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FINAL MEETING SUMMARY

National Wind Coordinating Committee **Avian Work Group Meeting**

December 6, 2000

Renaissance Madison Hotel
515 Madison Street
Seattle, WA 98104

Welcome and Introductions

The group reviewed the agenda and the purpose of the Meeting: to review the status of Avian perspectives paper, the Avian fact sheet, discuss outcome from the National Avian Wind Power Planning Meeting IV, and decide on future activities for the work group.
[See Attachment A for the Agenda and see the participants list at the end of the summary.]

Perspectives Paper Wally Erickson, WEST, Inc.

Wally Erickson provided a detailed presentation, on preliminary findings and the status of the Perspectives White Paper. The title of the draft paper is: *Avian Collisions with Wind Turbines: A Summary of Existing Studies and Comparisons to Other Sources of Collision Mortality in the United States*. After the presentation, work group members contributed these comments:

- Species composition data is important, especially to distinguish mortality data for Threatened and Endangered Species.
- Maybe the report should have compared avian impacts from wind turbines to other forms of energy generation, e.g. a cradle-to-grave life cycle analysis. Others pointed out that would take substantial resources beyond the scope of this paper.
- First cut paper does a good job at putting human-made structure impacts on birds in perspective.
- The paper shows that the wind industry's impact on birds is small.
- The packaging and presentation will be critical to the credibility of the product.
- Only three raptor fatalities have been reported at five study sites. This number is important to note.
- California data offers a unique story.
- This will be an important contribution to the literature when it is done.
- It's useful to put species in categories of concern. There is also the question of adaptive management. Are we learning over time?
- The paper could be presented as the state of science on avian mortality (from wind power) with a comparative look at the literature for other categories of human-made structure impacts.

1 The subcommittee also noted that care needs to be applied regarding what is being requested
2 from WEST for the current subcontract amount. The Subcommittee may need to look at all the
3 comments and the scope of work and revisit the funding level.

4
5 **ACTION STEPS:**

- 6 • Comments on the present draft should be e-mailed to Wally.
- 7 • Wally will e-mail the group what he can or can't incorporate into the next draft
8 which he anticipates coming out by January 16, 2001

9
10 **Update on North Dakota Wind Power Meeting with USFWS on Grassland Conservation**
11 **Easement and Compatibility with Wind Development** Jay Haley, EAPC Architects and
12 Engineers.

13
14 A meeting was held between US Fish and Wildlife Service personnel from North and South
15 Dakota, and members of the Wind Industry. The wind industry was represented by Jay Haley,
16 Kim Christianson of the ND State Energy Office, Scott Piscitello of RES, Jim Lindsey of FPL
17 Energy, Dale Strickland, WEST, Inc. and John Dunlop of AWEA.

18
19 The issue is that there is a world-class waterfowl production area in ND and SD that contributes
20 more than 1/3 of the waterfowl produced in North America. The wind industry has not yet sited
21 a windfarm in an area such as this with the high breeding pair densities seen in the Dakotas. The
22 concern is that there is some potential for this situation to become another Altamont Pass if not
23 addressed properly.

24
25 The USFWS has a grassland easement program that is designed to preserve prairie grasslands
26 that are used for nesting in the spring. Currently they do not allow wind turbines on easement
27 lands. They are aware that competition for land easements with the wind industry will have a
28 negative effect on their program, and they have concerns about negative impacts to waterfowl
29 production. Bird-strike issues are fairly well understood, with metrics in place that could be used
30 to study or monitor the impacts in ND. The avoidance or displacement of nesting sites has not
31 been addressed yet in any studies that the group was aware of, and there is probably a need to
32 design a study that will properly address this issue.

33
34 **DISCUSSION:**

- 35 • The question was asked whether there are studies that address displacement effects of
36 turbines on waterfowl?

37
38 **ACTION:**

- 39 • Various members of the subgroup will follow this issue and provide a resource as
40 appropriate. Steve Ugoretz offered to liaison with the North Dakota study group, if
41 appropriate.

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46 **Nocturnal Movements---Birds and Bats** Richard Carlton, EPRI

1 *Does the Avian Subcommittee want to support development of new chapters for the Standard*
2 *Metrics and Methods document? If yes, why? If no, why not?*

3
4 [Refer to attachment B for Richard Carlton’s slides].

5
6 Richard Carlton presented the conclusions of an EPRI study done by Bill Evans on this issue.
7 After discussion, the Subcommittee agreed to not pursue this topic at this time. There were some
8 who supported NWCC involvement with nocturnal avian issues, but not enough to reach group
9 consensus. The perspectives pro and con are listed below.

10
11 Summary of reasons stated for why it may be appropriate for the NWCC to address nocturnal
12 methods and metrics for birds and bats at this time.

- 13 • More data is needed to determine if this is a problem and proceed proactively.
- 14 • Some see a need for data. The absence of data has been used by some environmental
15 organizations to propose project delay: such as for the 300 MW VanSycle Stateline
16 Project.
- 17 • At the May 16-17, 2000 NAWPPM IV meeting this issue was sited as an issue that
18 needed more research.
- 19 • Soon there will be more nocturnal data and it would not take a lot to ask some bird
20 experts to say if the numbers are significant.

21
22 Summary of reasons stated for NWCC not to address nocturnal avian issues at this time:

- 23 • The Avian Subcommittee has limited resources and this is not a high priority.
- 24 • Some private companies, such as Seawest Windpower, are already conducting research
25 on bats.
- 26 • The need for bat studies seems to be driven by regulation. Potential issues with bats has
27 not come up in the experience of the Avian subcommittee company representatives.
- 28 • We should wait for the Perspectives Paper draft with its data on nocturnal and bat
29 impacts, and then revisit the question of whether to pursue the issue further.

30
31 **DECISION:**

32 No specific action steps were agreed to, but these possible action steps were discussed:

- 33 • See what the Perspectives Paper can cover on what is known about nocturnal mortality
34 data.
- 35 • Focus on getting a better understanding of the number of birds and bats killed in relation
36 to their populations sizes (species specific) and try to develop rough order of magnitude
37 information that would be useful for answering information requests.
- 38 • Decide whether the impacts are significant enough to justify modifying the NWCC
39 “Studying Wind Energy/Bird Interactions: A Guidance Document” to include specific
40 nocturnal methodologies.

41
42 The Avian Workgroup will continue to monitor the issue and continue having dialogue about
43 possible roles for the NWCC.

44
45 **Fact Sheet Draft** Tom Gray, AWEA

1 Tom Gray briefly presented a draft of the one-page Avian Fact Sheet. The group discussed it and various
2 individuals made the following comments:

- 3 • Clarify who the “we” is, i.e. scientific community researchers. The suggestion was the
4 “we” refers to the NWCC.
- 5 • Prefer use of the word “injury” to “mortality.”
- 6 • Clarify the types of birds, e.g. raptors.
- 7 • Simplify language and avoid jargon. Use terms like: mitigation, prevention, impacts to
8 population.
- 9 • 1-2 birds/turbine/year looks negative. Need to put this in context.
- 10 • Change meters to feet.
- 11 • This is useful and not biased.
- 12 • Reorganize the language to clarify what we know and don’t know.
- 13 • Mention that the wind industry knows something about how to avoid and minimize
14 impacts to birds.
- 15 • Use sidebars and graphics.
- 16 • Go to two pages double sided.
- 17 • Focuses on large wind farms. Include information on mid-sized turbines, clusters, and
18 small (<50 kW) turbines.
- 19 • Ask NREL to do the layout.
- 20 • One member prefers the term “mortality reduction” or “risk reduction” to “mitigation.”
- 21 • Present information on what is being done about the issue.
- 22 • The fact sheet should state the significance of the problem in relative terms.

23
24 **ACTION:**

- 25 • Workgroup members will get all their comments into Tom Gray and Abby Arnold at
26 RESOLVE and NWCC staff will work with the parties to produce a revised draft.

27
28 **Future Directions of the Avian Subcommittee** Abby Arnold

29 *Should the avian workgroup continue and if so what are its goals?*

30
31 Members agreed the group should continue and some offered the following perspectives about
32 future directions:

- 33
34 • One thing the group has not done is summarize what we know. The group has evolved
35 from dealing with an emergency to a mature group distributing information, but we need
36 to hone our message.
- 37 • It is important to keep this group going as a useful forum for emerging issues.
- 38 • The risk of perception becoming reality is always there (e.g. nocturnal, bats), therefore
39 the group is needed.
- 40 • In the early days of the committee it was the potential of USFWS enforcement action
41 that spurred on the research.
- 42 • The agencies are not seeking punitive action towards the wind industry.
- 43 • We can get a year ahead of the curve by keeping the committee going.
- 44 • There is a need to shift gears from production of information products to how to get the
45 message out to insure the work of these products is used.
- 46 • The group’s overall message should be transitioning way from the negative aspects and
47 toward the positive aspects. For example, in many locations, avian problems have been

1 minimal or non-existent; and the wind community now knows a great deal about
2 prevention of avian problems through careful siting.

- 3 • While we definitely have learned that careful siting seems to be the key to avoiding avian
4 impacts, fully understanding bird utilization and abundance at a proposed wind
5 developments is critical to careful siting. There are numerous projects in progress where
6 avian work is either not being done at all or being done at a very minimal level - thereby
7 opening the industry up for a future potential problem site. 'Careful siting' is particularly
8 important for large sites (like Stateline and other 100+MW sites)- yet the fast track
9 approach to installing wind farms should not preclude the opportunity to properly assess
10 the site for avian issues.

11
12 **ACTION:**

- 13 • The Subcommittee agreed that it would continue its role as national research advisor and
14 input will be directed to NREL (Karin Sinclair) on research priorities.
- 15 • The Subcommittee will complete outstanding products.

16
17 A list of other potential action steps was identified including:

18
19 Development of a communications plan that might include

- 20 • Fact Sheets
- 21 • Slide Show
- 22 • Information Package
- 23 • Communication Strategy with the following elements:
 - 24 – Communication
 - 25 – Education
 - 26 – Outreach
 - 27 – Target Audiences

28
29
30 **Altamont Specific Workshop** – Abby Arnold

31 *Does the Avian Workgroup want to sponsor a workshop on the Altamont?*

- 32 • Topics proposed for discussion from the agenda included:
 - 33 – Results of recent research
 - 34 – Present facts/dispel misperceptions
 - 35 – Stakeholder co-sponsored
 - 36 – Timeline and funding

37
38 The work group agreed that at this time an Altamont specific workshop was not needed but that
39 NWCC could hold a general avian-wind workshop for key stakeholders such as environmental
40 organizations, agencies, regulators, and the industry from key states such as California, Texas,
41 Minnesota, and the Dakotas.

42
43 **ACTION:**

44 The Avian Workgroup will continue to monitor the need for and usefulness of an NWCC-sponsored
45 avian-wind issues workshop.

46

1 **NWCC Permitting Handbook Modification and Re-Print** Abby Arnold

2 The NWCC Siting Workgroup is primarily charged with revising and updating *Permitting of*
3 *Wind Energy Facilities: A Handbook* in 2001, but there is some natural overlap with the Avian
4 Workgroup. The issues on the agenda for this meeting were:

- 5 • What process do we envision to achieve this goal
- 6 • Role of the Avian Subcommittee in this process
- 7 • Task members
- 8 • Timeline and funding

9
10 Work group members offered these comments:

- 11 • The handbook could include information on recent changes in the siting process in
12 response to electric restructuring which in some areas has accelerated the number of
13 attempts to get new generation on line quickly.
- 14 • This is an opportune time to update the handbook.

15
16 ACTION:

- 17 • Tom Gray, Steve Ugoretz, Larry Hartman, and Heather Rhoads offered to participate
18 in the Permitting Handbook update process from the Avian Workgroup.

19
20 **Avian-Wind Power Planning Meeting V** Abby Arnold

21 *What's the timing for a next meeting?* Members agreed that a meeting was not needed in 2001,
22 and would defer the decision to conduct another research meeting to a future date.
23
24

1 **National Wind Coordinating Committee**
2 **Avian Work Group Meeting**

3
4 December 6, 2000

5
6 Renaissance Madison Hotel
7 Seattle, WA 98104

8
9 **Final Participants List**

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13 Dick Anderson	48 Van Jamison
14 California Energy Commission	49 Environmental Protection Specialist
15	50 U.S. DOE Denver Regional Office
16 Abby Arnold	51
17 Senior Mediator & Director of	52 Paul Kerlinger, Ph.D.
18 Business Development	53 Principal
19 RESOLVE, Inc.	54 Curry & Kerlinger, L.L.C.
20	55
21 Mike Azeka	56 Gabe Petlin
22 Vice President	57 Senior Analyst/Outreach Coordinator
23 SeaWest Windpower, Inc.	58 RESOLVE, Inc.
24	59
25 Don Bain	60 Heather Rhoads-Weaver
26 Renewable Resources Policy Analyst	61 Northwest SEED - Sustainable Energy
27 Aeropower Services Inc.	62 for Economic Development
28	63
29 Richard Carlton, Ph. D.	64 Michael C. Robinson, Ph.D.
30 Manager, Quantitative Ecology,	65 Manager
31 Environmental Department	66 National Renewable Energy Laboratory
32 Electric Power Research Institute	67
33	68 Karin Sinclair
34 Ed DeMeo	69 Avian Projects Manager
35 Renewable Energy Consulting Services, Inc.	70 National Renewable Energy Laboratory
36	71
37 Wallace Erickson	72 Joan Stewart
38 Western Ecosystems Technology, Inc.	73 Permits & Environmental Affairs Specialist
39	74 Altamont Infrastructure Company
40 Thomas Gray	75
41 Deputy Executive Director	76 Steve Ugoretz
42 American Wind Energy Association	77 Wisconsin Department of Natural Resources
43	78 Integrated Science Services
44	79
45	80 Rebecca Wooden
46	81 Environmental Planner
47	82 Minnesota Department of Natural Resources

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