

- Other technologies exist, such as trona injection, that will allow companies to comply with EPA air regulations without installing more scrubbers.

Use of More Gas-Fired Generation

- Existing gas units may have additional power production potential, which can be expanded during off peak periods. This capacity can assist in managing plant outages during the installation of emission control systems.

Repowering of Coal-Fired Generation

- Some coal-fired generation have the potential to repower their units with combined-cycle gas turbines and reducing emissions.

The enhancements listed are all options for consideration to offset potential reliability concerns identified in this scenario assessment. The industry should closely monitor the EPA regulation process as well as continued generator participation/early-retirement announcements.