

New Policy

MORE STRINGENT EPA POWER PLANT RULES

Policy summary: The EPA is in the midst of proposing and implementing a variety of regulations that will affect the nation’s power plant fleet, impacting their allowable water and air emissions. It is likely that the owners of some older, smaller power plants will find it is not economical to retrofit their plants to meet EPA’s new regulations, and they will instead choose to shut down the plants. In Massachusetts, it is possible that two of the state’s older coal-fired power plants will close. The Somerset Power Station in Somerset last ran in January 2010, and its permits will eventually expire if it is not restarted. The owner of the Salem Harbor Station in Salem has indicated that it expects the plant to close within five years.⁴¹

Economy-wide GHG emissions reduced 2020	1.2 million metric tons; 1.2%
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Rationale: Power plant emissions have severe consequences for human health.

Policy design: Among the new rules being proposed by EPA are air emissions regulations addressing the transport of power plant pollution from one state to another (Clean Air Transport Rule, or CATR). Power plants contribute to high levels of ground-level ozone and fine particulates. These rules will require significant reductions in nitrogen oxides and sulfur dioxide emissions, which will tend to favor more efficient, cleaner power plants.

The Clean Air Act also requires EPA to propose air emission limits to control the release of mercury and other hazardous substances contained in power plant fuels (National Emission Standards for Hazardous Air Pollutants) and Maximum Available Control Technology standards). In addition, under Clean Water Act Section 316(b), cooling water intake structures may need to be redesigned to minimize the adverse environmental impact associated with the entrainment of fish, shellfish and their eggs and larvae by power plants drawing in large volumes of water to condense steam used in making electricity. Finally, Coal Combustion Residuals disposal regulations will ensure the safe disposal of coal ash.

Legal authority: EPA has the authority to issue new rules under the Clean Air and Clean Water Acts.

GHG impact: If these rules result in power from two older Massachusetts power plants being displaced by natural gas-fired power plants, there would be a net 1.2 million metric ton reduction in CO₂e in 2020.

Other benefits: Reduced exposure to fine particulates and ozone will have health and environmental benefits.

⁴¹ See http://www.boston.com/business/articles/2010/11/28/old_plant_begins_to_break_spell_over_salem_mass/