

DEQ Wind Energy Regulatory Advisory Panel (Wind RAP)

Living Resources Subcommittee

October 6, 2009 Meeting

Final Meeting Notes

Location: DEQ Central Office, 2nd Floor Conference Room C
629 E. Main Street, Richmond, VA 23219

Start: 09:45 a.m.

End: 03:00 p.m.

Subcommittee Chair: Judy Dunscomb, TNC

Recorder: Debra A. Miller, DEQ

Subcommittee Members Present:

Tom Smith, DCR

Bob Bisha, Dominion

Ray Fernald, VDGIF

Subcommittee Members Absent: none

Public Attendees:

Rick Reynolds, VDGIF (RAP Alternate)

Chris Hobson, DCR-DNH

Scott Francis, Dominion

Emil Avram, Dominion (RAP Alternate)

Robert Hare, Dominion

Hank Seltzer, BP Wind

Don Giecek, Invenergy (RAP Alternate)

Chad Smith, PBS&J

James Golden, DEQ (RAP Member)

David Young, West, Inc. (by telecom)

Agenda Item: Welcome and introductions

Discussion Leader: Judy Dunscomb

Discussion: All in attendance introduced themselves. Ms. Dunscomb then reviewed the agenda and the meeting objectives. Two handouts were provided: draft criteria for pre and post construction monitoring and draft regulatory language.

Agenda Item: Pre-Construction

Discussion Leader: Robert Hare

Discussion: The subcommittee reviewed the draft language provided regarding the requirements for pre-construction monitoring. The draft language for objectives, studies, and methodology was reviewed and discussed. The language specifies state T&E species as separate from the federal requirements. This "pre" construction information will include background/desktop review of available information regarding habitats and species. Habitat mapping should include review of available information from desktop review. Issues regarding how to get to the "next step" regarding coordination of information from desktop with the responsible agencies were noted as a concern. The coordination steps will be further discussed with the RAP leader.

Preconstruction Studies

Section 1- Habitat Mapping

The habitat mapping section was reviewed. This information will need to be in a standardized format that DEQ can "check". There are national classification standards for vegetation hierarchy. DGIF and DCR will review and provide guidance on standards for habitat mapping in order to insure that appropriate and useful data is provided. References will be published standards. It was noted that all federal listed species are also state listed species; however, there is a process to update the lists. The developer will be responsible for federal T&E requirements. Other resource features need to be addressed regarding significant plant communities such as large unfragmented blocks of habitat. This type of data is readily available. It should be made clear which agency should be coordinate with or consulted for the various resources that will need to be identified (i.e., DCR, DGIF, VDACS, etc.). Section 1.a

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will be revised to conduct one or more state T&E species population studies surveys. DCR will provide standards for the surveys under 1.a.

Section 2 - Fixed Point Bird Use Survey

The key will be the project area definition. What will be this area? At substation or will it be a distance beyond the substation? Will the area that includes distance to the transmission after the substation be in the definition? These issues and also lease and ownership issues were discussed. It was noted that the General Subcommittee is also looking at defining this "project area" and that the SCC will still be involved in the process (i.e., interconnection/transmission). Concerns with fixed point counting regarding applicability to nocturnal migrants and during non-breeding seasons were noted; however, risks are not just confined to migrant species. Birds do make noise at non-breeding times and can be detected via auditory and visual methods. Much depends on what will be done with this bird survey information. What will be learned about the site prior to construction so that impacts can be mitigated? What is really at risk here? Migrating and resident raptors, migrating and resident birds. Will point count be necessary if habitat mapping indicates presence of species of concern? The subcommittee then discussed what the mitigation measure would be and the fines for replacement values. It was noted that if a T&E bird is killed during operation, then it would be DGIF or federal regulations that will determine replacement values depending on the specie. So if studies indicate the presences of birds, will mitigation be required, and if so, what will be the standard to require mitigation? The best "mitigation" may be to focus on habitat avoidance and placement of turbines for avoidance. Further discussion is necessary.

Section 4 – Raptors Surveys

The subcommittee then discussed the proposed language for raptor surveys. The reporting issue was further discussed for clarification. The language will need to add information for nesting sites and adjacent areas (for survey data). DGIF will provide additional information on surveys and on surveying nesting sites.

BAT ACOUSTIC SURVEYS

Approach and methodology for bat acoustic including how to do, how to define, and the objective were discussed. Use of acoustic equipment (such as the anabat) is the current preferred method for these surveys. There is currently a lot of on-going work attempting to find a relationship between pre and post construction surveys and there is also a need to balance cost and effort. It was recommended that some studying be accomplished in pre-construction in order to support significant impact likely and to provide more data on this issue. What will be a significant impact? Presence?

The need for specifying a success rate for monitors was discussed.

CONSENSUS: A 50% success rate per monitor/detector per season would be a standard for success. Additionally, for the high monitor, consensus was achieved to require pulley system mount of these monitors.

The subcommittee discussed how many detectors may be necessary. Detectors shall be placed in high and low elevations.

Mist Netting

The language provided for mist netting was reviewed and what value it provided. Mist netting can provide good data if the focus is on T&E species. Information on harp trapping was presented to the group. These traps are smaller and reusable and less stressful for the bats. Harp traps are good to use for mine and cave areas. During the discussion, it was noted that DGIF is not able to provide incidental take permits for T&E bat species but noted that in Virginia T&E bats are located in the southwestern part of the state.

Other Studies

This section will be removed once the condition as noted in the discussion of Section 1.a is added to address studies.

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The subcommittee broke for lunch at 12:22pm and the meeting reconvened at 1:08pm.

Agenda Item: Post-Construction Monitoring

Discussion Leader: Judy Dunscomb

Discussion: The subcommittee reviewed the draft language provided regarding the requirements for post-construction monitoring. The draft language for objectives, studies, and methodology was reviewed. The objective of this monitoring is to measure efficacy of mitigation (as per the statute). The time period to require post-construction monitoring (to establish baseline/efficacy of mitigation), the frequency for performing the monitoring searches, and the methodologies were discussed.

Methodology of Monitoring – Paragraph A

The number of turbines to be monitored was further discussed. It was noted that in previous discussions had noted a minimum of 10 turbines or 30% of all turbines, whichever is greater. It was noted that it may be an issue for smaller projects as it would be disproportionate monitoring. The group continued with further discussion on the impacts to smaller projects and how to determine how many should be monitored. One possibility presented was 30% for all projects.

Suggestion of how to rotate searching so that all turbines are searched were solicited and discussed. Issues with removal rates and the impact on search frequency will also need to be addressed. Weekly search frequencies may be too long. For instance, if removal rate drops, then there may need to adjustments to search frequency.

Addressing of objectives and the purposes were reviewed. Will there be a limit or is less monitoring with more mitigation another way to achieve the objectives? This will also impact the proposal of the economic cap per turbine. Part of the first year monies can be used to test curtailment options and to perform monitoring. In short-term, there may be a need for more money to do both. A suggestion of year one being dedicated to baseline monitoring, year two to mitigation testing year, year three to “tweak”, and year four and on would be a cap \$\$ per turbine per year for mitigation/monitoring was presented and discussed. How to determine a standard? Would it be a: target – x bats per turbine or a cap - \$X per turbine or both? The issue is what is “x”. How do you define satisfaction with something that will allow you to spend less than the cap? Start mitigation testing at the onset? The mitigation language will be revised to look at these options of the target and the cap. Further discussion on this issue will be necessary based on the language developed.

Mitigation Phases:

1. Baseline assessment to determine performance relative to standard
2. Curtailment testing to determine optimal cut-in speed and other parameters
3. Operations with periodic monitoring

Phase #2 may require more than a cap amount. What phases would be done and when they would be done will depend on if there is a cap or a target or both. During this time, the wind energy facility will be operating. As curtailment is an adaptive management option, there needs to be flexibility for how these phases are accomplished. If you are not meeting performance standard, is money better spent on mitigation/curtailment or better spent on studying? Further discussion on this issue is necessary.

The next meeting is scheduled for October 20, 2009, at DEQ offices.

The meeting was adjourned at 3:05pm.

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Action items:

Judy will:

- Determine if we can incorporate a requirement for consultation with wildlife agencies about species of concern on a proposed wind site.
- Draft definition of species (habitats) of concern.
- Draft definition of "one-year" of monitoring for purposes of regulation.
- Draft language that reflects options for a mitigation plan: performance standard and economic cap, or just economic cap.
- Define sources of information used.

Tom will:

- Provide draft guidance/standards for habitat mapping.

Ray will:

- Tweak bird surveys to support the objective of avoiding habitat impacts.
- Review raptor nest survey data language.

Bob will:

- Incorporate various edits
- Add an operational standard and requirement for pulley mounting to the methodologies for bat acoustic surveys.
- Include harp-netting along with mist-netting.