Regulatory Advisory Panel (RAP) Meeting

Small Renewable Combustion Energy Permit by Rule June 28, 2011 Final Meeting Notes

Location: DEQ Piedmont Regional Office Glen Allen, VA 23060

Start: 9:35 a.m. **End:** 4:05 p.m.

RAP Leader/Facilitator: Carol Wampler, DEQ Recorder: Heather Mackey, DEQ Debra Miller, DEQ Connor Kain, DEQ

RAP Members Present:

Rene Hypes, DCR (Alt) Ray Fernald, DGIF Larry Land, VACO Roger Kirchen, DHR Rebekah Remick, DEQ Kathryn Perszyk, DEQ Stephen Versen, VDACS Robin Jones, DMME Tatyanna Patten, Public Policy Virginia (Alt) Tony Banks, VA Farm Bureau

RAP Members Absent:

Ron Jenkins, DOF John Hart, AEC Idom Larry Jackson, APCO Scott Sklar, Stella Group

Guests and Public Attendees:

Ralston King, Covanta Energy Ernie Aschenbach, DGIF (Alt)

Thomas Numbers, ERM Nikki Rovner, TNC Sandy Morse, Aegis (Alt) Donna Wirick, Recast Robert Greene, Ingenco Randy Bush, VA Forest Products Association Lynne Rhode, Troutman Sanders John Ignosh, VA Tech Extension Emil Avram, Dominion (Alt)

Al Weed, Public Policy Virginia (Alt Present) Bob Bisha, Dominion (Alt Present) Kelly Bonds, Aegis (Alt Present) Tom Smith, DCR (Alt Present)

Agenda Item: Welcome & Introductions Discussion Leader: Carol Wampler, DEQ

Ms. Wampler welcomed all attendees, including Heather Mackey, DEQ's new Renewable Energy Policy Analyst, and Connor Kain, DEQ summer law-student intern. Other attendees introduced themselves. Ms. Wampler then summarized discussions from the June 20, 2011, RAP meeting for the benefit of those Members who were absent. During that meeting DEQ's sister agencies (DCR, DGIF, DOF, VDACS and DMME) provided their perspectives and concerns. Ms. Wampler then reviewed the four basic Scenarios, or structural approaches, for the combustion regulation presented at the previous meeting. She then stated the goals for this meeting: the RAP will continue discussing the four Scenarios, as well as definitions unique to the Combustion Permit by Rule (PBR), with the intent of providing further direction on the preferred Scenario and definitions. Staff will then revise the draft regulation, incorporating the guidance given by the RAP, for discussion at the next meeting. At today's meeting, various RAP members will present suggested provisions that they developed in response to the facilitator's request at the June 20 RAP meeting.

Agenda Item: Discussion of Key PBR Definitions: "Biomass," "Energy from Waste" and "Municipal Solid Waste"

Discussion Leader: Carol Wampler, DEQ

Tatyanna Patten presented for discussion potential definitions for "biomass," "energy from waste" and "municipal solid waste," and the reasoning behind each definition, which were derived from existing definitions in the VA Code, with the exception of Energy from Waste, which is an undefined term. John Hart had contributed to these suggestions, and John Ignosh had contributed additional information. The RAP discussed the following issues:

- 1. Biomass and Municipal Solid Waste are feedstocks, whereas Energy from Waste is a process.
- 2. Ranking types or categories of Biomass and Municipal Solid Waste based upon associated pollution risks may be considered by the RAP but is not required by the Statute.
- 3. The benefits and limitations of definitions that are specific vs. general were discussed, including cross referencing VA Code sections rather than including specific language.
- 4. The Statute seems to require a definition for each term; however, there is nothing preventing the RAP from finding an 'umbrella' term, such as "combustion," which may cover all three terms.

"Biomass"

The RAP discussed the following definition of "Biomass" from the DEQ biomass energy generator general permit regulations (9 VAC 5-520-20):

"Biomass" means organic material that is available on a renewable or recurring basis, including:

- 1. Forest-related materials, including mill residues, logging residues, forest thinnings, slash, brush, low-commercial value materials or undesirable species, and woody material harvested for the purpose of forest fire fuel reduction or forest health and watershed improvement;
- 2. Agricultural-related materials, including orchard trees, vineyard, grain or crop residues, including straws, aquatic plants and agricultural processed co-products and waste products, including fats, oils, greases, whey, and lactose;
- 3. Animal waste, including manure and slaughterhouse and other processing waste;
- 4. Solid woody waste materials, including landscape trimmings, waste pallets, crates and manufacturing, construction, and demolition wood wastes, excluding pressure-treated, chemically treated or painted wood wastes and wood contaminated with plastic;
- 5. Crops and trees planted for the purpose of being used to produce energy;
- 6. Landfill gas, wastewater treatment gas, and biosolids, including organic waste byproducts generated during the wastewater treatment process; and
- 7. Municipal solid waste, excluding tires and medical and hazardous waste.

The RAP discussed excluding the following items from the definition of Biomass:

Medical and hazardous waste - both terms are addressed in separate regulations. The RAP noted that
these substances are excluded from definitions in one section of DEQ's current regulations because
they are covered in other sections. It may be appropriate to include them in the PBR, even though it
would be difficult for such projects to become permitted under DEQ's permit regulations for medical and
hazardous waste.

- Landfill gas (although some definitions of MSW specifically include landfill gas)
- Fossil fuels problematic in that they are typically used as a start up or stabilizing fuel in these projects. It was suggested that waste tires should be included as a renewable feedstock and that fossil fuels, including petroleum-based resources such as oil and coal, are considered non-renewable. The RAP discussed the possibility of excluding projects from the PBR if they utilize more than a certain percent of fossil fuels in their fuel mix – perhaps 10 or 15% -- in order to allow the fossil fuels necessary for start up. DEQ Air staff noted that EPA regulations classify a project as a "biomass" project with only a relatively small percent of biomass comprising the project's fuel – perhaps only 15%.

The RAP further discussed the feasibility of utilizing a general definition, rather than trying to itemize all possible feedstocks, agreeing to consider the following as a possible definition for "Biomass":

"Biomass" means a plant or animal based organic material that is available on a renewable or recurring basis.

"Energy from Waste"

The RAP discussed possible definitions for the term "Energy from Waste" which is undefined in the VA Code. Although they did not come to agreement on a meaning for the term, the following was suggested as a possibility:

"Energy from Waste," also known as waste to energy, is the process of creating energy from the incineration (or other technology such as gasification, digestion, etc.) of a waste source.

"Municipal Solid Waste"

Concerning Municipal Solid Waste, the RAP was willing to consider using the following definition from the Solid Waste Management Regulations (9 VAC 20-81-10):

"Municipal solid waste" means waste that is normally composed of residential, commercial, and institutional solid waste and residues derived from the combustion of these wastes, as defined under the Solid Waste Management Regulations (9 VAC 20-91-10).

Agenda Item: Discussion of Scenarios in the "Straw Man" or Draft Regulations Discussion Leader: Carol Wampler, DEQ

Ms. Wampler reintroduced the four Scenarios as follows (see Attachment 1):

- 1. No PBR necessary
- 2. "Fatal Flaw" Analysis with Exceptions
- 3. Provisions similar to the Solar PBR
- 4. Provisions similar to the Wind PBR

Roger Kirchen summarized DHR's views about a potential Combustion PBR, noting that his agency believes it is important to analyze and take into account potential impacts on historic resources. Larry Land and Lynne Rhode presented for discussion possible adjustments to the "fatal flaw analysis" in Scenario 2 to address issues raised at the meeting on June 20, 2011. The RAP discussed the following issues concerning Scenario 2:

- 1. The term "fatal flaw" may be a misnomer because discovery of T&E wildlife or known historic resources is a red flag prompting additional investigation, but their presence does not necessarily halt the project.
- 2. Background information was provided that the Solar RAP had agreed last year on a "de minimis" provision requiring that the applicant simply certify that a fatal flaw analysis had been completed. Subsequent discussion between DEQ and the OAG indicated that such an analysis would need to be submitted to the local government, not just certified complete by the applicant. The draft "de minimis" provision from the proposed Solar PBR is the basis for the Scenario 2 "straw man" provision.

The RAP discussed the pros/cons of submitting the fatal flaw analysis to the local government in the Combustion PBR.

The RAP broke for lunch at 12:35 p.m. and reconvened at 1:35 p.m.

Agenda Item: Discussion of Key PBR Definitions: "Rated Capacity" Discussion Leader: Carol Wampler, DEQ

At its first meeting RAP members raised questions concerning SCC jurisdiction and the term "rated capacity":

- 1. Does the SCC's jurisdiction extend to facilities that generate only steam/thermal energy?
- 2. When a facility generates both electricity and steam/thermal, how does the SCC classify "rated capacity" for the facility?
- 3. Does the SCC require protection of wildlife and historic resources for "boiler" projects?

As requested by Ms. Wampler, Emil Avram provided Dominion's perspective and experience regarding these questions. After discussion of the questions, the RAP agreed that their jurisdiction concerns electricity generating projects, not thermal or steam generating projects, consistent with the Small Renewable Energy Project statute and what the RAP believes the SCC regulates. The RAP then discussed boiler projects with which members had been involved where the SCC addressed wildlife and historic resource impacts as part of NEPA requirements.

"Rated Capacity"

Finally, the RAP discussed potential definitions for the term "Rated Capacity," including the definition used by DEQ for air permits. Tony Banks and Stephen Versen presented their suggestion, as well as a modification suggested by Larry Jackson. The RAP discussed the various components of rated capacity, including equipment generating capacity vs. facility or project capacity, nameplate or engineered capacity, and gross vs. net capacity. The RAP agreed to consider the following as a possible definition of "rated capacity":

"Rated Capacity" means the maximum designed electrical generation capacity of a small combustion energy project, without consideration of parasitic losses , where "parasitic losses" means the electricity required to operate the project.

Agenda Item: Discussion of Key PBR Definitions: "Combustion," "Project" and "Site" Discussion Leader: Carol Wampler

Donna Wirick and Bob Greene presented their suggestions regarding definitions of these terms. Ms. Wirick noted that they developed these suggestions with the assumption that there would be an exemption for projects located in an existing industrial facility.

"Combustion"

Ms. Wampler explained that the term "combustion" was used by DEQ staff as merely an umbrella term meaning biomass, energy from waste and municipal solid waste. "Combustion" may not be the best term to use, but it would simplify the language of the PBR if we can find one regulatory term that encompasses all three statutory terms. Several definitions of the term, from fully scientific detail to common meaning, were discussed by the RAP. The RAP agreed to consider the following as an umbrella term:

"Combustion" [or another umbrella-type word or term] means using biomass, energy from waste or municipal solid waste to generate electricity.

The RAP's discussion included the possibilities of either finding a suitable alternative for "combustion" or inserting, "the term 'combustion' in these circumstances (or for the purposes of this regulation) may include processes that do not involve burning."

"Project"

The RAP then discussed the term "small combustion energy project" and agreed to consider the following as a definition:

"Small combustion energy project," "combustion project," or "project" means a small renewable energy project that (i) generates electricity from biomass, energy from waste, or municipal solid waste and (ii) is designed for, or capable of, operation at a rated capacity equal to or less than 20 megawatts. Combustion energy projects otherwise considered combined sources for air permitting shall be considered a single small combustion energy project."

The RAP then discussed the meaning of the term "applied for" as it relates to air, water or waste permit applications. RAP members agreed that it may be reasonable for DEQ to find that an applicant has "applied for" a required air, water or waste permit if the initial completeness review has been conducted by the receiving agency.

"Site"

The RAP then discussed the term "site," as it relates to fuel processing, delivery, storage areas and associated conveyance equipment and whether or not to include these items in the definition. The RAP determined that, because these items could be involved in the operational aspects of a small combustion energy project or may be located where they are because of the project, they should be included in the definition of project "site." The RAP then considered the following phrases:

[From the "straw man" and previous PBR's:] "Site" means the area containing a small combustion energy project that is under common ownership or operating control. Electrical infrastructure and other appurtenant structures up to the interconnection point, if the project is connected to the electrical grid, shall be considered to be within the site. [From Wirick/Greene suggestion:] and consisting of the (i) fuel to energy conversion equipment and associated (permitted) pollution control equipment, (ii) the electricity generating equipment and, (iii) if the project is connected to the grid, the appurtenant electrical structures up to the interconnection point. [From RAP discussion:] Fuel processing, delivery, storage areas and associated conveyance equipment are considered part of the site if they (a) are contiguous and directly connected by continuous conveyor equipment to the project and (b) primarily exist to supply fuel for the generation of electricity.

Public Forum

No one signed up to speak during the public forum.

Adjournment

The meeting adjourned at 4:05 p.m. The RAP will be contacted concerning convenient dates for the next meeting. Staff will prepare and circulate draft Minutes. Staff will prepare a revision of the 6/14/11 Straw Man draft based upon today's discussion before the next RAP meeting.



Attachment 1