

DEQ Wind Energy Regulatory Advisory Panel (Wind RAP)

January 5, 2010 Meeting

Final Meeting Notes

Location: DEQ Piedmont Regional Office
Glen Allen, VA 23060

Start: 9:35 a.m.

End: 4:55 p.m.

RAP Leader/Facilitator: Carol Wampler, DEQ

Recorders: Bill Norris, DEQ, and Debra Miller, DEQ

RAP Members Present:

Julie Langan, DHR

Bob Bisha, Dominion

Ray Fernald, DGIF

James Golden, DEQ

Nikki Rovner, Deputy SNR

Judy Dunscomb, TNC

Ronald Jenkins, DOF

Larry Jackson, Appalachian Power

Tom Smith, DCR

Jonathan Miles, JMU

John Daniel, Troutman Sanders

Jayme Hill, Sierra Club-VA Chapter

Ken Jurman, DMME

RAP Members Absent:

Theo deWolff, Independent Developer

Larry Land, Virginia Assoc. of Counties

Stephen Versen, VDACS

Tony Watkinson, VMRC

Mary Elfner, Audubon

Dan Holmes, Piedmont Environmental Council

Public Attendees:

Robert Hare, Dominion

Don Giecek, Invenergy (alternate)

Rick Reynolds, DGIF (alternate)

David Phemister, TNC (alternate)

Roger Kirchen, DHR (alternate)

Hank Seltzer, BP Wind Energy

Emil Avram, Dom (alternate)

Agenda Item: Welcome & Introductions

Discussion Leader: Carol Wampler

Discussion: The RAP meeting attendees and public attendees were welcomed. Carol reviewed the process to date for how the current draft discussion document was developed. She summarized the process that has resulted in the working draft of the Wind Energy Permit-by-Rule that is the subject of today's and Thursday's discussions. She noted that the draft regulations are the culmination of the work of the members of the RAP through its three months of subcommittee meetings, previous plenary meetings, individual meetings between DEQ staff and sister-agency staffs, and 5 plenary work sessions, as well as input from DEQ leadership and AG staff. During this week's meetings, we will try to reach consensus on as many issues as possible. As stated when we began in August, consensus generally means that members can "live with" a provision and will not work against it in other forums. On issues where we do not have consensus, we will ask members to state their views and rationale for the record, so that the DEQ director will have the benefit of all of this input when he decides what to approve in the PBR. It was explained that some of the language from earlier documents is not included in this draft document as it will be moved to guidance, so none of the "work" has been lost. While the guidance is being formulated, input from RAP members will be sought.

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Agenda Item: Discussion of Draft Section 1

Discussion Leaders: Carol Wampler, DEQ

Discussion: It was noted that the introductory "Outline" section was not changed with one exception; that is, the separate "Operating Plan" section has been deleted, since we can adequately explain what the applicant must submit regarding his operating plan in Section 2.A.10.

The RAP then began review of Section 1, "Authority, Applicability, and Definitions." It was pointed out that subsection A was modified to include the clarification that this regulation will apply to land-based small wind power facilities, as DEQ is awaiting information from VMRC on their study prior to adding offshore requirements for small wind power projects. A lengthy discussion on this issue resulted as some RAP members (both those from the independent developers and some of the environmental groups) felt the regulation should apply to offshore projects as well. It was further clarified that this decision not to include offshore while VMRC continues their work was made previously by the directors of DEQ and VMRC, but apparently not the entire RAP had an understanding of this point. Discussions of the reasoning for the bifurcation of the land-based and offshore were continued with many comments provided.

Comments noted:

- Concerns by some environmental group representatives that nothing in the statute that restricts the "permit-by-rule" to land-based projects.
- Academia representatives noted that to include offshore would be difficult at this point due to the uniqueness of those issues. The benefit of including both land-based and off-shore based projects in this permit-by-rule was questioned. Inclusion of both at this point would seem to make the VMRC work moot. It was suggested that off-shore and land-based are like dealing with "apples" and "oranges" and should be addressed separately.
- Issues with the January 1, 2011, legislative deadline for wind power regulations and the impact this bifurcation of the regulation would have on that statutory obligation were vocalized by independent developer representatives and some environmental group members. Some indicated that they do not understand the concept that the statute provides the option for development of a permit-by-rule for wind-powered electric generation projects that excludes off-shore projects. Waiting for the VMRC report before developing the requirements for off-shore projects will result in missing this statutory deadline for development of the permit-by-rule.
- VMRC is looking at the off-shore aspects of wind-powered electric generation projects. Offshore will require VMRC permits in addition to the PBR. This VMRC permit is for the submerged lands; will biological impacts be addressed? VMRC is working on avian migration pathways as a layer for their study. Will this then exclude from use those areas in migratory bird corridors?
- Offshore issues, under the directors' plan, will be considered by a RAP that is focused specifically on those issues. It was noted that legal counsel had advised that the work of the RAP should focus on land-based. A lot of the current regulatory language may be applicable for land-based as well as offshore projects.
- It was suggested that the current regulatory action could still cover the majority of the types of projects that would be developed in the Commonwealth and that the guidance and/or reg amendments could be modified to address any specific or unique issues related to off-shore projects. That way this action could comply with the statutory deadline requirements.
- It was noted that legal counsel had advised the pursuit of the land-based approach with close coordination with VMRC regarding their efforts on off-shore issues. It was noted that VMRC had a number of unique issues to examine (such as shipping lanes) but a lot the same issues would need to

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be addressed. The VMRC report to the General Assembly is due in March. The findings of that report could be used to help develop an off-shore project permit-by-rule.

- Developer representatives indicated that the regulation (permit-by-rule) should be inclusive for all wind energy. Others agreed that one regulation was desirable in lieu of two separate ones.
- It was again noted that the decision to pursue this approach was something that had been agreed upon by both the director of DEQ and VMRC and based on the advice of the Attorney General.
- It was suggested that some members of the RAP never understood the decision that the group would be dealing solely with land-based, while others voiced that this was an understanding from the very early stage of the process. It was noted that waiting for the VMRC study was the reason that an offshore subcommittee was never established. However, this was the first use of the actual “land-based” language, so some RAP members indicated their concern.
- It was noted that there was a parallel between HB 2175 and SB 1350. Some suggested that they disagree that there is a parallel in requirements. SB 1350 directs the VMRC to perform an assessment of the submerged lands for leasing to wind-energy projects. HB 2175 contains paragraphs 7 and 8 dealing with review and authorization of projects and limitation of State Corporation Commission authority which are of interest to environmental groups while SB 1350 does not contain those provisions. It was noted that the statutes are not parallel but that the time line for the VMRC and DEQ efforts were on a parallel path. The goal is to try to address the issues related to wind-energy projects in a coordinated fashion. There are lots of resources that will need lots of separate analyses in off-shore settings. The concept is to make sure that the DEQ effort is not going in a different direction than the VMRC effort.
- Will the offshore wind PBR be a separate regulation or an amendment to this regulation?
- One concern is being able to adequately address those “near-shore” projects that might attempt to move their projects slightly inland in order to avoid any additional requirements for “off-shore” projects.
- It was suggested that some RAP members were confused by the bifurcation of the process when the statute spells out the need to address “small renewable energy projects” and doesn’t separate out the various types of projects with different timelines. The statute says that the permit-by-rule for these types of projects is to be developed by January 2011. This deadline was established as a result of a lot of hard work and should be met.

To allow the discussion to move forward, it was asked that the RAP members (and especially state agency representatives) look at the current draft PBR provisions and advise the RAP leader which are applicable to offshore projects and which are not. The question for today is “What provisions work for one scenario (land-based or off-shore) but not for the other or are they appropriate for both?”

Where applicable, the use of “facility” in the regulation will be changed to “project” to be consistent with the statute’s terminology.

Agenda Item: Discussion Draft Section 1, Definitions

Discussion Leaders: Carol Wampler, DEQ

Discussion: The RAP continued with review of the definitions of subsection B. Definitions that were revised or added during the work sessions were reviewed.

No comments or concerns were noted for any of the following definitions:

- Definitions for department acronyms, except VDACS (not used in regulation?)
- Invasive Plant Species
- Historic Resource

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- Land-based (if necessary to use)
- Natural Heritage Resource
- Operator
- Owner
- Permit by rule
- Rated capacity
- Small renewable energy project (from statute)

The items discussed by the RAP and issues/comments noted included:

- Remove VDACS if it is not utilized in the regulation.
- Disturbance Zone is somewhat based on the old living resources subcommittee project boundary definition. Previous definitions of “project boundary” and “project boundaries” replaced with new definitions. It was suggested that the phrase “at, below, or in the air space above ground level” was unnecessary and should be deleted from the definition; no one disagreed, so that phrase will be deleted. The group discussed the use of the “limitation” of 100 feet in the definition and may be useful to look beyond that boundary. No objections were noted to the disturbance zone definition provided, which includes 100 feet around the disturbance zone boundary. However, although suggested, the “within the site” language will remain for clarification of what area is of concern and because disturbance zone is a subset of site.

Interconnection point discussion was due to the issue of common ownership and how to clarify that concern. As a practical matter the break point would be the “sub-station.”

ACTION ITEM: It was suggested that this definition should be further clarified. Judy Dunscomb & Emil Avram will work on.

- Phase of Project was discussed. This definition has been added and is currently being refined by Dominion to clarify. Clarification was provided that some of the turbines may come on line prior to the entire project being completed. It was suggested that this definition misses the point and should be tied to impacts. A cleaner definition might look at a certain number of turbines generating power. The RAP members discussed phasing and the timing of when impacts might occur during the life of the start-up of a project. It was suggested that the definition should include some reference to a certain number of days from initiation of “commercial operation” at a site. This definition will be further clarified.

ACTION ITEM: Judy Dunscomb and Robert Hare will work on a definition to address phases and pre- and post-construction.

- “Small wind energy facility or project” suggested definition included. It was suggested that there may be a bill introduced during the GA session to address the issue of the “de minimis” exception. Independent developer representatives noted that there is an entire industry for smaller projects (community based < 5MW). It was recommended that one of the “5 megawatt” alternatives in the proposed definition language should be used. It was noted that in terms of “wildlife” impacts there is no size where there are no impacts. Legal counsel has informally advised that the statute does not provide specific authority to identify a “de minimis” exemption; however, if we wish to address in reg, we might do so in def of “facility” or “project.” Developers asked that this be looked at as breaking new ground and that the regulation not be restrictive on community based projects which are normally built in urbanized areas. Some suggested that this definition should not be in the regulations at all (noting it was not in the statute). It was explained why this definition is necessary. Overall, the RAP does not have consensus on de minimis. Local government, Industry and Developers prefer the 5 MW option, while environmental groups and some SNR agencies prefer the 500 kW option, or the 5 MW option with a required “fatal flaw” or Phase I environmental audit.

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- “State Threatened or Endangered” or “T & E” will be revised per the DGIF definition. It was noted that a definition had been proposed in previous drafts that addressed the DGIF components related to threatened and endangered species but did not address VDACS’ endangered insects. It was suggested that the flexibility to add or delete species from the specified list is important.
- “Wildlife” -- options for this definition were provided. The work session had considered spelling out the types of wildlife in the definition, but the general definition “wild animals” was preferred.. The question was asked whether everyone could live with the simpler, general definition. No objections were raised.
- “Wind energy facility” has been revised. However, a question was raised regarding the inclusion of “meteorological towers” as part of this definition. It was noted that these towers are normally constructed prior to the project, often to evaluate suitability for developing a project. It was recommended that the reference should be removed from the definition or modified to refer only to “post-construction” meteorological towers.

ACTION ITEM: John Daniel review and provide revisions necessary for this definition.

Agenda Item: Discussion Draft Section 2, Application for permit by rule for land-based wind energy facilities.

Discussion Leaders: Carol Wampler, DEQ

Discussion: The RAP reviewed the Section 2 of the discussion draft. The items discussed by the RAP included the following:

- It was noted that nothing in this section is different from that already seen and reviewed by the RAP.
- Subsection 2.A.6:
 - A question was raised as to how “national ambient air quality standards” were addressed in Subsection A.6. It was noted that this was being addressed in guidance. The concept is to provide the same type of guidance to the wind developer as to those wanting to claim an off-set. It was noted that the only area of the site where an off-set could be used is in a designated non-attainment area (Northern Virginia). The guidance will include the EPA guidance for off-sets after DEQ’s Air Division receives it.
- Subsection 2.A.7:
 - The use of the phrase “where relevant” was questioned in subsection A.7 of this section. What does that mean? It was noted that operationally, if a “desktop” survey is conducted and no resource shows up, then they are not relevant. If they exist, then they are relevant. Trying to define relevance may lead to more problems than it solves. Some noted that it was the applicant’s responsibility to properly determine what was relevant and this flexibility was necessary. It was noted that the term is used because the statute covers a number of different renewable energy sources and in some cases a resource would be relevant where as in another it would not be. An analysis of some kind needs to be done to be able to make the determination of whether it is relevant or not.
 - It was suggested that Section 2 is the index of the box of documents that the applicant has to provide to DEQ. Subsection A.7 was reworded to clarify the referral to Section 3.
 - A question was raised regarding the stipulation of the inclusion of phrase “not exceeding 12 months” in subsection A.7. Does the specified length of time preclude the submission of data collected from a longer period of time? It was noted that the Department can’t require the applicant to collect data for longer than 12 months based on statutory provisions; however, if the applicant has more than 12 months of information, that can be submitted. This will be clarified in guidance.
- Subsection 2.A.8:

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- This subsection is worded awkwardly. The order of the clauses will be reversed to clarify.
- ACTION ITEM:** Carol will be revising this subsection to make it easier to read and understand.
- A question was raised regarding the use of the phrase “deemed complete and adequate.” This wording had been added to help specify what things in the regulation DEQ should and could enforce, i.e., “The mitigation plan shall be considered an enforceable part of the permit by rule.” The concern is if we include other standards for design/structures, H&S, etc., there may be an image that DEQ will be checking these things, and DEQ will not, as those issues are under the authority of others; therefore, the issue that DEQ will enforce is the mitigation plan, and the PBR will clearly reference that fact.
- Subsection 2.A.9:
 - Refers to “a certification signed by a professional engineer.” A question was raised as to how DEQ would know that the certification was actually signed by a professional engineer? What guarantee is there that it isn't falsified? All that DEQ is going to check is that there is a signature by a professional engineer included in the documents. The PE will need to sign the certification with his seal. DEQ will not be guaranteeing the qualifications or the quality of the PE's work.
- The RAP members discussed the replacement of the reference to “invasive species” and “historic resources” with a general reference to “requiring mitigation.” It was suggested that the specific recommendations related to “invasive species” and “historic resources” could be included in guidance.
- Subsection 2.A.13:
 - Correct reference (Section 8 not Section 9). A question was raised over the use of the phrase “issues raised in either or both forums” in Subsection A.13. The language was reworded to read “issues raised by the public.”
- It was explained that Section 2.A contains information on “what needs to be included in the application” while Section 2.B “details what the Department will do with that information.” The language attempts as much as possible to stay true to the PBR process, but with the consultation requirements and adequacy determination required in the statute, this is not completely possible. PBR application reviews are completeness only, but by statute this PBR application will have further review than just completeness. Section 2.B is the “completeness” review, while Section 2.C is the “adequacy” review requirements. Section 2.B.2 is a “by-pass” provision. It was suggested that the “completeness” and “adequacy” sections should be rewritten. The RAP members discussed the length of time provided for the “completeness” review and the “adequacy” review. There was some concern over the sister agencies' input into what significant adverse impact is and who decides that. Guidance will spell out the requirement for consultation with “sister” agencies. The need for this dialogue to occur will be included in guidance. DHR concerns are with the impact and completeness determination, while DGIF concerns are along the impact and mitigation plan adequacy determination. Guidance will further clarify these issues.

ACTION ITEM: RAP Members review subsection 2.B and provide revisions to Carol.

Agenda Item: Discussion Draft Section 3, Analysis of the beneficial and adverse impacts of the proposed project on natural resources.

Discussion Leaders: Carol Wampler, DEQ

Discussion: The RAP reviewed the Section 3 of the discussion draft. It was clarified that many of the details of “how to” meet the requirements (that had been developed by the RAP subcommittees) will be moved to guidance. Nothing is lost, but those “how tos” will not be in the regulation itself, but rather in

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guidance. The regulatory language provided for this subsection was discussed by the RAP. Issues and comments included the following:

- Subsection 3.A.4:
 - Should read "Avian Migratory Corridors: In the coastal zone..." to be consistent with the other subsections.
 - It was suggested that "known diurnal flight" paths mapping should be included in Subsection A.4. This is related to work being done by Bryan Watts. In the coastal regions there is a much better understanding of these corridors.

ACTION ITEM: Judy Dunscomb and Carol will work with CZM and VMRC to develop wording that properly addresses these concerns for the coastal zone.

- The RAP members discussed the different aspects of "mapping migratory corridors" and mapping "breeding areas" and the possible inclusion of a "within 10 miles" of the shoreline as a consideration.
- Subsection 3.A.1:
 - Discussion if this is "site" or "disturbance zone." Conclusion: The desktop is based on "site."
- Subsection 3.A.2:
 - The concept of the inclusion of "species of greatest conservation need" terminology was raised. Some agency representatives and environmental group representatives request that SGCN be added to this section as the statute just states wildlife, not T&E wildlife only.
 - The concept of the inclusion of "species of local significance" was also raised.
 - The use of the phrase "likely to occur" was discussed.

ACTION ITEM: Judy and Robert were asked to look at this wording for possible clarification.

- Subsection 3.A.3:
 - The RAP members discussed the inclusion of a limitation to "within the disturbance zone" for the requirements for Subsection 3 A 3 related to Raptor Migration Surveys.

ACTION ITEM: Judy and Ray were asked to work on the wording of this provision.

- In regard to SGCN, some noted that the idea is NOT to raise an issue that is not currently regulatory to a "regulatory level" with this PBR. Bats were the exception because of precedent of wind turbines' unique impact on them.
- Some requested that analysis and field survey be accomplished for SGCN bird and non-bird species.
- Subsection 3.B:
 - It was suggested that the specific requirements spelled out in Subsection 3.B.2 and 3.B.3 should include the requirement to file a separate report documenting the results of each of the pre-construction analyses conducted. Subsection 3.B.4 can be addressed with a "narrative description."

ACTION ITEM: Roger Kirchen will revise this section to include the necessary report language.

- Subsection 3.C:
 - The phrase "pre-construction" should be added to Subsection 3 C to clarify the timing of the required analyses.
 - Subsection 3.C.1.a should refer to "two (2) miles of the site boundary."
 - Subsection 3.C.2 should refer to "a view shed analysis." *"For the area within the 5-mile radial survey around the site pursuant to Section 6, a view shed analysis of the impact of the project..."*

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- It was suggested that the requirements for a "view shed analysis" approach should be clarified in guidance.

ACTION ITEM: Tom Smith was asked to review this language with John Davy.

- The RAP members discussed the phrase "those resources identified as potential candidates for such designation" contained in 3 C 2. The question was raised as to how long that list might be? Clarified that list appears in Virginia Outdoors Plan.

Agenda Item: Discussion Draft Section 4, Determination of whether significant adverse impacts to wildlife or historic resources are likely.

Discussion Leaders: Carol Wampler, DEQ

Discussion: The RAP reviewed the Section 4 of the discussion draft. Issues and comments included the following:

- Subsection 4.A:
 - Some requested that SGCN be a factor in this. SGCN will be discussed in the meeting of tomorrow with the agency heads from DEQ and DGIF and their staffs.
- Subsection 4.B:
 - Grammatical correction: Text should read "diminish significantly any aspect of a historic resource's integrity."
 - It was noted that "historic resources" are not quantifiable resources.
 - No issue with the language provided in 4.B was noted.

Agenda Item: Discussion Draft Section 5. Mitigation Plan.

Discussion Leaders: Carol Wampler, DEQ

Discussion: The RAP reviewed the Section 5 of the discussion draft. Items discussed by the RAP included the following:

- The RAP members discussed the terminology used in Subsection 5.C.1. It was recommended that the text be reworded to read: *"Significant adverse impacts to VLR-eligible or VLR-listed architectural resources shall be minimized, to the extent practicable, through design of the wind energy facility or the installation of vegetative or other screening."*
- VLR (Virginia Landmark Registry) needs to be spelled out in the document. It was noted that it is spelled out in the definition section but should also be spelled out the first time it is actually used in the text. This will also be another document included by reference.

Agenda Item: Discussion Draft Section 9. Change of ownership, facility modifications, termination.

Discussion Leaders: Carol Wampler, DEQ

Discussion: It was noted that this section had been revised to comply with "boiler plate" language from other DEQ programs. Further review will be conducted at Thursday's meeting.

Agenda Item: Next Meeting

Discussion Leaders: Carol Wampler, DEQ

Discussion: Carol Wampler thanked the RAP members and public attendees for their participation in today's meeting and reminded them that the remaining sections of the draft regulation would be the subject of the "final" meeting of the RAP scheduled for Thursday, January 7, 2010.

The meeting was adjourned at 4:55 p.m.