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Proposed Regulation Agency Background Document

Agency name	Department of Environmental Quality (DEQ)	
Virginia Administrative Code (VAC) citation	9 VAC 15 - 70	
Regulation title	Small Renewable Energy Projects (Combustion) Permit by Rule	
Action title	Establishment of one or more permits by rule necessary for the construction and operation of small renewable energy projects mandated by the Virginia 2009 Acts of Assembly Chapters 808 and 854 (HB 2175/SB 1347). Specifically, this regulatory action focuses on combustion energy projects.	
Date this document uploaded to Town Hall	November 9, 2011	

This information is required for executive branch review and the Virginia Registrar of Regulations, pursuant to the Virginia Administrative Process Act (APA), Executive Orders 36 (2006) and 58 (1999), and the *Virginia Register Form. Style, and Procedure Manual.*

Brief summary

In a short paragraph, please summarize all substantive provisions of new regulations or changes to existing regulations that are being proposed in this regulatory action.

The purpose of this regulatory action is to implement 2009 state legislation requiring the Department of Environmental Quality to develop one or more permits by rule for certain renewable energy projects with rated capacity not exceeding 20 megawatts. By means of this legislation, the General Assembly moved permitting authority for these projects from the State Corporation Commission (SCC) to the Department of Environmental Quality (DEQ or the Department). 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. The legislation mandates that the permit by rule include conditions and standards necessary to protect the Commonwealth's natural resources. The proposal establishes requirements for potential environmental impacts analyses, mitigation plans, public participation, permit fees, inter-agency consultations, compliance and enforcement. The legislation requires DEQ to determine if multiple permits by rule are necessary to address all the renewable energy media. DEQ determined that multiple permits by rule are necessary. This proposal constitutes DEQ's permit by rule for combustion energy projects; i.e., those projects

that generate electricity from biomass, energy from waste, and municipal solid waste. This Combustion PBR proposal represents the DEQ director's decisions based on the statutory intent of the 2009 legislation, the extensive record and consensus recommendations developed during the RAP process, ongoing guidance from the Attorney General's office, and the agency's purpose and capabilities.

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Legal basis

Please identify the state and/or federal legal authority to promulgate this proposed regulation, including (1) the most relevant law and/or regulation, including Code of Virginia citation and General Assembly chapter number(s), if applicable, and (2) promulgating entity, i.e., the agency, board, or person. Describe the legal authority and the extent to which the authority is mandatory or discretionary.

This regulatory action is undertaken by the Department of Environmental Quality pursuant to Code of Virginia Sections 10.1-1197.5 through 10.1-1197.11, 2009 Acts of Assembly Chapters 808 and 854. The legislation mandates that DEQ develop one or more permits by rule for small renewable energy projects.

Purpose

Please explain the need for the new or amended regulation by (1) detailing the specific reasons why this regulatory action is essential to protect the health, safety, or welfare of citizens, and (2) discussing the goals of the proposal, the environmental benefits, and the problems the proposal is intended to solve.

This regulatory action is necessary in order for DEQ to carry out the requirements of 2009 Acts of Assembly Chapters 808 and 854 (hereinafter "2009 statute"). The regulatory action is essential to protect the health, safety, and welfare of Virginia citizens because it will establish necessary requirements, other than those established in applicable environmental permits, to protect Virginia's natural resources that may be affected by the construction and operation of small renewable energy projects.

Substance

Please briefly identify and explain the new substantive provisions (for new regulations), the substantive changes to existing sections, or both where appropriate. (More detail about these changes is requested in the "Detail of changes" section.)

This regulatory action addresses the need for a reasonable degree of certainty and timeliness in the natural-resource protections required of small combustion energy projects by setting forth, as fully as practicable, these required protections "up front" in this new permit by rule for combustion energy projects. The regulatory action describes how the Department will address analysis of potential environmental impacts, mitigation plans, public participation, permit fees, inter-agency consultations, compliance, enforcement, and other topics that may be brought up during the public comment period.

Issues

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Please identify the issues associated with the proposed regulatory action, including:

- 1) the primary advantages and disadvantages to the public, such as individual private citizens or businesses, of implementing the new or amended provisions;
- 2) the primary advantages and disadvantages to the agency or the Commonwealth; and
- 3) other pertinent matters of interest to the regulated community, government officials, and the public.

If the regulatory action poses no disadvantages to the public or the Commonwealth, please so indicate.

The primary advantages of the proposed regulation to the public include the following:

For any individual or company wishing to develop a small combustion energy project, the proposed regulation provides certain, consistent and, DEQ believes, reasonable standards for obtaining a permit to construct and operate. Furthermore, the proposal mandates that DEQ process permit applications in no more than 90 days – a timeframe that should help developers in their planning. Provision of certain and timely regulatory requirements may assist developers in obtaining project financing.

For individuals or companies wishing to develop very small projects (e.g., 5 MW and below) or projects falling into certain categories (e.g., smaller than 10 acres or utilizing existing buildings or parking lots), the proposed § 9VAC15-70-130 allows the applicant to perform a greatly reduced number of regulatory requirements. This provision should make it less costly to develop residential-scale and community-scale projects.

Another advantage -- to the regulated community, government officials, and the public – is that this proposal creates a clear and, DEQ believes, an efficient path for development of combustion-related energy in Virginia. Developing and expanding new, energy-related industry in Virginia is also a boost for our economy, and a significant step in creating energy independence from foreign oil interests.

Of interest is the agreement of the regulatory advisory panel (RAP) – a group comprised of representatives from environmental advocacy groups, industry, local government, academia, industry, and state agencies – on all issues presented in the proposal. In a number of states, interested parties and government agencies are debating what natural-resource protections are appropriate for renewable energy projects. RAP members who have experience with such projects and regulations across the country expressed the view that Virginia's proposed permits by rule are fair, balanced, and appropriately protective of natural resources, while not overburdening business interests. The fact that the RAP was able to agree on all issues was a significant milestone in creating a constructive and productive process for approving proposed renewable energy projects in Virginia.

The proposal poses no known disadvantages to the public or the Commonwealth.

Requirements more restrictive than federal

Please identify and describe any requirement of the proposal which are more restrictive than applicable federal requirements. Include a rationale for the need for the more restrictive requirements. If there are

no applicable federal requirements or no requirements that exceed applicable federal requirements, include a statement to that effect.

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There are no comparable and applicable federal requirements.

Localities particularly affected

Please identify any locality particularly affected by the proposed regulation. Locality particularly affected means any locality which bears any identified disproportionate material impact which would not be experienced by other localities.

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

Public participation

Please include a statement that in addition to any other comments on the proposal, the agency is seeking comments on the costs and benefits of the proposal, the impacts on the regulated community and the impacts of the regulation on farm or forest land preservation.

In addition to any other comments, the agency is seeking comments on the costs and benefits of the proposal, the potential impacts of this regulatory proposal and any impacts of the regulation on farm and forest land preservation. Also, the agency is seeking information on impacts on small businesses as defined in § 2.2-4007.1 of the Code of Virginia. Information may include 1) projected reporting, recordkeeping and other administrative costs, 2) probable effect of the regulation on affected small businesses, and 3) description of less intrusive or costly alternative methods of achieving the purpose of the regulation.

Anyone wishing to submit written comments may do so by mail, email or fax to Carol C. Wampler, Department of Environmental Quality, 629 East Main Street, P. O. Box 1105, Richmond, VA 23218, ph: 804-698-4579, fax: 804-698-4416, or carol.wampler@deq.virginia.gov. Comments may also be submitted through the Public Forum feature of the Virginia Regulatory Town Hall web site at www.townhall.virginia.gov. Written comments must include the name and address of the commenter. In order to be considered, comments must be received by 11:59 p.m. on the date established as the close of the comment period.

Economic impact

Please identify the anticipated economic impact of the proposed new regulations or amendments to the existing regulation. When describing a particular economic impact, please specify which new requirement or change in requirement creates the anticipated economic impact.

Projected cost to the state to implement and enforce the proposed regulation, including (a) fund source / fund detail, and (b) a delineation of one-time versus on-going expenditures	The fee schedule presented in the proposal is designed to recover DEQ's ongoing costs in implementing and enforcing the proposed regulation. Fees will be collected from permit applicants.
Projected cost of the new regulations or changes to existing regulations on localities	The new regulations are not expected to create costs for localities, unless a locality itself chooses to develop a combustion energy project, in which case the locality's costs will be similar to the costs of any other permit applicant (as summarized below). There might be potential costs and benefits to a locality if a project is developed within its jurisdiction; however, those costs and benefits would occur because of the existence of the project – with potential access or road construction issues, for example – and not because of these regulations. The locality, pursuant to its land-use authority, has the power to determine whether or not a project can be located within its jurisdiction. A locality's decisions in this regard are separate from the operation of the proposed regulations. Pursuant to the 2009 statute, DEQ only requires that the local government certify that the applicant has met all local land-use ordinances.
Description of the individuals, businesses or other entities likely to be affected by the new regulations or changes to existing regulations	Individuals, businesses or other entities wishing to develop a combustion energy project (>5–20 MW) will be affected by the new regulations.
Agency's best estimate of the number of such entities that will be affected. Please include an estimate of the number of small businesses affected. Small business means a business entity, including its affiliates, that (i) is independently owned and operated and (ii) employs fewer than 500 full-time employees or has gross annual sales of less than \$6 million.	DEQ staff is currently aware of three proposed projects that could be subject to the new regulation, if they do not complete the current SCC process prior to this PBR regulation's becoming final and effective. DEQ does not know how many other projects may be pursued by developers in Virginia. To the extent that small businesses seek to develop smaller projects (5 MW or less, or meeting specified categorical criteria), they will not be affected by the new regulation, pursuant to the proposed provisions for no notification or certification requirements or greatly reduced requirements.
All projected costs of the new regulations or changes to existing regulations for affected individuals, businesses, or other entities. Please be specific and do include all costs. Be sure to include the projected reporting, recordkeeping, and other administrative costs	Projected costs to an entity applying for a combustion permit by rule (other than permit fees) are estimated as follows: Part III projects (≤5 MW or meeting categorical

required for compliance by small businesses. Specify any costs related to the development of real estate for commercial or residential purposes that are a consequence of the proposed regulatory changes or new regulations.

criteria): \$0 - \$1000 (some labor cost if voluntarily discuss with state agencies)

Part II projects (>5 MW and not meeting categorical criteria): Approx. \$5,000 - \$50,000 (labor cost for desktop database surveys, potential architectural/archaeological field studies and potential discussions with state agencies)

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Costs are presented as 2011 dollars. Estimates could increase depending on several factors (e.g., phase II/III cultural surveys, etc., if the results of the requirements prescribed in the proposal indicate that follow-up measures are in order). These estimates were developed with assistance from a company with experience in developing combustion energy projects.

These cost estimates include reporting, recordkeeping, and administrative costs.

The costs are expected to be the same for any individual or business (small or otherwise) that develops a project in the size or other categories addressed by this regulation.

No development of commercial or residential real estate is expected to be necessitated as a direct consequence of the new regulation.

Beneficial impact the regulation is designed to produce.

The regulation, like the 2009 enabling legislation, is designed to facilitate development of renewable energy while also protecting natural resources. Combustion-related and other renewable-energy projects help reduce our country's dependence on foreign oil, and help increase jobs and economic development related to construction and operation of combustion-related projects. Because combustion-related projects often generate energy from waste products, such projects create a beneficial use for substances that might otherwise become a disposal or pollution issue.

Alternatives

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Please describe any viable alternatives to the proposal considered and the rationale used by the agency to select the least burdensome or intrusive alternative that meets the essential purpose of the action. Also, include discussion of less intrusive or less costly alternatives for small businesses, as defined in §2.2-4007.1 of the Code of Virginia, of achieving the purpose of the regulation.

DEQ and other regulatory authorities generally consider permit requirements on a case-by-case basis as each individual permit application is received. The natural-resource protections required of applicants who wish to construct and operate small combustion energy projects in Virginia have heretofore been addressed in this fashion by the State Corporation Commission. In enacting this legislation, the Virginia General Assembly chose to direct DEQ to develop this permit by rule rather than adhering to the more traditional case-by-case alternative. In the current regulatory action, DEQ is considering only the permit-by-rule alternative mandated by the General Assembly.

Concerning provisions within this permit by rule, DEQ considered various alternatives on a large number of issues during the course of seven RAP meetings. By the end of the process, the RAP agreed by consensus on all issues set forth in this proposal. A few topics were complex enough to warrant extended discussion by RAP members. The RAP's conclusions and rationale regarding these issues are summarized as follows:

1. Applicability issues.

The Combustion RAP began its deliberations by studying what constitutes a combustion project and what combustion technologies are currently utilized in Virginia. After presentations by several knowledgeable experts and significant discussion during the course of several meetings, RAP members concluded the following:

<u>Definitions of "biomass, energy from waste, municipal solid waste"</u>: The 2009 statute lists nine renewable energy resources for which DEQ is directed to develop a permit by rule (PBR) regulation. These nine resources are subdivided into two groups. DEQ's jurisdiction over the first group (sunlight, wind, falling water, wave motion, tides, geothermal power) extends to projects with a rated capacity not exceeding 100 megawatts (MW). DEQ's jurisdiction over the second group (<u>biomass, energy from waste, municipal solid waste</u>) extends to projects with a rated capacity not exceeding 20 MW. The second group of resources is the subject of this rulemaking.

Biomass & Municipal Solid Waste. Early in its deliberations, the RAP began to consider how to define the three statutory terms, "biomass," "energy from waste," and "municipal solid waste" (or "MSW"). Research showed that biomass and MSW are defined in a number of ways in both federal and state law and regulations. In some cases, these definitions are overlapping and/or contradictory. Further, there appears a likely possibility that these definitions will continue to change. For example, a RAP member noted that there are plans to ask Virginia's General Assembly to amend the definition of biomass. Whereas DEQ's regulations can be amended to adjust to changing circumstances, such regulatory changes are subject to the Administrative Process Act (APA) and thus take approximately two years to accomplish. The RAP preferred, if possible, to recommend a PBR regulation that would transcend the differing definitions of biomass and MSW that currently exist, and that would minimize the need to amend the PBR regulation whenever these definitions change.

Energy from Waste. Formulating a definition for "energy from waste" presented a different type of challenge to the RAP. Whereas many existing statutory and regulatory definitions were found for "biomass" and "MSW," no such definitions were found for "energy from waste." References were found to "waste to energy" projects, but even those references did not rise to the level of statutory or regulatory definitions. Parties who had participated in the legislative process by which the 2009 statute was enacted noted that there is a Virginia company that prefers the term "energy from waste" over "waste to energy," reportedly because the former places initial emphasis on "energy" rather than on "waste." They speculated that this preference may have had some bearing on inclusion of the term "energy from waste" in the 2009 statute. Regardless of the origin of the term "energy from waste," the RAP did not find statutory or regulatory precedent that could guide its consideration of an appropriate definition for the term. Furthermore, the RAP noted that "energy from waste" is clearly referring to a process, whereas all the other renewable resources listed in the 2009 statute refer to fuels or feedstocks (e.g., sunlight, wind, falling water, biomass, MSW). This fact complicated any effort to formulate separate but mutually-consistent definitions of the three terms in the statutory category biomass, energy from waste, MSW.

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Additional definitional issues. The RAP reached several additional conclusions when deliberating about definitions for these three terms.

First, the RAP concluded that it was the intent of the statute for DEQ's PBR regulations to address all renewable energy resources. In dictating a streamlined process for permitting for small renewable energy projects, the General Assembly would not logically have intended for any subset of renewable energy projects to be excluded from PBR coverage and remain subject to the case-by-case determination available at the SCC. For example, the RAP considered projects that generate electricity by burning waste tires and concluded that such projects should be included in this proposed PBR, even though tires are produced from petroleum-based constituents. The RAP noted that waste tires are a renewable (recurring) fuel, and burning them to generate electricity creates a beneficial societal use while reducing the waste stream going to landfills. The RAP thus determined that the definition of the three statutory terms should be broad enough to include all legitimate renewable energy sources.

Second, the RAP concluded that the definition should not be so broad as to include traditional fossil fuels. For example, the RAP considered the burning of waste oil and concluded that this type of project is not within the intended reach of the 2009 statute. Although some scientists might point out that fossil fuels continue to be created under the earth's surface on a renewable/recurring basis, these processes take thousands, if not millions, of years. They are not renewable within a timeframe of practical use by today's citizens. In fact, the RAP concluded that one of the purposes of the 2009 statute was to encourage renewable energy so that Virginia citizens would be *less* reliant on fossil fuels. The RAP wanted a definition of projects that would exclude traditional fossil fuels.

Third, the RAP concluded that "combustion" was a serviceable – though not perfect – umbrella term to encompass the three statutory terms, "biomass, energy from waste, and MSW." Use of the term "combustion" within this proposed regulation is not intended to suggest the technical, scientific, or engineering definitions of "combustion." Nor does use of the term suggest that all projects encompassed by the proposed regulation rely primarily on combustion/burning to generate electricity. Some types of projects which are commonly included in definitions of MSW (e.g., landfill gas), or even of biomass, are not primarily reliant on combustion/burning when

generating electricity; however, some RAP members pointed out that burning is ultimately involved in all projects they envision as being covered by this PBR regulation. Further, the proposed regulation makes it clear that "combustion" and all other terms are defined for use "in this chapter" and not in the world at large. Consequently, the RAP recommended a definition for "**combustion energy project**" that is designed to include projects that generate electricity from any or all of the three statutory terms, "biomass, energy from waste, or municipal solid waste." Likewise, this proposal sets forth the proposed "Combustion PBR," including recommendations made by the "Combustion RAP." In each case, "combustion" should be read to denote "biomass, energy from waste, and municipal solid waste."

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Conclusions regarding definitions. In keeping with the reasoning outlined above, the definition of "combustion energy project" recommended by consensus of the Combustion RAP is as follows:

"Combustion energy project," or "project" means a small renewable energy project that

- 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
- ii. 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.

Within this definition, subparagraph (i) simply restates the portion of the statute's definition of "small renewable energy project" which describes the projects being addressed by this PBR: biomass, energy from waste, and municipal solid waste.

Subparagraph (ii) is intended to incorporate all of the RAP's conclusions, as summarized in the forgoing discussion. The provision specifically cites DEQ's waste regulations, which carefully define what constitutes a "regulated solid waste." The waste regulations *include* such things as waste tires, but *exclude* traditional fossil fuels (including waste oil), just as the Combustion RAP intended to do in the PBR. By citing to DEQ's three regulations for regulated solid wastes (9VAC20-81, -60, and -120), the RAP was including the careful analysis performed by the Department in formulating these regulations (often in response to federal dictates), as well as any future such formulations – without the need for adjustments to the PBR definitions.

The reference in subparagraph (ii) to DEQ's waste regulations, however, has one notable shortcoming; that is, it does not include biomass crops. Biomass crops are not properly construed to be a "waste," so they are not addressed by the waste regulations. Rather, they are generally understood to be crops grown for the purpose of being burned in order to generate electricity and/or heat. Within its air regulations, DEQ has a new and somewhat experimental general permit for biomass projects. Although all biomass projects will not be getting this general permit, it is likely that they will all continue to be included in the statutory definition. Even if this statutory definition of biomass changes over time, it is anticipated that the definition will always include biomass crops.

Thus, the RAP's recommended definition of "combustion energy project" strives to include all statutorily-intended interpretations of a project "that generates electricity only from biomass, energy from waste, or municipal solid waste" while at the same time (1) avoiding arbitrary or speculative definitions of each individual resource, (2) appropriately excluding traditional fossil

fuels, and (3) obviating the need to amend the Combustion PBR every time the definitions of these terms change in DEQ's other organic statutes or regulations.

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2. Scope of the proposed combustion PBR.

A number of the Combustion RAP's discussions centered on the scope, or regulatory reach, of the proposed PBR regulation.

Electricity generation vs. heat/thermal output. The 2009 statute directs DEQ to develop one or more PBR's for the construction and operation of "small renewable energy projects." The statute defines a "small renewable energy project," in pertinent part, as "an *electrical* generation facility" . . . "that generates *electricity* only from [nine stated renewable resources, including biomass, energy from waste, and municipal solid waste]." (Emphasis added.) Combustion projects – biomass, energy from waste, MSW – typically generate both heat/thermal energy and electricity. After lengthy discussion, the RAP concluded that the 2009 statute confers authority on DEQ to regulate only the impacts on natural resources of projects, or portions of projects, that generate electricity, but not that generate heat/thermal energy. This conclusion was consistent with informal advice from the Office of the Attorney General (OAG). Accordingly, the proposed definition of "rated capacity" for this PBR is "the maximum designed electrical generation capacity (in megawatts or kilowatts)." Although a project's thermal output could theoretically be converted from BTU's to megawatts (as is typically done in Europe), this aspect of a combustion energy project was not deemed to be within the proper reach of the PBR regulation and is not to be included in the calculation of the project's "rated capacity."

Another factor was likewise deemed to be outside the scope of the regulation; that is, the project's parasitic load. The proposed definition of "parasitic load" is the electricity a project uses "to run its electricity-producing processes." RAP members compared parasitic load to the pilot light kept burning on a gas range, or the water necessary to prime a pump. It is not a component of the electricity actually generated and transmitted by the combustion project. Therefore, the proposed definition of "rated capacity" specifically excludes "parasitic load."

Rated capacity is the key figure used to determine two important classifications of projects: first, whether a project falls at or below the statutory cap of 20 MW; and second, whether a project falls at or below the regulatory "de minimis" level of 5 MW (see "de minimis" discussion below). The RAP clearly recommended that neither thermal output nor parasitic load should be considered when calculating a project's rated capacity.

Air/waste/water impacts vs. wildlife/historic resources impacts. The 2009 statute provides that the applicant must certify that the renewable energy project "has applied for or obtained all necessary environmental permits." For combustion energy projects, these "other necessary environmental permits" – air permits, waste permits, and sometimes even water permits – can be critically important. RAP members did not envision combustion energy projects that would not at least require an air permit, and current federal/state air permitting regulations for boilers are widely viewed as highly stringent.

A question arose whether a project could apply for the Combustion PBR if it were generating electricity by burning medical or hazardous waste. After considerable discussion by the RAP, the answer emerged as "yes" – and both DEQ's medical, hazardous, and solid waste

regulations are cited in the definition of "combustion energy project." Since the air permit and all other necessary environmental permits are effectively prerequisites for the PBR, the RAP understood that impacts to air, water, and land would be addressed and regulated outside the operative provisions of the PBR. The Combustion PBR accordingly does not exclude projects based on the type of fuel being burned to generate electricity. Air permits (and possibly other regulatory permits) will address their statutory and regulatory resource issues, and the PBR will address what additional measures the project must implement pursuant to the 2009 statute to address impacts on wildlife and historic resources.

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A related question arose about whether a PBR is actually necessary for combustion energy projects. Once other regulatory permits address impacts on air, land, and water, the remaining question is what impact a building – probably with a stack and parking lot – has on wildlife and historic resources. To some, it appeared that a Combustion PBR would be regulating a footprint not dissimilar from that of a WalMart and, initially, some RAP participants disagreed with the need to develop a Combustion PBR. Input from DEQ's sister agencies, however, confirmed that other regulatory permits for these projects do not generally address historic resources, and only the Virginia Water Protection Permit (if applicable) specifically addresses wildlife. In subsequent discussions, the RAP agreed by consensus that the Combustion PBR should provide some protections for wildlife and historic resources. Representatives from industry affirmatively contributed to this agreement. As indicated in the provisions below, the RAP recommended protections that are considerably scaled back from those found in the Wind PBR, and generally comparable to those in the proposed Solar PBR.

Appurtenant structures. For many combustion energy projects, there are areas where fuels or feedstocks are stored until they are ready to be conveyed to the boiler or other electricity-generating facility. In some cases, the fuel is stored in an area that is totally removed, and perhaps significantly distant, from the boiler. In other cases, the fuel storage area is close to the boiler, and perhaps even connected by conveyor equipment to the boiler. The location of fuel storage may be largely the function of the owner/operator's business model. Some would argue that, as a matter of consistency, the reach of the Combustion PBR should be the same, whether fuel storage is on-site or off-site. Others (including some industry representatives) indicated that, if fuel storage and other related facilities are "right there," then they should not be ignored by the regulation. The consensus recommendation of the RAP was to include the areas occupied by appurtenant structures as part of the "site," under circumstances set forth in the proposed definition below.

The RAP also recommended a proviso regarding ownership and operational control. As reiterated previously, the 2009 statute grants DEQ permitting jurisdiction over "electrical generation facilities." The regulated entity will be the owner or operator of this facility. Even though the RAP recommended that certain appurtenant structures be considered part of the project site, the RAP also acknowledged that PBR coverage will apply to the owner or operator of the electrical generation facility. If another entity owns the fuel storage or other appurtenant structures, and no electricity is generated by those structures, then it does not appear that DEQ has PBR authority over those appurtenant structures, regardless of their proximity to the electrical generation facility. The RAP's recommended definition of "site" also includes this proviso concerning ownership and operational control.

Consistent with these recommendations, the proposed Combustion PBR definition of "site" is as follows:

"Site" means the area encompassed by the combustion energy project, plus appurtenant structures and facilities such as fuel processing, delivery, storage and associated conveyance equipment areas if they (a) are contiguous and (b) primarily exist to supply fuel for the generation of electricity at that project, to the extent that these areas are under common ownership or operating control by the owner or operator of the combustion energy project.

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3. Projects with de minimis impacts.

Although the 2009 statute does not explicitly address a "de minimis" standard for very small projects, the SCC's regulations provide an exemption for all renewable-energy projects with rated capacity of 5 megawatts or less, across the board. Beginning with the Wind PBR, it has been determined that the intent of the 2009 statute was to make it easier, not harder, to permit a renewable energy facility; consequently, each PBR contains a "de minimis" provision. The issue is a complex one, however, and has been discussed at length by each successive RAP.

The original Wind RAP and the Offshore/Coastal Wind RAP agreed unanimously that projects with rated capacity of 500kW and less should have no notification or certification requirements. They did not reach consensus on what should be required of applicants for projects of >500kW to 5MW; however, with the RAP's deliberations in mind, the Department set the requirement as notice to DEQ by providing certification by the local government of the project's compliance with land use ordinances. The Wind RAP's agreed that projects >5MW should be required to submit a full PBR application. These provisions became effective in December 2010, along with the rest of the Wind PBR.

The Solar RAP agreed by consensus on the same "de minimis" provisions as were found in the Wind PBR, with one difference. The Solar RAP agreed by consensus to add a further requirement for projects >500kW to 5MW that the applicant perform a so-called "fatal flaw" analysis and submit certification to DEQ that he had done so. This requirement involved a basic desktop analysis of T&E species and of known VLR-listed and VLR-eligible historic resources within the project's disturbance zone.

As this "fatal flaw" provision was being vetted prior to the Director's consideration, a number of questions arose as to whether this analysis could or should be required without the results being reported to some governmental entity. To overcome these concerns, the provision was altered by staff to require that results be submitted by the applicant to the local government. The Solar PBR, including this "fatal flaw" provision, is currently in executive review and will undergo public comment once approved by the Governor.

In the meantime, local government representatives raised a concern about the "fatal flaw" provision, indicating that they object to these results being submitted to local governments. DEQ expects these representatives to express their concerns during the public comment period for the Solar PBR, and of course their comments will be taken into account by the Department.

When considering what "de minimis" provisions to recommend for the Combustion PBR, the Combustion RAP discussed the issues extensively, including the precedents in the Wind PBR and the proposed Solar PBR. Several RAP members were interested in retaining the Solar PBR's "fatal flaw" requirement for projects >500kW to 5MW; however, they could not figure out a way to overcome the concerns about if and how the applicant should report the results. A

number of the Combustion RAP members articulated that the "fatal flaw" analysis was substantively more stringent than the SCC's "de minimis" exemption, and they objected to its inclusion in the regulation. The Combustion RAP's final recommendation, by consensus, was that, for projects of >500kW to 5MW, the regulation should only require that the applicant provide notice and local government certification of land use compliance, just as in the Wind PBR. They further recommended by consensus that agency guidance set forth a recommendation for the applicant to perform the "fatal flaw" analysis and voluntarily discuss the results with the relevant state agencies. In addition, they recommended that DEQ give careful consideration to public comments on the "fatal flaw" issue in the course of public comment on both the proposed Solar PBR and the proposed Combustion PBR.

In summary, the "de minimis" provisions of the three renewable energy PBR's currently appear as follows:

WIND

Rated Capacity Requirements

≤ 500 kW No notification or certification

> 500 kW to 5 MW Notify DEQ & provide local-government certification

of land-use compliance

> 5 MW to 100 MW Satisfy all PBR requirements of 9VAC15-40-30 et seq.

PROPOSED SOLAR

Rated Capacity Requirements

≤ 500 kW No notification or certification

> 500 kW to 5 MW Notify DEQ & provide local-government certification

of land-use ordinance compliance

Perform "fatal flaw" analysis & submit results to local government

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> 5 MW to 100 MW Satisfy all PBR requirements of 9VAC15-60-30 et seq.

PROPOSED COMBUSTION

Rated Capacity Requirements

≤ 500 kW No notification or certification

> 500 kW to 5 MW Notify DEQ & provide local-government certification

of land-use ordinance compliance

Recommended Guidance: Perform "fatal flaw" analysis &

voluntarily discuss results with state agencies

> 5 MW to 100 MW Satisfy all PBR requirements of 9VAC15-70-30 et seq.

For both the Solar PBR and Combustion PBR, members of the RAP recommended that certain projects with rated capacity <u>over</u> 5MW should also be accorded "de minimis" status. Examples are projects that utilize existing structures and roads and therefore do not create additional resource impacts, and projects whose land area or height is less than that ordinarily scrutinized by the state's resource agencies. These additional "de minimis" exclusions were agreed on by consensus with the support of the relevant resource agencies.

In summary, the RAP recommended by consensus that certain sizes (≤5MW) and categories of projects are "de minimis" in nature and do not present sufficient risk to natural resources that they warrant performance a full-blown PBR. As set forth in Part III of the proposed Combustion PBR, the RAP recommended that no notification or certification be required for projects that

have a rated capacity $\leq 500 \, \mathrm{kW}$. (See proposed 9VAC15-70-130 A.) The RAP also recommended that a developer of a project with a rated capacity $> 500 \, \mathrm{kW}$ to 5 MW (or $> 5 \, \mathrm{MW}$ and fulfilling certain stated criteria) should notify the department and provide local-government certification of land-use compliance. (See proposed 9VAC15-70-130 B). In addition, the RAP recommended that the department recommend in agency guidance that the applicant perform basic desktop surveys of T&E species and of known VLR-listed and VLR-eligible historic resources (the so-called "fatal flaw" analysis) and voluntarily discuss results with state agencies if potential problems are detected.

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The RAP recommended by consensus that projects that have a rated capacity >5 MW and do not fulfill the other criteria specified in Part III should comply with the full-blown Combustion PBR requirements set forth in Part II of the proposed regulation. (See proposed 9VAC15-70-30 et seq.)

3. <u>Full PBR: Requirements for Analysis, Mitigation, and Post-Construction Monitoring</u>

The 2009 statute requires the applicant to analyze the beneficial and adverse impacts of the proposed project on natural resources. Further, if the information collected pursuant to these analyses indicates that significant adverse impacts to wildlife or historic resources are likely, then the applicant must submit a mitigation plan detailing actions he will take to avoid, minimize, or otherwise offset such impacts, and to measure the efficacy of those actions. One of the RAP's chief tasks was to recommend to DEQ appropriate standards for DEQ to use in determining that significant adverse impacts are likely and how these impacts will be mitigated. In practice, these standards for determining significant adverse impact become mandatory "triggers" for requiring the applicant to develop and submit a mitigation plan.

In considering what analyses, mandatory triggers, and mitigation plans were appropriate for combustion energy projects, among the alternatives examined by the Combustion RAP were the requirements set forth in the Wind PBR and the proposed Solar PBR. In almost every case, the Combustion RAP determined that the likely impacts of combustion energy projects on wildlife and historic resources were far less than those anticipated from wind projects, and generally more analogous to those for solar projects, once the project's air, waste, and any other permits have addressed emissions and discharges. Consequently, the proposed Combustion PBR generally has fewer and less complex requirements in each section — analysis, triggers, and mitigation — than do previous PBR's. These provisions are explained in the Detail of Changes section of this document. Summary explanations of the full-blown Combustion PBR (Part II), as well as of the "de minimis" provisions (Part III) appear in the following chart:

Part II: Full PBR (9VAC15-70-30 et seq.)

Criteria: Rated Capacity >5 MW & Not Otherwise Meeting Criteria for Part III "De Minimis" Requirements:)

Wildlife Analyses

For disturbance zone >10 acres & project does not meet criteria for 9VAC15-70-130 B 2 a ii:

 Desktop for: T&E in disturbance zone, known species & habitats to 2 miles, & sea turtle nesting within ½ mile of disturbance zone

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Desktop for CAPZ (if >200 foot stack)

Historic Resources Analyses

For all projects >5MW that don't meet Part III criteria:

• Archives search (non DOI qualified person can perform)

For disturbance zone >10 acres & project does not meet 9VAC15-70-130 B 2 a ii (by DOI gualified):

- Architectural survey (direct impacts) for structures >50 years old within disturbance zone
- Archaeological survey of disturbance zone

For stack >200 feet (by DOI qualified):

Architectural survey (indirect impacts/viewshed) of >50 years old within disturbance zone plus ½
mile

For utilizing or demolishing structures >50 years old (by DOI qualified)

Architectural survey (direct impacts) for structures >50 years old within disturbance zone

Mitigation plan to be determined based on results of Analyses enumerated above. Mitigation provisions similar to those in Wind PBR & proposed Solar PBR.

Part III: De Minimis (9VAC15-70-130 B)

Criteria:

- 1. Rated capacity >500kW to 5 MW OR
- 2. >5 MW rated capacity but meet all of the following:
- ≤10 acres **or**
 - >10 acres but existing parking lots, roads or other previously disturbed & ≤10 acres new disturbance; and
- ≤200 ft stack; and
- <50 yr old structures or

>50 yr old structures determined by DHR to be not VLR-eligible within past 7 yrs

Guidance: Recommend basic desktop "fatal flaw" analysis; voluntarily discuss results with agencies

Requirements: Notify DEQ via Local Government Certification of Land Use Compliance

Part III: De Minimis (9VAC15-70-130 A)

Criteria: Rated Capacity ≤500 kW

Requirements: No Notice or Certification

DEQ is soliciting further public input and will consider any alternatives and issues presented by the public during the upcoming comment period on this proposal that meet the goals of the statute, the regulation, and the agency.

Regulatory flexibility analysis

Please describe the agency's analysis of alternative regulatory methods, consistent with health, safety, environmental, and economic welfare, that will accomplish the objectives of applicable law while minimizing the adverse impact on small business. Alternative regulatory methods include, at a minimum: 1) the establishment of less stringent compliance or reporting requirements; 2) the establishment of less stringent schedules or deadlines for compliance or reporting requirements; 3) the consolidation or simplification of compliance or reporting requirements; 4) the establishment of performance standards for small businesses to replace design or operational standards required in the proposed regulation; and 5) the exemption of small businesses from all or any part of the requirements contained in the proposed regulation.

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The permit by rule, in and of itself, is a regulatory method that is considered a less burdensome, faster approach for small businesses and indeed for all applicants.

Small businesses, and all other applicants, whose projects are eligible for the proposed *de minimis* provisions will have no reporting requirements or greatly reduced reporting requirements.

Since there is no accurate way to predict what type or size of entity will apply for this permit by rule, it is difficult to analyze impacts on small businesses *per se*.

The RAP and DEQ worked to ensure that the requirements in the proposal are necessary and reasonable, within the mandates of the enabling legislation.

Public comment

Please summarize all comments received during public comment period following the publication of the NOIRA, and provide the agency response.

One comment was received in response to the publication of the NOIRA.

Commenter	Comment	Agency response
Al Weed, Chairman, Public Policy Virginia (PPVIR)	Major points: Define technology options covered by PBR. State allowable limits as defined measures (e.g., MW output). PBR may offer benefits to combustion projects. Competitive advantage of small scale renewable projects may spur development of biomass production.	This comment was presented to the Combustion RAP, and staff asked the RAP to consider and address the comment during its deliberations. A representative of PPVIR served on the RAP.

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Within the NOIRA, DEQ published a request that all persons who were interested in serving on the Combustion Regulatory Advisory Panel (RAP) to contact the department. From the pool of stakeholders who responded to DEQ's notice, DEQ convened a RAP to assist DEQ in developing this proposal. Following is a listing of the members of the Combustion RAP.

State Government

DCR - Tom Smith; Danette Poole, alternate

DGIF - Ray Fernald; Ernie Aschenbach, alternate

DHR - Roger Kirchen; Julie Langan, alternate

DOF - Ron Jenkins; Charlie Becker, alternate

DMME - Robin Jones

VDACS - Stephen Versen; Larry Nichols, alternate

DEQ – Rebekah Remick (Air Division) & Kathryn Perszyk (LPR Division)

Private Sector

Bob Bisha, Dominion; Emil Avram, alternate

Larry Jackson, Appalachian Power/AEP; Ron Jefferson, alternate

Scott Sklar, The Stella Group (former head of national biomass association)

John Hart, AEC Idom

Kelly Bonds, Aegis

Lynne Rhode, Troutman Sanders

Robert Greene, Ingenco

Donna Wirick, Recast

Thomas Numbers, ERM Randy Bush, Virginia Forest Products Association

Public Interest

The Nature Conservancy – Nikki Rovner
Public Policy Virginia – Al Weed; Tatyanna Patten, alternate
VT/Virginia Extension Service, Agricultural Byproduct Utilization – John Ignosh
Piedmont Environmental Council – Dan Holmes; Rob Marmet, alternate
Farm Bureau – Tony Banks; Andrew Smith, alternate

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Local Government

Virginia Association of Counties - Larry Land

The first, introductory meeting of the Combustion RAP occurred on April 12, 2011. At both the initial meeting on April 12 and the second meeting on June 20, experts made presentations concerning various types of biomass, energy from waste, and municipal solid waste projects what constitutes each and what resource impacts, if any, may be caused by such projects to wildlife or historic resources. Representatives from DEQ also explained the air, waste, and water permits which generally must be obtained for combustion-related projects, and these permits will continue to be required, over and above what might be required for the proposed renewable energy PBR. The potential natural-resource impacts of each technology were explored, and the RAP considered which combustion technologies can feasibly be developed in Virginia. Once RAP members had reached a common understanding of combustion-related technologies and potential resource impacts, they were ready to convert these understandings into recommended PBR provisions designed to protect natural resources adequately and reasonably. RAP members considered the public comment received in response to the NOIRA, as well as issues raised among themselves and by members of the public who chose to attend RAP meetings. At its subsequent meetings and work sessions (June 28, August 31, October 6, October 7, and October 28), the RAP discussed substantive issues and draft PBR language. Between meetings, staff circulated draft provisions which had been developed with input from wildlife and historic-resources experts at DEQ's sister agencies. As a result of the diligent and dedicated work of the RAP, consensus was achieved on all substantive issues by the conclusion of the seventh meeting. DEQ staff then edited the draft PBR provisions to reflect the RAP's recommendations and circulated that draft to RAP members. RAP members offered a few language refinements but expressed no objections to these provisions, so an additional RAP meeting was not convened to discuss the draft further. Because of this exceptional degree of cooperative deliberation, DEQ staff was able to present to the DEQ director a draft proposal to which no RAP member had expressed objection. As prescribed by the 2009 statute, the renewable energy PBR's are the first DEQ permit regulations to be approved by the director, rather than by a citizen board.

Family impact

Please assess the impact of the proposed regulatory action on the institution of the family and family stability including to what extent the regulatory action will: 1) strengthen or erode the authority and rights of parents in the education, nurturing, and supervision of their children; 2) encourage or discourage economic self-sufficiency, self-pride, and the assumption of responsibility for oneself, one's spouse, and

one's children and/or elderly parents; 3) strengthen or erode the marital commitment; and 4) increase or decrease disposable family income.

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The Department does not expect that the regulation will have a direct impact on the institution of the family and family stability.

Detail of changes

Please detail all changes that are being proposed and the consequences of the proposed changes. If the proposed regulation is a new chapter, describe the intent of the language and the expected impact if implemented in each section. Please detail the difference between the requirements of the new provisions and the current practice or if applicable, the requirements of other existing regulations in place.

If the proposed regulation is intended to replace an emergency regulation, please list separately (1) all provisions of the new regulation or changes to existing regulations between the pre-emergency regulation and the proposed regulation, and (2) only changes made since the publication of the emergency regulation.

Proposed 9 VAC 15-70 is a new chapter designed to implement the statutory mandates of Virginia 2009 Acts of Assembly Chapters 808 and 854 ("the 2009 statute"), which move permitting authority for environmental requirements of small renewable energy projects from the State Corporation Commission (SCC) to the Department of Environmental Quality (DEQ).

The legislation requires DEQ to develop "permits by rule," which are streamlined permitting vehicles currently utilized in DEQ's solid waste division, and which set forth "up front" what requirements all applicants must meet in order to be covered by the permit by rule. The legislation further requires that the regulations include standards necessary to protect the Commonwealth's natural resources. These proposed regulations seek to balance the two statutory goals – (1) to streamline and facilitate development of small renewable energy projects and (2) to protect natural resources.

Pursuant to the statute's provisions, DEQ determined that more than one permit by rule will be necessary to address all renewable media. The current proposal addresses combustion energy projects (biomass, energy from waste, municipal solid waste).

HOW THE PROPOSED REGULATION COMPARES WITH CURRENT LAW:

Under current law, developers of proposed wind energy projects must apply to the SCC, where hearings are held to determine what natural-resource protections will be required at the proposed project site. The SCC's determination is made on a case-by-case basis. The SCC receives input from the natural-resource agencies regarding the agencies' recommendations for needed resource protections for a proposed project. To the best of our knowledge, there are few guidelines in place to inform either the agencies' recommendations or the SCC's acceptance or rejection of those recommendations. There are no time limitations on how long the SCC process may take.

Under the 2009 statute and these proposed combustion regulations, applicants must apply to DEQ for a permit by rule regarding the construction and operation of the proposed combustion energy project. The proposed regulation sets forth, in detailed fashion, what all applicants must

do to gain permit coverage. The combination of the proposed regulation plus DEQ's guidance will fully explain how each standard must be achieved. The proposal also sets forth the requirement that DEQ process that application and render a decision to the applicant within 90 days. The other natural-resource agencies will continue to have input into this process, but in a different fashion than under existing law. All of the relevant natural-resource agencies were represented on the Regulatory Advisory Panel (RAP) that developed recommendations for this regulation. Further, these agencies will be consulted by DEQ when DEQ makes a decision about each permit application, as required by the 2009 statute. By these methods, input from the natural-resource agencies will continue to be a vital part of the permit decision, but within carefully defined structures and time frames.

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HOW NEW REGULATIONS ADDRESS GOALS OF INDUSTRY AND OF ENVIRONMENTAL INTERESTS:

Nationwide, representatives of renewable-energy industries generally articulate three major needs when they seek governmental permission to develop a project: certainty, timeliness, and reasonableness. As stated above, the proposed regulation will provide a high degree of certainty and timeliness. As for reasonableness, the proposed provisions also provide the most appropriate and reasonable standards the RAP and DEQ could develop to balance facilitating renewable energy with protecting natural resources, in compliance with the mandates of the statute. Accordingly, DEQ believes that the proposed regulations put developers in a better position than did Virginia's existing law. Several developers on the RAP noted that other states do not generally regulate the natural-resource (wildlife and historic resource) impacts of combustion projects in as formalized a manner as required by the 2009 statute; however, they expressed support for the Combustion PBR proposal as being reasonable – requiring what, in their view, responsible developers across the country would likely do.

The statute and proposed regulations also address resource-protection needs often cited by environmental advocacy groups and by DEQ's sister agencies as being top priorities. Under the new regimen, wildlife and historic resource protections will be required for every project subject to the full PBR, even if no advocacy group has the time or resources to comment on an individual application. That is the nature of a permit by rule -- to lay out uniform, across-the-board standards for all projects. Virginia's 2009 statute goes further than most other states' standards do in requiring certain natural-resource protections, and the proposed regulations implement those protections, as set forth below. Further, DEQ has an effective apparatus for regulatory enforcement, which some observers believe the SCC lacks. Thus, the proposed regulation achieves many of the goals of environmental groups with respect to renewable energy projects.

In summary, the statute and these proposed regulations provide a number of advantages, for both industry and environmental interests. They help promote development of renewable energy, which is an environmental and economic benefit to all citizens.

HOW THE NEW PERMIT BY RULE FITS INTO LOCAL, STATE, AND FEDERAL REQUIREMENTS:

The permit by rule proposal implements the requirements of the 2009 legislation, which defines natural-resource (primarily wildlife and historic resource) protections at small combustion energy projects in Virginia. For the most part, the resources enumerated in the 2009 legislation are not the subject of regulation under current law, but rather are the subject of advisory consultations with natural-resource agencies other than DEQ. DEQ is a regulatory agency. The 2009 statute makes clear that DEQ's regulatory environmental permits (air, water, waste, wetlands, etc.), as

well as those regulatory permits of any other agency, if relevant, are still required. The 2009 statute requires that the permit by rule applicant submit to DEQ certification that he has obtained, or applied for, these other environmental permits. Many people view the air permits required of combustion-related projects to address the projects' main environmental impacts, and the air standards are generally perceived to be very stringent. The 2009 statute does not abrogate these other permit requirements. Nor does it abrogate local requirements, as reflected by the fact that the 2009 statute requires the applicant to submit to DEQ certification that he has complied with local land-use ordinances. Since the 2009 statute does not explicitly speak to federal requirements, the proposed regulation does not reference federal requirements either. It seems clear, however, that the applicant must comply with requirements of federal agencies.

Section	Proposed Requirements	Rationale and Consequences
Number	1 roposca requirements	Rationale and Consequences
10	Definitions. The following words and terms when used in this chapter shall have the following meanings unless the context clearly indicates otherwise: "Applicant" means the owner or operator who submits an application to the department for a permit by rule pursuant to this chapter.	The definitions explain meanings of relevant terms as these terms are used in the proposed regulation. In a number of instances, the definitions reflect specific decisions debated and recommended by the RAP, and these definitions are not intended to have application beyond the reach of the proposed regulation. Where possible, the RAP used definitions taken from the natural-resource agencies' existing laws and regulations.
	"Archive search" means a search of DHR's cultural resource inventory for the presence of previously recorded archaeological sites and for architectural structures and districts.	The definition of "archive search" was suggested by DHR. It represents an abbreviated, low- or no-cost survey that can be performed by a non-professional. Unlike the Analysis requirement for combustion projects subject to Part II of this proposed regulation, the archive search does not involve an obligation to discover or analyze asyet-unidentified historic resources. The archive search may be performed by a lay person; i.e., a DOI-qualified expert is not required to perform the survey. DHR and the other members of the Combustion RAP believed that this requirement was sufficient and appropriate for projects falling within the purview of 9VAC15-70-130 B.
	"Coastal Avian Protection Zones" or "CAPZ" means the areas designated on the map of "Coastal Avian Protection Zones" generated on the department's Coastal GEMS geospatial data system (9VAC15-70-120 C 1).	The CAPZ map and related regulatory provisions were originally developed and recommended by the Offshore/Coastal Wind RAP. These concepts were created chiefly by scientists from DGIF and the Center for Conservation Biology for use in DEQ's renewable energy regulations for projects located in nearshore (i.e., state)

waters and on coastal land areas. The Combustion RAP determined that combustion projects cannot be feasibly constructed in state waters, at least for the foreseeable future, that are large enough or of a character to trigger any of the requirements of this proposed Combustion PBR. Accordingly, this proposal contains no definitions or other provisions relating to combustion projects in state waters. The Combustion RAP did believe, however, that combustion projects might be feasibly constructed on coastal land areas, which might include some areas within the CAPZ, and that these projects might pose a risk to avian resources if the built structures exceed 200 feet in height. For this reason, the proposal contains definitions and other provisions applicable to combustion energy projects located in certain CAPZ.

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"Combustion energy project," or "project" means a small renewable energy project that

<u>See</u> the discussion of definitions of biomass, energy from waste, and municipal solid waste in the Alternatives section of this document.

i. 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

Subparagraph (i) quotes the 2009 statute.

ii. 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.

Subparagraph (ii) explains that projects that generate electricity from regulated solid wastes or biomass crops are addressed by the PBR regulation.

"Department" means the Department of Environmental Quality, its director, or the director's designee.

"DCR" means the Department of Conservation and Recreation.

"DGIF" means the Department of Game

and Inland Fisheries.

"DHR" means the Department of Historic Resources.

"Disturbance zone" means the area within the site directly impacted by construction and operation of the combustion energy project.

"Historic resource" means any prehistoric or historic district, site, building, structure, object, or cultural landscape that is included or meets the criteria necessary for inclusion in the Virginia Landmarks Register pursuant to the authorities of § 10.1-2205 of the Code of Virginia and in accordance with 17VAC5-30-40 through 17VAC5-30-70.

"Interconnection point" means the point or points where the combustion energy project connects to a project substation for transmission to the electrical grid.

"Natural heritage resource" means the habitat of rare, threatened, or endangered plant and animal species, rare or state significant natural communities or geologic sites, and similar features of scientific interest benefiting the welfare of the citizens of the Commonwealth.

"Operator" means the person responsible for the overall operation and

The definition of "disturbance zone" is important because the proposal prescribes certain environmental analyses or procedures that the applicant must perform within this area. Whereas the Wind PBR includes a 100' buffer in the definition of "disturbance zone," Combustion RAP members agreed by consensus that this buffer was unnecessary for this PBR.

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Since the proposal is a state regulation, the RAP agreed that it was appropriate to utilize a Virginia definition of "historic resource."

Interconnection: RAP members discussed whether the intent of the 2009 statute was to restrict DEQ's jurisdiction to only those renewable energy projects that are "interconnected" to the grid (that is, sell electricity at wholesale to the grid). DEQ staff has asked OAG staff to provide informal advice on the issue. DEQ intends to abide by this advice, when rendered, in determining which projects are required to obtain PBR coverage; however, that determination does not affect the contents of this proposed regulation, since the regulation sets forth what is required of projects to which the regulation actually applies.

management of a combustion energy project.

"Owner" means the person who owns all or a portion of a combustion energy project.

"Parking lot" means an improved area, usually divided into individual spaces and covered with pavement or gravel, intended for the parking of motor vehicles.

"Permit by rule" means provisions of the regulations stating that a project or activity is deemed to have a permit if it meets the requirements of the provision.

"Person" means any individual, partnership, firm, association, joint venture, public or private corporation, trust, estate, commission, board, public or private institution, utility, cooperative, county, city, town, or other political subdivision of the Commonwealth, any interstate body, or any other legal entity.

"Parasitic load" means the maximum amount of electricity (in megawatts or kilowatts) a combustion energy project uses to run its electricity-producing processes while operating at the rated capacity.

"Pre-construction" means any time prior to commencing land-clearing operations necessary for the installation of energygenerating structures at the combustion The definition of "parking lot" was suggested by DHR to assist the RAP in defining one of the categories of projects that the group agreed should not trigger substantive PBR requirements. The term is utilized in proposed 9VAC15-70-130.

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Although the 2009 statute directs DEQ to develop permits by rule for renewable energy projects, the term "permit by rule" had never been defined in either statute or regulation until promulgation of the Wind PBR. "Permit by rule" is a permitting vehicle utilized in DEQ's solid waste permitting programs. Both the Wind RAP, the Solar RAP, and the Combustion RAP adhered as closely as possible, given all the 2009 statute's provisions, to the permit by rule model from solid waste in developing standards for the current permit by rule. The regulatory definition is a new one, but it conforms to DEQ's practices for permits by rule in the solid waste program.

"Parasitic load": RAP members pointed out that, unlike wind and solar projects, combustion energy projects require a certain amount of energy to support the electricity-producing processes. RAP members agreed that it was not appropriate to include this "parasitic load" when calculating the project's rated capacity. (See Alternatives section of this document.)

energy project.

"Rated capacity" means the maximum designed electrical generation capacity (in megawatts or kilowatts) of a combustion energy project, minus the parasitic load; sometimes known as "net capacity."

"Site" means the area encompassed by the combustion energy project, plus appurtenant structures and facilities such as fuel processing, delivery, storage and associated conveyance equipment areas if they (a) are contiguous and (b) primarily exist to supply fuel for the generation of electricity at that project, to the extent that these areas are under common ownership or operating control by the owner or operator of the combustion energy project.

"Small renewable energy project" means (i) an electrical generation facility with a rated capacity not exceeding 100 megawatts that generates electricity only from sunlight, wind, falling water, wave motion, tides, or geothermal power, or (ii) 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.

"T&E," "state threatened or endangered species," or "state-listed species" means any wildlife species designated as a Virginia endangered or threatened species by DGIF pursuant to the § 29.1-563-570 of the Code of Virginia and 4VAC15-20-130.

"VLR" means the Virginia Landmarks Register (9VAC15-70-120 B 1).

"VLR-eligible" means those historic resources that meet the criteria necessary for inclusion on the VLR pursuant to 17VAC5-30-40 through 17VAC5-30-70 but are not listed in VLR.

<u>See</u> Alternatives section of this document for a discussion of "rated capacity." This definition reflects the RAP's acknowledgment that DEQ has statutory authority to regulate projects that "generate electricity" without regard to generation of heat/thermal energy.

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For some projects addressed by this PBR, there may be fuel storage (wood, manure, etc.) near or connected to the boiler. Under certain circumstances, it is appropriate to include such structures within the "site." (See Alternatives section.)

This is the definition of "small renewable energy project" set forth in the 2009 statute.

This definition of "T&E" purposely focuses on those T&E species designated by DGIF, and omits T&E insects designated by VDACS. <u>See</u> note below regarding definition of "wildlife."

laws and regulations, discussed numerous related issues and sub-issues, and finally concluded it best to use a broad, general definition. Details like "non-native," 'exotic," "undomesticated," etc. will be addressed in DEQ's guidance as needed. The Wind RAP, including representatives of the Virginia Department of Agriculture and Consumer Services (VDACS) and of DGIF, agreed that T&E insects should be treated as part of Natural Heritage Resources and not as wildlife. This approach is consistent with how T&E plants and insects are addressed under VDACS' law as it applies to all development projects. That is, developers consult DCR's mapping of Natural Heritage Resources. If habitat for T&E plants or insects is found on the proposed development site, then the developer consults with VDACS. Pursuant to VDACS' law, landowner's explicit permission – who could include developers who lease land for wind energy projects – can take any action they deem appropriate on their own land. This proviso to the definition of "wildlife" is designed to prevent the presence of T&E insects from becoming an automatic, mandatory trigger for wildlife mitigation under the proposed regulation. This information was summarized for the Combustion RAP, whose members agreed with this approach.			
"undomesticated," etc. will be addressed in DEQ's guidance as needed. The Wind RAP, including representatives of the Virginia Department of Agriculture and Consumer Services (VDACS) and of DGIF, agreed that T&E insects should be treated as part of Natural Heritage Resources and not as wildlife. This approach is consistent with how T&E plants and insects are addressed under VDACS' law as it applies to all development projects. That is, developers consult DCR's mapping of Natural Heritage Resources. If habitat for T&E plants or insects is found on the proposed development site, then the developer consults with VDACS. Pursuant to VDACS' law, landowners and persons acting with the landowner's explicit permission – who could include developers who lease land for wind energy projects – can take any action they deem appropriate on their own land. This proviso to the definition of "wildlife" is designed to prevent the presence of T&E insects from becoming an automatic, mandatory trigger for wildlife mitigation under the proposed regulation. This information was summarized for the Combustion RAP, whose members agreed with this approach.		resources that have been listed in the VLR in accordance with the criteria of 17VAC5-30-40 through 17VAC5-30-70. "Wildlife" means wild animals; except, however, that T&E insect species shall only be addressed as part of natural heritage resources and shall not be	the Wind RAP and accepted by the Solar RAP and Combustion RAP: Theoretically, a simple word like "wildlife" should be easy to define; however, the RAP discovered that quite the opposite is true. The Wind RAP reviewed numerous definitions from both state and federal laws and regulations, discussed numerous related issues and sub-issues, and finally concluded it best to use a broad, general
Virginia Department of Agriculture and Consumer Services (VDACS) and of DGIF, agreed that T&E insects should be treated as part of Natural Heritage Resources and not as wildlife. This approach is consistent with how T&E plants and insects are addressed under VDACS' law as it applies to all development projects. That is, developers consult DCR's mapping of Natural Heritage Resources. If habitat for T&E plants or insects is found on the proposed development site, then the developer consults with VDACS. Pursuant to VDACS' law, landowners and persons acting with the landowner's explicit permission – who could include developers who lease land for wind energy projects – can take any action they deem appropriate on their own land. This proviso to the definition of "wildlife" is designed to prevent the presence of T&E insects from becoming an automatic, mandatory trigger for wildlife mitigation under the proposed regulation. This information was summarized for the Combustion RAP, whose members agreed with this approach.			"undomesticated," etc. will be addressed in
1 20 Authority and applicability	20	Authority and applicability.	Virginia Department of Agriculture and Consumer Services (VDACS) and of DGIF, agreed that T&E insects should be treated as part of Natural Heritage Resources and not as wildlife. This approach is consistent with how T&E plants and insects are addressed under VDACS' law as it applies to all development projects. That is, developers consult DCR's mapping of Natural Heritage Resources. If habitat for T&E plants or insects is found on the proposed development site, then the developer consults with VDACS. Pursuant to VDACS' law, landowners and persons acting with the landowner's explicit permission – who could include developers who lease land for wind energy projects – can take any action they deem appropriate on their own land. This proviso to the definition of "wildlife" is designed to prevent the presence of T&E insects from becoming an automatic, mandatory trigger for wildlife mitigation under the proposed regulation. This information was summarized for the Combustion RAP, whose members agreed with this
A. This regulation is issued under authority of Article 5 (§ 10.1- that the permit by rule shall apply to combustion	20	A. This regulation is issued under	

1197.5 et seg.) of Chapter 11.1 of projects with a rated capacity of 20 megawatts Title 10.1 of the Code of Virginia. and smaller. The SCC retains authority over regulation contains projects larger than 20 megawatts. combustion requirements for energy projects that are designed See also the "Alternatives" section of this for, or capable of, operation at a document. rated capacity equal to or less than 20 megawatts. B. The department has determined B (Part II projects): Based on the consensus that a permit by rule is required recommendations of the Combustion RAP, this for combustion energy projects proposal requires that projects with rated with a rated capacity greater than capacity of 5 MW or more that do not otherwise meet the "de minimis" requirements of Part III five (5) megawatts, provided that should meet the requirements set forth in Part II the projects do not otherwise meet the criteria for Part III of the PBR regulation (9VAC15-70-30 et seq.) -(9VAC15-70-130) of this chapter; which are the 14 statutory criteria – as long as and this regulation contains the the project does not exceed a rated capacity of permit by rule provisions for 20 MW. these projects in Part II (9VAC15-70-30 et seq.) of this chapter. C. The department has determined C.(Part III projects): The proposal provides in that different provisions should Part III (9VAC15-70-130 A & B) only minimal or no requirements for projects ≤ 5MW of rated apply to projects that meet the criteria as set forth in Part III capacity, or >5MW but meeting specified criteria. (9VAC15-70-130) of this chapter. and this regulation contains the requirements, if any, for these projects in Part III (9VAC15-70-130) of this chapter. Projects that meet the criteria for Part III of this chapter are deemed to covered by the permit by rule. 30 Application. This section lists the application requirements as set forth in the 2009 statute. If a particular A. The owner or operator of a requirement warrants detailed explanation, then combustion energy project with a rated that explanation is set forth either in guidance, in capacity greater than five (5) megawatts. a subsequent section of the proposed regulation. provided that the project does not or in both. otherwise meet the criteria for Part III (9VAC15-70-130) of this chapter, shall The application requirements are quite specific. submit to the department a complete as is the practice in a permit by rule. Developers application, in which he satisfactorily generally value that certainty of knowing exactly accomplishes all of the following: what they will be required to do. It enables them to plan their project's design and operation, and 1. In accordance with § 10.1-1197.6 B 1 to secure financing. Virginia's proposed

of the Code of Virginia, and as early in the project development process as practicable, furnishes to the department a notice of intent, to be published in the Virginia Register, that he intends to submit the necessary documentation for a permit by rule for a small renewable energy project;

2. In accordance with § 10.1-1197.6 B 2 of the Code of Virginia, furnishes to the department a certification by the governing body of the locality or localities wherein the small renewable energy project will be located that the project complies with all applicable land use ordinances;

regulations appear superior to most states' approaches in this respect, since most states largely make permitting decisions on a case-by-case, *ad hoc* basis.

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The 2009 statute authorizes DEQ to develop a permit by rule for the "construction and operation" of small renewable energy projects. The statute does not address other major phases of a project's development, namely siting and decommissioning. There is a subtle but significant difference between siting decisions (that is, whether or not a developer can put a project in a particular location) and permitting decisions (that is, how a developer must construct and operate the project once the site has been approved). Since the 2009 statute only authorizes DEQ to develop a permit program for construction and operation of projects, it is assumed that local governments will essentially be making the siting decisions in the process of determining whether to grant special use permits, zoning provisions, and the like. Likewise, decommissioning decisions will presumably fall to local governments, the provisions of the developer's lease agreement, or other relevant entities or documents. Siting and decommissioning criteria are not included in the proposed permit by rule. Decisions regarding these provisions are consistent with advice from the Office of the Attorney General (OAG). As specified in the statute and proposed regulation, DEQ expects to receive certification from the local government that the applicant has met all local zoning, use permit, and other land-userelated requirements before DEQ considers the applicant's permit by rule application.

- 3. In accordance with § 10.1-1197.6 B 3 of the Code of Virginia, furnishes to the department copies of all interconnection studies undertaken by the regional transmission organization or transmission owner, or both, on behalf of the small renewable energy project;
- 4. In accordance with § 10.1-1197.6 B 4 of the Code of Virginia, furnishes to the department a copy of the final

3. & 4. For the proposed Combustion PBR, language was added to these sections to account for the fact that a number of combustion projects may not be connected to the electrical grid, but rather provide electrical power to be used on site. If the project does connect to the grid, then copies of the interconnection studies and agreement need to be provided, as required by the statute.

interconnection agreement between the small renewable energy project and the regional transmission organization or transmission owner indicating that the connection of the small renewable energy project will not cause a reliability problem for the system. If the final agreement is not available, the most recent interconnection study shall be sufficient for the purposes of this section. When a final interconnection agreement is complete, it shall be provided to the department. The department shall forward a copy of the agreement or study to the State Corporation Commission;

- 5. In accordance with § 10.1-1197.6 B 5 of the Code of Virginia, furnishes to the department a certification signed by a professional engineer licensed in Virginia that the maximum generation capacity of the combustion energy project, as designed, does not exceed 20 megawatts;
- 6. In accordance with § 10.1-1197.6 B 6 of the Code of Virginia, furnishes to the department an analysis of potential environmental impacts of the small renewable energy project's operations on attainment of national ambient air quality standards;
- 7. In accordance with § 10.1-1197.6 B 7 of the Code of Virginia, furnishes to the department, where relevant, an analysis of the beneficial and adverse impacts of the proposed project on natural resources. The owner or operator shall perform the analyses prescribed in 9VAC15-70-40. For wildlife, that analysis shall be based on information on the presence, activity, and migratory behavior of wildlife to be collected at the site for a period of time dictated by the site conditions and biology of the wildlife being studied, not exceeding 12 months;
- 8. In accordance with § 10.1-1197.6 B 8 of the Code of Virginia, furnishes to the department a mitigation plan pursuant to

8. General comments about the 2009 statute: The 2009 statute requires Virginia applicants to develop a mitigation plan for likely "significant

9VAC15-70-70 that details reasonable actions to be taken by the owner or operator to avoid, minimize, or otherwise mitigate such impacts, and to measure the efficacy of those actions; provided, however, that the provisions of 9VAC15-70-30 A 8 shall only be required if the department determines, pursuant to 9VAC15-70-50, that the information collected pursuant to § 10.1-1197.6 B 7 of the Code of Virginia and 9VAC15-70-40 indicates that significant adverse impacts to wildlife or historic resources are likely;

9. In accordance with § 10.1-1197.6 B 9 of the Code of Virginia, furnishes to the department a certification signed by a professional engineer licensed in Virginia that the project is designed_in accordance with 9VAC15-70-80;

10. In accordance with § 10.1-1197.6 B 10 of the Code of Virginia, furnishes to the department an operating plan describing how any standards established in the regulations applicable to the permit by rule will be achieved.

- 11. In accordance with § 10.1-1197.6 B 11 of the Code of Virginia, furnishes to the department a detailed site plan meeting the requirements of 9VAC15-70-70;
- 12. In accordance with § 10.1-1197.6 B 12 of the Code of Virginia, furnishes to the department a certification signed by the applicant that the combustion energy project has applied for or obtained all

adverse impacts" to both wildlife and historic resources, and "to measure the efficacy" of those mitigation plans. Research has not produced evidence of such across-the-board requirements in other states.

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Some business interests may pronounce these aspects of Virginia's regulations stricter or more burdensome than those of other states; however, the regulations implement a statute in which these standards are mandated.

Across the country, wildlife experts generally recommend that mitigation and monitoring be done regarding bat fatalities (for wind projects) and other wildlife; and historic resources experts also recommend mitigation by design modifications, screening, or offsets. Virginia appears to be ahead of the curve on these environmental protections.

Different constituencies may have different views about the costs and benefits of these requirements. In the final analysis, Virginia's statutory mandates for mitigation and post-construction monitoring are policy decisions made by the General Assembly after listening to the views of stakeholders on all sides of the issues. The proposed regulation attempts merely to implement these mandates, and to do so as faithfully, fairly, and reasonably as possible.

10. This provision makes clear that DEQ is concerned only with the aspects of the project's operating plan that involve implementation of the mitigation plan, if a mitigation plan is required. Enforcing health and safety and other operating-plan issues are not within DEQ's authority over natural-resource protections, and they are left to the authority of local government and other relevant entities.

necessary environmental permits;

- 13. Prior to authorization of the project and in accordance with §§ 10.1-1197.6 B 13 and 10.1-1197.6 B 14 of the Code of Virginia, conducts a 30-day public review and comment period and holds a public meeting pursuant to 9VAC15-70-90. The public meeting shall be held in the locality or, if the project is located in more than one locality, in a place proximate to the location of the proposed project. Following the public meeting and public comment period, the applicant shall prepare a report summarizing the issues raised by the public and include any written comments received and the applicant's response to those comments. The report shall be provided to the department as part of this application; and
- 14. In accordance with 9VAC15-70-110, furnishes to the department the appropriate fee.
- B. Within 90 days of receiving all of the required documents and fees listed in subsection A of this section, the department shall determine, after consultation with other agencies in the Secretariat of Natural Resources, whether the application is complete and whether it adequately meets the requirements of this chapter, pursuant to § 10.1-1197.7 A of the Code of Virginia.
- 1. If the department determines that the application meets the requirements of this chapter, then the department shall notify the applicant in writing that he is authorized to construct and operate a combustion energy project pursuant to this chapter.
- 2. If the department determines that the application does not meet the requirements of this chapter, then the department shall notify the applicant in writing and specify the deficiencies.

13. The 2009 statute provides that the applicant must hold a public meeting. The statute also provides that a 30-day public review and comment period must occur but does not specify who is to conduct it. The RAP discussed whether that entity should be the applicant or DEQ. In the waste permit by rule, the applicant is the party who conducts this comment period. The RAP endorsed the proposed provision. which assigns the applicant responsibility for both the public meeting and public comment period. One advantage of having the applicant perform this function is that it provides an opportunity for the applicant and public to seek common ground on controversial issues before the final application is submitted to DEQ.

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B. The proposed 90-day time limit for permit processing is expected to be beneficial to developers, allowing them to proceed with their proposed projects in a timely fashion. It is another aspect of certainty that helps developers make planning decisions and obtain financing. Research indicates that this proposed timeframe is significantly shorter than those used in many other states, and that a number of states do not even provide a time limit for permitting decisions. All RAP members, including representatives of the natural-resources sister agencies, agreed that an adequate and meaningful review of an application can be accomplished within 90 days.

	3. If the applicant chooses to correct deficiencies in a previously submitted application, the department shall follow the procedures of this subsection and notify the applicant whether the revised application meets the requirements of this chapter within 60 days of receiving the revised application.	
	4. Any case decision by the department pursuant to this subsection shall be subject to the process and appeal provisions of the Administrative Process Act (§ 2.2-4000 et seq. of the Code of Virginia).	4. This provision reminds the public that the permit by rule, like all other DEQ regulations, affords the applicant (and others who have participated in the public participation process) full rights under the Administrative Process Act. These rights include the right to an informal hearing, formal hearing, or both.
40	Analysis of the beneficial and adverse impacts on natural resources.	The 2009 statute requires an applicant to analyze natural resources "where relevant." "Relevant" is a hard word to define in narrative terms. The RAP chose to define it operationally. That is, the wildlife, historic, and other natural resources enumerated in this section are "relevant" if they are detected in the disturbance zone or other specified area by use of the assessment tools prescribed in the regulation. Only the natural resources specified in this section can be deemed relevant. And these natural resources only become relevant if the prescribed methods indicate that they exist in the prescribed areas in or near the disturbance zone.
	A. Analyses of wildlife. To fulfill the requirements of § 10.1-1197.6 B 7 of the Code of Virginia, the applicant shall conduct pre-construction wildlife analyses. The analyses of wildlife shall include the following, if the disturbance zone exceeds 10 acres and the project does not meet the criteria of 9VAC15-70-130 B 2 a ii:	A. The following wildlife analyses were agreed upon by the RAP members as appropriate tools for identifying potential impacts of a proposed combustion energy project on important wildlife. DEQ guidance documents will explain the details of how these analyses should be conducted.
	1. The applicant shall obtain a wildlife report and map generated from DGIF's Virginia Fish and Wildlife Information Service web-based application (9VAC15-70-120 C 3) or from a data and mapping system including the most	1. Although the Wind PBR requires both desktop and field-survey analyses for wildlife, the Combustion RAP recommended that only desktop studies be required for combustion energy projects.

recent data available from DGIF's subscriber-based Wildlife Environmental Review Map Service of the following: (i) T&E species within the project's disturbance zone; (ii) known wildlife species and habitat features within the project's disturbance zone and within two (2) miles of the boundary of the project's disturbance zone; and (iii) known or potential sea turtle nesting beaches located within one-half (1/2) mile of the disturbance zone.

- 2. If the height of the tallest point of the built structures exceeds 200 feet, the applicant shall consult the "Coastal Avian Protection Zones (CAPZ)" map generated on the department's Coastal GEMS geospatial data system (9VAC15-70-120 C 1) and determine whether the proposed combustion energy project disturbance zone will be located in part or in whole within one or more CAPZ.
- B. Analyses of historic resources. To fulfill the requirements of § 10.1-1197.6 B 7 of the Code of Virginia, the applicant shall also conduct a pre-construction historic resources analysis.
- 1. Desktop survey for projects with rated capacity exceeding five (5) megawatts. The applicant shall perform a desktop survey of known VLR-listed and VLR-eligible historic resources within the project's disturbance zone and within one-half (1/2) mile of the disturbance zone boundary by means of an archives search of DHR's cultural resource inventory; and report in writing the results of the archives search to the department.
- 2. Architectural (direct impacts) and archaeological surveys if disturbance zone exceeds 10 acres. If the project's disturbance zone exceeds 10 acres and the project does not meet the criteria for 9VAC15-70-130 B 2 a ii, the applicant

1. (ii) The desktop survey for sea turtle nesting beaches is confined to ½ mile from the disturbance zone, as opposed to the 1-mile requirement for wind projects.

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2. Please see previous discussion regarding treatment of coastal avian resources (CAPZ) and related issues.

- B. 1. For all Part II (full PBR) projects, the RAP recommended that the applicant perform a desktop archives search of known historic resources. Although most historic resources analyses must be performed by a DOI-qualified expert who can evaluate the historic qualities of the resource, this archives search may be performed by a lay person. An applicant will only have to perform the remaining historic resource analyses if the stated criteria contained in subparagraphs 2 and 3 apply to his project. The analyses prescribed in the latter subparagraphs must be performed by a DOI-qualified expert.
- 2 & 3. All RAP members agreed that the following field studies, performed by a qualified professional, are appropriate tools for identifying potential impacts of a proposed combustion project on historic resources, if certain stated criteria are relevant. Although impacts on

shall also meet the requirements of this subsection, and the prescribed analysis shall be conducted by a qualified professional meeting the professional qualification standards of the Secretary of the Interior's Standards for Archaeology and Historic Preservation (9VAC15-70-120 B 2) in the appropriate discipline. The analysis for this subsection shall include each of the following:

- a. Architectural survey (direct impacts). The applicant shall conduct a field survey of all architectural resources, including cultural landscapes, 50 years of age or older, within the disturbance zone and evaluate the eligibility of any identified resource for listing in the VLR.
- b. Archaeological survey. The applicant shall conduct an archaeological field survey of the disturbance zone and evaluate the eligibility of any identified archaeological site for listing in the VLR. As an alternative to performing this archaeological survey, the applicant may make a demonstration to the department that the project will not penetrate the subsurface in a manner that would threaten archaeological resources and that any necessary grading of the site prior to construction does not have the potential to adversely impact any archaeological resource.
- 3. Architectural survey (indirect impacts) if the tallest point of the built structures exceeds 200 feet. If the tallest point of the built structures exceeds 200 feet, the applicant shall also conduct a field survey of all architectural resources, including cultural landscapes, 50 years of age or older, within the one-half (1/2) mile of the disturbance zone boundary and evaluate the eligibility of any identified resource for listing in the VLR. The prescribed analysis shall be conducted by a qualified professional meeting the professional qualification

historic resources tend to be, by their very nature, more qualitative then quantitative, RAP members were comfortable with the well-established protocols utilized by DHR and the U.S. Department of the Interior. DHR's regulations will be incorporated into DEQ's guidance documents to explain how the applicant should carry out the specified analyses.

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Results of all studies will be reported to DEQ, along with the applicant's analysis of beneficial and adverse impacts of the proposed project on relevant historic resources.

standards of the Secretary of the Interior's Standards for Archeology and Historic Preservation (9VAC15-70-120 B 2) in the appropriate discipline.

- 4. Architectural survey (direct impacts) of structures 50 years of age or older. If the project will utilize or demolish existing buildings 50 years of age or older and the project does not meet the criteria for 9VAC15-70-130 B 2 c ii, the applicant shall evaluate the eligibility of any such buildings for listing in the VLR. The prescribed analysis shall be conducted by a qualified professional meeting the professional qualification standards of the Secretary of the Interior's Standards for Archaeology and Historic Preservation (9VAC15-70-120 B 2) in the appropriate discipline.
- C. Analyses of other natural resources. To fulfill the requirements of § 10.1-1197.6 B 7 of the Code of Virginia, and if the project's disturbance zone exceeds 10 acres, the applicant shall also conduct a pre-construction desktop survey of natural heritage resources within the disturbance zone.
- D. Summary report. The applicant shall provide to the department a report presenting the findings of the applicable studies and analyses conducted pursuant to subdivisions A, B, and C of this subsection, along with all data and supporting documents. The applicant shall assess and describe the expected beneficial and adverse impacts, if any, of the proposed project on wildlife and historic resources identified by these studies and analyses.

C. RAP members agreed that Natural Heritage Resources (but not Scenic Resources - a change from the Wind PBR requirements) should be analyzed by the applicant, in addition to the wildlife and historic resources addressed above. Natural Heritage Resources are a major area of responsibility for DCR, an agency within the Secretariat of Natural Resources. Whereas this resource tends to involve habitat and is not specifically addressed in the 2009 statute (as are "wildlife" and "historic resources"), they are "natural resources," and the statute requires that "natural resources" be analyzed. As discussed previously, it is especially important to include Natural Heritage Resources in the regulation. because they indicate the presence of T&E insects, which are a type of wildlife that the 2009 statute is interpreted to include. If a mitigation plan is required for wildlife under the Combustion PBR, then the applicant may choose to protect Natural Heritage Resources as a possible way to mitigate for impacts to T&E wildlife. (See mitigation section below.)

50	Determination of likely significant	
	adverse impacts. A. The department shall find that significant adverse impacts to wildlife are likely whenever the wildlife analyses prescribed in 9VAC15-70-40 A document that any of the following conditions exists:	A. This section sets forth the mandatory triggers for a wildlife mitigation plan. The first mandatory trigger under the Wind PBR – presence of or habitat for bats – was considered by the Combustion RAP not to be needed for the Combustion PBR. Although wind turbines present a well-documented risk to bats, combustion projects do not. Hence, there is no "bat" trigger for combustion projects.
	State-listed T&E wildlife are found to occur within the disturbance zone;	1. The first combustion mandatory trigger – T&E wildlife – was agreed by all Combustion RAP members to be worthy of note by combustion project developers. The "taking" of a T&E species is actionable under both state and federal laws, totally apart from the PBR. The Combustion RAP, like the Wind RAP and Solar RAP, believed that a developer should make himself aware of the likelihood of T&E species within his proposed disturbance zone and take reasonable measures to avoid the chance of "taking" a T&E species.
	2. The disturbance zone is located on or within one-half (1/2) mile of a known or potential sea turtle nesting beach;	2. Sea turtles are T&E species. Like the Wind RAP and Solar RAP, members of the Combustion RAP believed that special attention should be required to these turtles' nesting areas, so as to avoid potential harm to the species themselves. Apparently, construction at certain times of year and lighting that is not properly directed can inhibit nesting activities and/or confuse the turtles about which direction to find the open sea. The relevant area of the nesting beach from the disturbance zone has been reduced from 1 mile in the Wind PBR to ½ mile in the proposed Combustion PBR.
	3. The disturbance zone is located in part or in whole within zones 1, 2, 3, 4, 5, 10, 11, 12, or 14 on the Coastal Avian Protection Zones (CAPZ) map and the height of the tallest point of the built structures exceeds 200 feet.	3. The location of the proposed combustion project within one of the specified CAPZ areas was judged by the Combustion RAP to constitute a likelihood of significant adverse impacts to the important avian resources within these critical geographic areas, if the project's stack (highest point of the built structures) exceeds 200 feet. The specified zones are the ones in which

	B. The department shall find that	scientists have already researched and established the highly significant nature and extent of avian resources. B. The integrity of a historic resource is defined
	significant adverse impacts to historic resources are likely whenever the historic resources analyses prescribed by 9VAC15-70-40 B indicate that the	in DHR's regulations. This information will be provided and explained in DEQ's guidance, much of which has already been drafted by DHR and the Wind RAP.
	proposed project is likely to diminish significantly any aspect of a historic resource's integrity.	Although the standard for triggering a historic resources mitigation plan is largely qualitative, the Wind, Solar, and Combustion RAP's were comfortable that it is understood by DHR and qualified professionals who will be dealing with the standard on behalf of the applicant.
60	Mitigation plan.	Although the 2009 statute requires an applicant to analyze "natural resources," the only resources for which the statute authorizes or requires a mitigation plan are "wildlife" and "historic resources," and only if DEQ determines that "significant adverse impacts to wildlife or historic resources are likely." This section sets forth the criteria DEQ must use in making these determinations. These criteria operate as mandatory triggers for development of a wildlife mitigation plan or historic resources mitigation plan.
		A permit by rule is supposed to set forth across-the-board requirements "up front" for all applicants to follow. To the extent practicable, the RAP and DEQ followed this model in developing the proposed regulation. The analyses and mitigation triggers are "one size fits all." When it comes to mitigation, however, the RAP agreed that some degree of individualization will need to occur if the mitigation plan is to have meaningful impacts for the project in question. Consequently, the mitigation provisions set forth standard procedures for mitigation but leave room for case-specific determinations where needed.
	A. If the department determines that significant adverse impacts to wildlife or historic resources or both are likely, then the applicant shall prepare a mitigation plan. The mitigation plan shall include a	A. The regulation includes the traditional hierarchy for mitigation – avoid, minimize, offset.

description of the affected wildlife or historic resources, or both, and the impact to be mitigated; a description of actions that will be taken to avoid the stated impact; and a plan for implementation. If the impact cannot reasonably be avoided, the plan shall include a description of actions that will be taken to minimize the stated impact and a plan for implementation. If neither avoidance nor minimization is reasonably practicable, the plan shall include a description of other measures that may be taken to offset the stated impact; and a plan for implementation.

- B. Mitigation measures for significant adverse impacts to wildlife shall include:
- 1. For state-listed T&E wildlife, the applicant shall take all reasonable measures to avoid significant adverse impacts, or shall demonstrate in the mitigation plan what significant adverse impacts cannot practicably be avoided and why additional proposed actions are reasonable. These additional proposed actions may include best practices to avoid, minimize, or offset adverse impacts to resources analyzed pursuant to 9VAC15-70-40 A or 9VAC15-70-40 C.
- 2. For proposed projects where the disturbance zone is located on or within one-half (½) mile of a known or potential sea turtle nesting beach, the applicant shall take all reasonable measures to avoid significant adverse impacts or shall demonstrate in the mitigation plan what significant adverse impacts cannot practicably be avoided, and why additional proposed mitigation actions are reasonable. Mitigation measures shall include the following:
- a. Avoiding construction within likely sea turtle crawl or nesting habitats during the turtle nesting and hatching season (May 20 - October 31). If avoiding construction during this period is not possible, then

B 1. The proposal provides that the applicant may opt to propose best practices to mitigate for *other* wildlife-related resources when he cannot fully avoid impacts to T&E species. These proposals may include not only best practices to avoid "taking" a T&E species, but also best practices to mitigate other resources analyzed under the wildlife and Natural Heritage Resources provisions, when impacts on T&E species cannot be practicably avoided.

Form: TH-02

2. The proposed mitigation requirements for projects located on or near a sea turtle nesting beach are the same in the Combustion PBR as they are in the Wind PBR, except that the relevant area is ½ mile of the beach, rather than the 1 mile provided in the Wind PBR. It appears that mitigation strategies for nesting sea turtles are well established, and the Combustion RAP saw no reason to vary from DGIF's original recommendations to the Offshore/Coastal Wind RAP.

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conducting daily crawl surveys of the disturbance zone (May 20 - August 31) and one (1) mile beyond the northern and southern reaches of the disturbance zone (hereinafter "sea turtle nest survey zone") between sunrise and 9:00 a.m. by qualified individuals who have the ability to distinguish accurately between nesting and non-nesting emergences.

- b. If construction is scheduled during the nesting season, then including measures to protect nests and hatchlings found within the sea turtle nest survey zone.
- c. Minimizing nighttime construction during the nesting season, and designing project lighting during the construction and operational phases to minimize impacts on nesting sea turtles and hatchlings.
- 3. For projects located in part or in whole within zones 1, 2, 3, 4, 5, 10, 11, 12, or 14 on the Coastal Avian Protection Zones (CAPZ) map for which the tallest point of the built structures exceeds 200 feet, contribute \$1,000.00 per megawatt of rated capacity, or partial megawatt thereof, to a fund designated by the department in support of scientific research investigating the impacts of projects in CAPZ on avian resources.
- C. Mitigation measures for significant adverse impacts to historic resources shall include:
- 1. Significant adverse impacts to VLReligible or VLR-listed architectural resources shall be minimized, to the extent practicable, through design of the combustion energy project or the installation of vegetative or other screening.
- 2. If significant adverse impacts to VLReligible or VLR-listed architectural resources cannot be avoided or minimized such that impacts are no

3. See previous discussion of mitigation for projects located in the specified CAPZ areas.

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C. Impacts of combustion energy projects on historic resources may typically be of three types: direct impact on historic architectural resources, indirect impact (view shed impacts) on historic resources, or direct impacts on archaeological historic resources. To mitigate for these impacts, the applicant can sometimes move the location of structures within the site to minimize these impacts, or he can construct or plant screening materials (usually at or near the historic resource) so that the combustion project cannot be as fully viewed from the historic resource. If he cannot practicably screen the project from view so that the impact is no longer a significant diminishment of the historic resource's integrity, then the applicant must

develop an offset. The DHR member on the longer significantly adverse, then the applicant shall develop a reasonable and Combustion RAP gave several examples of proportionate mitigation plan that offsets mitigation strategies employed at sites of other the significantly adverse impacts and has types of development. Among these examples a demonstrable public benefit and were photographing and recording information benefit for the affected or similar about historic buildings before destroying them when clearing the land for development, giving resource. recovered archaeological data to a museum, and 3. If any identified VLR-eligible or VLRerecting a display of photographs and other data listed archaeological site cannot be about the impacted resource at or near the avoided or minimized to such a degree project. as to avoid a significant adverse impact, significant adverse impacts of the project will be mitigated through archaeological data recovery. 70 Site plan and context map requirements. A. The applicant shall submit a site plan A. The site plan should provide to DEQ and the public a clear idea of the chief features of the that includes maps showing the physical features, topography and land cover of project site. the area within the site, both before and after construction of the proposed project. The site plan shall be submitted at a scale sufficient to show, and shall include, the following: (i) the boundaries of the site; (ii) the location, height, and approximate dimensions of all existing and proposed infrastructure; (iii) the location, grades, and dimensions of all temporary and permanent on-site and access roads from the nearest county or state maintained road; and (iv) water bodies, waterways, wetlands, and drainage channels. B. If the project's disturbance zone B. This provision requires submittal of a context exceeds 10 acres, the applicant shall map of the area extending 2 miles around the submit a context map including the area boundary of the site. Discreet natural resources encompassed by the site and within two often occur within a larger context, such as a miles of the site boundary. The context watershed. The RAP wanted to ensure that map shall show known state and federal DEQ and the public are aware of the larger resource lands and other protected context in which the proposed project will exist, areas. Coastal Avian Protection Zones. and its possible effect within that "big picture." state roads, waterways, locality boundaries, forests, and open spaces. Of special note is the inclusion of "forests" and "open spaces" as required aspects of the context map. Although the RAP agreed that the regulatory reach of the proposed regulation does not extend to forest or farm management, the

		manner in which fuel for combustion energy projects may be supplied by farms and forests is of significant societal importance. The Department of Forestry representative pointed out that the issue of forest fragmentation is important, and possible forest fragmentation may be reflected on the context map. It can be taken into account by the public and local government, among others. The use of farm land to grow biomass crops was of special interest to the representative from VDACS.
		Known historic resources are not included in the context map for the Combustion PBR, since the desktop archives search prescribed in the Analysis section (9VAC15-70-40 B 1) would provide comparable information.
80	Small combustion energy project design standards. The design and installation of the combustion energy project shall incorporate any requirements of the mitigation plan that pertain to design and installation, if a mitigation plan is required pursuant to 9VAC15-70-50.	This provision clarifies that DEQ is interested only in the aspects of the project design that relate to mitigation. It should be clear to the public that DEQ is not guaranteeing the quality of the work or the credentials of the person doing the design. Nor will DEQ be involved in ensuring compliance of the design with any requirements other than mitigation. If, however, the applicant's mitigation plan involves such things as locating a structure so as to avoid view shed impacts on a nearby historic resource, or to avoid the habitat of a T&E species, DEQ will expect to see those adjustments reflected in the project design and will enforce them accordingly.
90	Public participation. A. Before the initiation of any construction at the combustion energy project, the applicant shall comply with this section. The owner or operator shall first publish a notice once a week for two	This section sets forth the requirements the applicant must complete for compliance with the statutorily-mandated public-participation on any project. The requirements are minimum requirements and are similar to those utilized for other DEQ permits by rule.
	consecutive weeks in a major local newspaper of general circulation informing the public that he intends to construct and operate a project eligible for a permit by rule. No later than the date of newspaper publication of the initial notice, the owner or operator shall submit to the department a copy of the notice along with electronic copies of all documents that the applicant plans to	DEQ decided to require the applicant to submit electronic copies of the documents that will be placed in a location near the proposed project documents that are required in support of the permit by rule application. This requirement should not be burdensome for the applicant, since all of these documents are likely to have been generated as electronic documents. It is increasingly the case that newspapers do not reach large segments of the public. DEQ will

submit in support of the application. The notice shall include:

- 1. A brief description of the proposed project and its location, including the approximate dimensions of the site, approximate number and configuration of systems, and approximate maximum height of systems;
- 2. A statement that the purpose of the public participation is to acquaint the public with the technical aspects of the proposed project and how the standards and the requirements of this chapter will be met, to identify issues of concern, to facilitate communication, and to establish a dialogue between the owner or operator and persons who may be affected by the project;
- 3. Announcement of a 30-day comment period in accordance with subsection C of this section, and the name, telephone number, address, and email address of the applicant who can be contacted by the interested persons to answer questions or to whom comments shall be sent:
- 4. Announcement of the date, time, and place for a public meeting held in accordance with subsection D of this section; and
- 5. Location where copies of the documentation to be submitted to the department in support of the permit by rule application will be available for inspection.
- B. The owner or operator shall place a copy of the documentation in a location accessible to the public during business hours for the duration of the 30-day comment period in the vicinity of the proposed project.
- C. The public shall be provided at least

seek ways to make project notice and application information available electronically for the benefit of the public.

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1. This brief description will allow the public and interested persons who track all such developments the ability to discern, at a glance, whether they need to be concerned about the proposed combustion energy project.

	20 days to comment on the technical and	
	30 days to comment on the technical and the regulatory aspects of the proposal. The comment period shall begin no sooner than 15 days after the applicant initially publishes the notice in the local newspaper.	
	D The applicant shall hold a public meeting not earlier than 15 days after the beginning of the 30-day public comment period and no later than seven days before the close of the 30-day comment period. The meeting shall be held in the locality or, if the project is located in more than one locality, in a place proximate to the location of the proposed project.	D. It may be difficult for members of the public to understand that their comments should be limited to the technical and regulatory aspects of the proposal. Those aspects are delineated in DEQ's permit by rule. Comments on factors beyond the scope of the 2009 statute and the permit by rule are not within DEQ's authority to address. Those comments should be directed to the local government or to whoever has authority over the issues.
	E. For purposes of this chapter, the applicant and any interested party who submits written comments on the proposal to the applicant during the public comment period or who signs in and provides oral comments at the public meeting shall be deemed to have participated in the proceeding for a permit by rule under this chapter and pursuant to § 10.1-1197.7 B of the Code of Virginia.	E. The RAP recognized that, for legal purposes, it is important to define clearly who has participated in the public comment period and therefore has the right to appeal DEQ's case decision under the Administrative Process Act. This provision seeks to do that. Persons, for instance, who chat with the owner's representative out in the hall at the public meeting have not met the requirement.
100	Change of ownership, project modifications, termination. A. Change of ownership. A permit by rule may be transferred to a new owner or operator if:	This section establishes requirements for permit by rule revisions such as change of ownership, modifications and permit terminations. The provisions of subsection C.3 are required by the Administrative Process Act when DEQ terminates a permit.
	 The department receives notification of the change of ownership within 30 days of the transfer; and The notice includes written agreement by the new owner or operator to comply with all requirements of the existing permit by rule and the date on which permit responsibility is transferred to the new owner or operator. 	The subsections of paragraph A vary somewhat from those in the Wind or Solar PBR's, based on comments by Combustion RAP members. They reflect what were described as the realities of transactions involving these projects, and the provisions are similar to the modification provisions found in other DEQ permit regulations (e.g., air).
	B. Project modifications. Projects	

subject to Part II of this chapter may be modified as follows:

1. Project modifications that do not

- increase the project's disturbance zone by more than an additional 10 acres. cause the tallest point of the built structures to exceed 200 feet, or newly involve utilizing or demolishing a building over 50 years of age may occur without notice to the Department. No fee will be levied for these modifications. 2. If, however, the project modification involves increasing the disturbance zone by more than 10 additional acres increasing the height of the tallest point of the built structures so that it now exceeds 200 feet, or newly utilizing or demolishing a building over 50 years of age, the owner or operator shall furnish to the department new certificates prepared by a professional engineer. new documentation required under 9VAC15-70-30, and the appropriate fee in accordance with 9VAC15-70-110. The department shall review the received modification submittal pursuant to this subparagraph in accordance with the provisions of subsection B of 9VAC15-70-30.
- C. Permit by rule termination. The department may terminate the permit by rule whenever the department finds that:
- 1. The applicant has knowingly or willfully misrepresented or failed to disclose a material fact in any report or certification required under this chapter; or
- 2. After the department has taken enforcement actions pursuant to 9VAC15-70-140, the owner or operator persistently operates the project in significant violation of the project's mitigation plan.

Prior to terminating a permit by rule pursuant to subdivision 1 or 2 of this subsection, the department shall hold an

B 1 & 2. RAP members recognized that modification of a project's rated capacity is unlikely to warrant a new regulatory review; however, a significant change in disturbed area, stack height, or age of newly disturbed buildings might do so.

	informal fact finding proceeding process	
	informal fact-finding proceeding pursuant to § 2.2-4019 of the Virginia Administrative Process Act in order to assess whether to continue with termination of the permit by rule or to issue any other appropriate order. If the department determines that it should continue with the termination of the permit by rule, the department shall hold a formal hearing pursuant to § 2.2-4020 of the Virginia Administrative Process Act. Notice of the formal hearing shall be delivered to the owner or operator. Any owner or operator whose permit by rule is terminated by the department shall cease operating his combustion energy project.	
110	Fees for projects subject to Part II of this chapter. A. Purpose. The purpose of this section is to establish schedules and procedures pertaining to the payment and collection of fees from any applicant seeking a new permit by rule or a modification to an existing permit by rule for a combustion energy project subject to Part II (9VAC15-70-30 et seq.) of this chapter. B. Permit fee payment and deposit. Fees for permit by rule applications or modifications shall be paid by the applicant as follows:	The RAP asked DEQ to develop appropriate fee schedules in compliance with the 2009 statute and in keeping with the anticipated actual costs the agency will incur in administering the permit program. The provisions are DEQ's best calculation of what the fees need to be. The procedures for payment are those used in other DEQ regulations.
	Due date. All permit application fees or modification fees are due on submittal day of the application or modification package.	
	2. Method of payment. Fees shall be paid by check, draft, or postal money order made payable to "Treasurer of Virginia/DEQ" and shall be sent to the Department of Environmental Quality, Receipts Control, P.O. Box 1104, Richmond, VA 23218.	
	3. Incomplete payments. All incomplete payments shall be deemed	

nonpayments.

- 4. Late payment. No application or modification submittal will be deemed complete until the department receives proper payment.
- C. Fee schedules. Each application for a permit by rule and each application for a modification of a permit by rule is a separate action and shall be assessed a separate fee, except as noted in 9VAC15-70-100 B 1. The amount of the permit application fee is based on the costs associated with the permitting program required by this chapter. The fee schedules are shown in the following table:

Type of Action
Permit by rule application \$8000
Permit by rule modification \$4000

- D. Use of fees. Fees are assessed for the purpose of defraying the department's costs of administering and enforcing the provisions of this chapter including, but not limited to, permit by rule processing, permit by rule modification processing, and inspection and monitoring of combustion energy projects to ensure compliance with this chapter. Fees collected pursuant to this section shall be used for the administrative and enforcement purposes specified in this section and in § 10.1-1197.6 E of the Code of Virginia.
- E. Fund. The fees, received by the department in accordance with this chapter, shall be deposited in the Small Renewable Energy Project Fee Fund.
- F. Periodic review of fees. Beginning July 1, 2014, and periodically thereafter, the department shall review the schedule of fees established pursuant to this section to ensure that the total fees collected are sufficient to cover 100% of the department's direct costs associated

Included in the initial fee are DEQ's anticipated costs for processing the permit application and monitoring and enforcing the permit requirements.

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The fee provisions are stated in a way to make clear that fees only apply to projects governed by Part II of the Combustion PBR. No project governed by Part III (9VAC15-60-130 A or B) is required to pay a fee.

The application and modification fees are the same as those proposed for the lowest tier of full-PBR solar profects (i.e., rated capacity >5MW to 25MW). [TPEQ believes a comparable amount of staff tim[e] and effort will be involved for combustion energy projects.

F. This re-opener clause parallels the same provisions in the Wind PBR and proposed Solar PBR; that is, two years after the regulation is expected to go into effect.

	with use of the fees.	
120	A. This chapter refers to resources to be used by applicants in gathering information to be submitted to the department. These resources are available through the Internet; therefore, in order to assist applicants, the uniform resource locator or Internet address is provided for each of the references listed in this section.	Provided to assist applicants regarding resources required by the Combustion PBR that are available through the internet.
	B. Internet available resources.	
	1. The Virginia Landmarks Register, Virginia Department of Historic Resources, 2801 Kensington Avenue, Richmond, Virginia. Available at the following Internet address: http://www.dhr.virginia.gov/registers/register.htm.	
	2. Professional Qualifications Standards, the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation, as amended and annotated (48 FR 44716-740, September 29, 1983), National Parks Service, Washington, DC. Available at the following Internet address: http://www.nps.gov/history/local-law/arch_stnds_9.htm.	
	3. The Natural Communities of Virginia, Classification of Ecological Community Groups, Second Approximation, Version 2.3, Virginia Department of Conservation and Recreation, Division of Natural Heritage, Richmond, VA. Available at the following Internet address: http://www.dcr.virginia.gov/natural_heritage/ncintro.shtml. 4. Virginia's Comprehensive Wildlife Conservation Strategy, 2005 (referred to	
	as the Virginia Wildlife Action Plan), Virginia Department of Game and Inland Fisheries, 4010 West Broad Street,	

Richmond, Virginia. Available at the following Internet address: http://www.bewildvirginia.org/wildlifeplan/

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C. Internet applications.

1. Coastal GEMS application, 2010, Virginia Department of Environmental Quality. Available at the following Internet address:

http://www.deq.virginia.gov/coastal/coast algems.html.

NOTE: This website is maintained by the department. Assistance and information may be obtained by contacting Virginia Coastal Zone Management Program, Virginia Department of Environmental Quality, 629 E. Main Street, Richmond, Virginia 23219, (804) 698-4000.

2. Natural Landscape Assessment, 2010, Virginia Department of Conservation and Recreation. Available at the following Internet address: for detailed information on ecological cores go to

http://www.dcr.virginia.gov/natural_herita ge/vclnavnla.shtm. Land maps may be viewed at DCR's Land Conservation Data Explorer Geographic Information System website at http://www.vaconservedlands.org/gis.asp

x.
NOTE: The website is maintained by

DCR. Actual shapefiles and metadata are available for free by contacting a DCR staff person at vaconslands@dcr.virginia.gov or DCR,

Division of Natural Heritage, 217 Governor Street, Richmond, Virginia 23219, (804) 786-7951.

3. Virginia Fish and Wildlife Information Service 2010, Virginia Department of Game and Inland Fisheries. Available at the following Internet address: http://www.vafwis.org/fwis/.

NOTE: This website is maintained by DGIF and is accessible to the public as "visitors," or to registered subscribers. Registration, however, is required for access to resource- or species-specific locational data and records. Assistance

	and information may be obtained by contacting DGIF, Fish and Wildlife Information Service, 4010 West Broad Street, Richmond, Virginia 23230, (804) 367-6913.	
130	Provisions for Projects Less Than or Equal to Five Megawatts or Meeting Other Specified Criteria	This section sets forth the requirements for projects with "de minimis" impacts on natural resources, as recommended by unanimous consensus of the Combustion RAP. The rationale for these provisions is explained in the "Alternatives" section of this submission.
	A. The owner or operator of a combustion energy project is not required to submit any notification or certification to the department if the combustion energy project has a rated capacity equal to or less than 500 kilowatts.	A. Projects that fall within subsection A do not have to provide notification or certification to the department. The RAP agreed that these projects have so little impact on resources that they do not warrant any kind of scrutiny by the department. A project qualifies for subsection A if it has a rated capacity ≤500kW, just as in the Wind PBR and proposed Solar PBR.
	B. The owner or operator of a combustion energy project shall notify the department by submitting a certification by the governing body of the locality or localities wherein the project will be located that the project complies with all applicable land use ordinances, if the project meets either of the following criteria:	
	1. The combustion energy project has a rated capacity greater than 500 kilowatts and less than or equal to five (5) megawatts; or	B 1. As with the Wind and Solar PBR's (and similar to SCC regulations), this proposal provides that projects with rated capacity ≤5MW should have only nominal requirements (notification by providing local-government certification of land use compliance).
	2. The combustion energy project has a rated capacity greater than five (5) megawatts and meets all of the criteria specified below. a. The combustion energy project has a disturbance zone (i) less than or equal to ten (10) acres; or (ii) greater than 10 acres but utilizes	B 2. The Combustion RAP also recommended that projects >5MW that meet the criteria listed under subpart 2 should have only nominal requirements. These provisions were suggested and/or approved by representatives from DEQ's sister agencies that have expertise on these issues.
	existing parking lots, existing roads, or other previously disturbed areas and any impacts to undisturbed areas do not	See also the "de minimis" discussion in the "Alternatives" section of this submission.

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exceed an additional ten acres;

b. The tallest point of the built structures does not exceed 200 feet; and

c. If utilizing or demolishing existing buildings, utilizes or demolishes existing buildings
(i) less than 50 years of age; or
(ii) 50 years of age or older that have been evaluated and determined by DHR within the preceding seven (7) years to be not VLR-eligible.

140 Enforcement. DEQ will enforce the combustion permit by rule the same way it enforces other permits. The The department may enforce the 2009 statute includes an extensive section on provisions of this chapter and any enforcement, which is incorporated by reference into the proposed regulation. The statutory permits by rule authorized under this chapter in accordance with §§ 10.1provision encompasses DEQ's relevant 1197.9, 10.1-1197.10, and 10.1-1197.11 enforcement tools and procedures. These of the Code of Virginia. In so doing, the statutory provisions are further fleshed out in this department may: section, with language the public is accustomed to seeing in other DEQ regulations. 1. Issue directives in accordance with the law: 2. Issue special orders in accordance with the law: 3. Issue emergency special orders in accordance with the law; 4. Seek injunction, mandamus or other appropriate remedy as authorized by the law; 5. Seek civil penalties under the law: or 6. Seek remedies under the law, or under other laws including the common law. **DIBR** Documents incorporated by reference. The Natural Communities of Virginia, Classification of Ecological Community Groups, Second Approximation (Version 2.2), 2006, Virginia Department of Conservation and Recreation, Division of Natural Heritage, Richmond, VA. Virginia's Comprehensive Wildlife Conservation Strategy, 2005, Virginia

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Acronyms and Definitions

Department of Game and Inland Fisheries, Richmond, Virginia.

Please define all acronyms used in the Agency Background Document. Also, please define any technical terms that are used in the document that are not also defined in the "Definition" section of the regulations.