



Economic Impact Analysis Virginia Department of Planning and Budget

**9 VAC 15 - 70 – Small Renewable Energy Projects (Combustion) Permit by Rule
Department of Environmental Quality
December 16, 2011**

Summary of the Proposed Amendments to Regulation

Pursuant to 2009 Acts of Assembly Chapters 808 and 854, the Department of Environmental Quality (DEQ) proposes to establish requirements for permits by rule for combustion energy projects with rated capacity not exceeding 20 megawatts. The proposed regulations define “combustion energy project” as a small renewable energy project that: 1) is an electrical generation facility with a rated capacity not exceeding 20 megawatts that generates electricity only from biomass, energy from waste, or municipal solid waste; and 2) utilizes a fuel or feedstock which is addressed as a regulated solid waste by 9VAC20-81, 9VAC20-60, or 9VAC20-120; is defined as biomass pursuant to §10.1-1308.1 of the Code of Virginia; or both. By means of the 2009 legislation, the General Assembly moved permitting authority for these projects from the State Corporation Commission (SCC) to DEQ. By requiring a “permit by rule,” the legislature is mandating that permit requirements be set forth “up front” within this regulation, rather than being developed on a case-by-case basis.

Result of Analysis

The benefits likely exceed the costs for all proposed changes.

Estimated Economic Impact

Prior to the 2009 legislation small renewable energy projects were to be permitted on a case-by-case basis by the SCC. For those considering small combustion energy projects there was large uncertainty concerning the requirements and potential costs of completing a project, as well as how long the permitting process would take. The permit by rule framework eliminates much of that uncertainty. Applicants need to meet the 14 criteria set forth by §§ 10.1-1197.6(B)

of the Code of Virginia to obtain permit by rule. Further, the proposed regulations specify that DEQ must render a decision concerning the permit application within 90 days. This significant reduction in uncertainty is in itself beneficial and will increase the likelihood that net beneficial projects will go forward.

According to the Union of Concerned Scientists, most scientists believe that a wide range of biomass resources are “beneficial” because their use will reduce overall carbon emissions. Among other resources, beneficial biomass includes

1. energy crops that don’t compete with food crops for land
2. portions of crop residues such as wheat straw or corn stover
3. wood and forest residues, and
4. clean municipal and industrial wastes.

Beneficial biomass use can be considered part of the terrestrial carbon cycle—the balanced cycling of carbon from the atmosphere into plants and then into soils and the atmosphere during plant decay. When biopower is developed properly, emissions of biomass carbon are taken up or recycled by subsequent plant growth within a relatively short time, resulting in low net carbon emissions.¹ Biomass, even though it releases CO₂ when burned, overall produces less carbon dioxide than do fossil fuels because plants grown to replenish the resource are assumed to reabsorb those emissions.² Thus, to the degree that the likely increase in generation of combustion energy replaces more polluting forms of energy, there will likely be some benefit to the environment.

DEQ staff is currently aware of three proposed projects that could be subject to the new regulation, if the current SCC process is not completed prior to these regulations’ becoming final and effective. Prior to these three projects, there was no known small combustion-energy project that went forward when permitting authority was vested with the SCC. Since projects were to be permitted on a case-by-case basis a precise comparison of the costs for establishing small combustion energy projects under the prior system with the costs under the proposed permit by rule system cannot be made. Given both the significant benefit for reduced risk,

¹ Source: Union of Concerned Scientists website (<http://www.ucsusa.org/>), December 15, 2011.

reduced time cost, and reduced administrative costs for both applicants and the state inherent in the permit by rule system, total application costs will likely be reduced under the proposed regulation.

Businesses and Entities Affected

The proposed amendments affect individuals, businesses or other entities wishing to develop a small combustion energy project with rated capacity less than or equal to 20 megawatts, but greater than 5 megawatts. DEQ staff is currently aware of three proposed projects that would be affected by the proposed regulations.

Localities Particularly Affected

The proposed regulation applies statewide and is not designed to have a disproportionate material impact on any particular locality.

Projected Impact on Employment

The statutes and proposed regulation will increase the likelihood that small combustion energy projects will go forward. Consequently, the proposed regulation may have a small positive impact on employment.

Effects on the Use and Value of Private Property

The statutes and proposed regulation will increase the likelihood that small combustion energy projects will go forward. Consequently, the proposed regulation may have a small positive impact on the value of land appropriate for such projects and entities that may be considering generating combustion energy.

Small Businesses: Costs and Other Effects

The statutes and proposed regulation will reduce risk, time costs, and administrative costs for small firms wishing to develop a small combustion energy project.

Small Businesses: Alternative Method that Minimizes Adverse Impact

The proposed amendments will not produce an adverse impact on small businesses.

² Source: Hamilton, Tyler, "Biofuels vs. Biomass Electricity," *Technology Review*, Massachusetts Institute of Technology, May 8, 2009.

Real Estate Development Costs

The statutes and proposed regulation will reduce the cost of developing property for combustion energy projects.

Legal Mandate

The Department of Planning and Budget (DPB) has analyzed the economic impact of this proposed regulation in accordance with Section 2.2-4007.04 of the Administrative Process Act and Executive Order Number 14 (10). Section 2.2-4007.04 requires that such economic impact analyses include, but need not be limited to, the projected number of businesses or other entities to whom the regulation would apply, the identity of any localities and types of businesses or other entities particularly affected, the projected number of persons and employment positions to be affected, the projected costs to affected businesses or entities to implement or comply with the regulation, and the impact on the use and value of private property. Further, if the proposed regulation has adverse effect on small businesses, Section 2.2-4007.04 requires that such economic impact analyses include (i) an identification and estimate of the number of small businesses subject to the regulation; (ii) the projected reporting, recordkeeping, and other administrative costs required for small businesses to comply with the regulation, including the type of professional skills necessary for preparing required reports and other documents; (iii) a statement of the probable effect of the regulation on affected small businesses; and (iv) a description of any less intrusive or less costly alternative methods of achieving the purpose of the regulation. The analysis presented above represents DPB's best estimate of these economic impacts.