Meeting Summary

NWCC Business Meeting #37 began after the issue forum on wind power and radar interaction. The agenda for the meeting is in Appendix C and the participants list in Appendix D.

NWCC Budget Update
Katie Kalinowski, NWCC Outreach Coordinator, reminded meeting participants that NWCC is in the final year of its current three year contract. Currently there is enough funding to support NWCC work through the end of October. Two meetings are scheduled for late in the year, the Wildlife Research Meeting VI in November and the Midwest Transmission Workshop in December. Funding provided by Energy and Environmental Research Center (EERC) will cover a good share of the direct costs for the Midwest Transmission Workshop. There is the possibility one or both meetings will be canceled due to insufficient funds, but DOE/NREL has indicated they plan to provide funding for November and December pending their 2007 Congressional appropriation and the meetings would go on as scheduled.

Workgroup Reports and Discussion of Blueprints
NWCC staff, with the input of members of the three workgroups, updated the workgroup blueprints to include 2007 activities. The NWCC Steering Committee is responsible for reviewing and ratifying the blueprints. Given that many Steering Committee members were unable to participate in this meeting, the Steering Committee will be asked to consider and approve the blueprints on the next monthly Steering Committee conference call. Meeting participants reviewed each blueprint in turn and provided feedback. The draft workgroup blueprints distributed at the meeting are provided in Appendix A.

Transmission Blueprint
NWCC Senior Mediator Abby Arnold began by reviewing the Transmission Workgroup blueprint. Continuation of the regional workshops is included in the blueprint. NWCC had just held its most recent Western transmission workshop and participants urged working with Western Governors’ Association (WGA) to keep the momentum created by the event going to bring about desired transmission reforms. If NWCC takes the lead on this work, it will need to seek additional funds from sponsors and foundations. The next Midwest transmission workshop is scheduled for December 4 – 5, 2006 and a SPP workshop is envisioned for the first quarter of 2007. Getting traction in SPP has been difficult and the current concept driven by regional stakeholders is to expand the workshop scope beyond transmission; NWCC staff plan to talk to WPA staff about how to do this without duplicating efforts.

In terms of publications, the blueprint calls for completion of case studies (currently in draft form) describing approaches taken to making transmission available for wind projects. The layman’s guide to wind integration, as Ms. Arnold noted, is being debated amongst members of the Transmission Workgroup. Continuation of the transmission update calls and summary briefs to post online is planned. An update call or issue brief on what the FERC Order 888 NOPR means for wind has been suggested.

Participants offered the following comments on the Transmission workplan:
• Getting states to participate in regional planning will take strategic discussion, part of the reason why more work with the Western action plans is needed.
• NWCC should consider working with WGA to do a plenary session at the next WGA annual meeting to brief the Western Governors on what has been done on CDEAC recommendations, and then keep the next NWCC Western transmission workshop in fall 2007.
• NCSL perhaps should be the organization to make a layman’s guide to wind integration.
• It would be nice to have a shorter piece on wind integration than the UWIG guide but the abridged version may take away from balanced tone of the original publication.
• Craig Cox from Interwest Energy Alliance volunteered to make a first draft of the integration layman’s guide and send it to NWCC Transmission Workgroup members for feedback.

Wildlife Blueprint
Next the Wildlife Workgroup blueprint was set forward for consideration. This workplan calls for resumption of risk assessment activities; a risk assessment panel is being put together for the November NWCC Wildlife Research Meeting VI. The other change in the blueprint is the decision to write a white paper on priority research projects on wind energy and wildlife. The white paper draft will be based on the prioritization exercise at NWCC’s June 2006 Core Group meeting. At the November meeting, the white paper will be presented for feedback and revised. The concept is to see if agreement can be reached and the priorities used to start research on these questions by USGS, FWS, AFWA, and other wildlife entities. The remainder of the workgroup blueprint is essentially a continuation of 2006 activities.

Ms. Arnold offered the following clarifications based on participant questions:
• If the FWS voluntary guideline revision process starts, the research priorities may be picked up by that collaborative. Also, the white paper might be used to approach universities, industries, and others to take up research initiatives.
• The songbird protocol drafted by members of the GS3C was edited by members of the Wildlife Workgroup and the protocol authors are currently revising the document.

Siting Blueprint
The ideas in the Siting Workgroup blueprint come from individuals on the workgroup, but there is less guidance on direction for NWCC siting activities than in the other workgroups. Three meeting concepts are proposed:
  1) Workshop on transmission siting for policymakers
  2) Workshop to strengthen regional coordination on siting and transmission for wind energy projects
  3) Meeting for comparison of siting guidelines in the U.S. and abroad, including components, pros and cons, and plans for revision

Another proposed workgroup activity is to develop a web tool on how to involve the public and government agencies in wind energy siting processes. All of these concepts need further discussion amongst the workgroup members and Steering Committee to see which ideas have traction. Further work on interaction between wind power and radar may also be incorporated into the blueprint, if strong interest in this topic holds and a role for NWCC develops. NWCC may also be involved in the wind visioning exercise that AWEA, DOE, and others are initiating.

Meeting attendees made the following comments:
• People misunderstand distributed wind and how it is sited. The NWCC may have a role to play on this topic.
• Tracking best practices for siting would be a useful endeavor. This topic could be included in the proposed meeting for comparison of siting guidelines.
• NWCC may want to become involved with the growing community wind movement.
• One concern about the use of siting guidelines is that they become a point of departure for legal cases. Another participant suggested using the term principles rather than guidelines.

Update on NWCC Meetings and Outreach Schedule
A proposed schedule of NWCC meetings and workshops through 2007 was provided to meeting attendees. As always, meetings will be scheduled to meet the needs of regional stakeholders and in coordination with other wind-interested organizations. The proposed schedule is available in Appendix B.

Business Meeting Adjourns
NWCC staff will work with the Steering Committee to finalize workgroup blueprints in the August / September timeframe. One participant urged the Steering Committee to consider whether the workplans fit within NWCC’s budget or consider how to raise funds outside of NREL/DOE support. NWCC staff over the last two years has sought opportunities to partner with other groups to financially support proposed activities and plans to continue doing so in 2007.
## Appendix A

**Draft Workgroup Blueprints**

### Transmission Workgroup

**Proposed Products and Activities – August 2006 and Beyond**

<table>
<thead>
<tr>
<th>Proposed Products and Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outreach</strong></td>
</tr>
<tr>
<td>• <strong>Conduct regularly scheduled conference calls</strong> (every 8 weeks &amp; coordinated with the Transmission Update) to brief participants on relevant issues and activities.</td>
</tr>
<tr>
<td>• <strong>Continue outreach into the West, Midwest, and Southwest Power Pool regions</strong> to effectively address key issues in these regions, potentially through presentations, briefings at business meetings, web casts, or other outreach avenues.</td>
</tr>
<tr>
<td><strong>2006 - 2007 Projects</strong></td>
</tr>
<tr>
<td>• <strong>Edit and Publish Case Studies</strong> that identify unique approaches to making transmission capacity available for wind projects, including a commonalities analysis. Three case studies are in draft form; they need editing and review for publication.</td>
</tr>
<tr>
<td>- Buffalo Ridge, MN</td>
</tr>
<tr>
<td>- Lamar, CO</td>
</tr>
<tr>
<td>- McCamey, TX</td>
</tr>
<tr>
<td>• <strong>Conduct three regional workshops</strong> as follows:</td>
</tr>
<tr>
<td>▪ In the Midwest - convene a workshop December 4-5, 2006, at the request and support of regional stakeholders, to discuss regional transmission issues.</td>
</tr>
<tr>
<td>▪ In the SPP region - hold a workshop to build bridges with the SPP Committees and other SPP stakeholders. Schedule workshop in conjunction with a SPP committee meeting in early 2007. Also reach out to area decision makers and grassroots wind-interested stakeholders.</td>
</tr>
<tr>
<td>▪ In the West – In Fall 2007, follow through on activities in the Interior West prompted by the July 2006 NWCC / WGA leadership forum. Focus especially on WAPA and BPA responsiveness to wind needs.</td>
</tr>
<tr>
<td>• <strong>Continue coordination with Western leaders</strong> on WGA CDEAC recommendation implementation, including:</td>
</tr>
<tr>
<td>▪ Organize an ongoing multi-stakeholder Core Group to develop a “game plan” and take it to “Leadership,” e.g. Governors, Utility CEOs, Commissioners, NGO Executive Directors, Consumer Union, etc.</td>
</tr>
<tr>
<td>▪ Modify action plans organized around four teams—FERC NOPR, Integration, Legislative / Regulation, and Planning</td>
</tr>
<tr>
<td>▪ Develop an outreach / education strategy targeted at specific parties</td>
</tr>
<tr>
<td>▪ Build momentum for resources, money, staff, etc.</td>
</tr>
<tr>
<td>▪ Build on existing transmission planning efforts (e.g., WECC, TEPPC, WestConnect, etc.)</td>
</tr>
<tr>
<td>• <strong>Consider publishing a layman’s guide to wind integration</strong> based on UWIG’s technical work on this subject.</td>
</tr>
<tr>
<td>• <strong>Continue to produce the Transmission Update</strong>, a bi-monthly update of activities underway in the transmission world across the country, focusing on specific geographic regions and critical issues that affect wind energy.</td>
</tr>
<tr>
<td>• <strong>Conduct an issue forum and write an issue brief or transmission update</strong> on what the final revisions to FERC Order 888 mean for wind.</td>
</tr>
</tbody>
</table>
**Possible Activities, 2007 or Future**

- Hold a workshop on national wind-transmission issues, bringing together RTOs and ISOs to talk about their experience with wind energy:
  - How RTOs/ISOs are integrating wind and where they are not
  - How FERC and DOE influence wind integration and regional transmission planning
  - Regional drivers for wind power
  - Cost recovery
  - RTO/ISO interaction with states
Wildlife Workgroup
Proposed Products and Activities – August 2006 and Beyond

### Proposed Products and Activities

#### Outreach
- Coordinate with Core Group about progress made on projects below and to find out about what issues need to be addressed.
- Continue dialogue and work to get agreement on list of prioritized research needs to minimize impacts from wind development on wildlife.
- Conduct regularly scheduled conference calls (at a minimum of every 6-8 weeks) to keep Core Group, Associate Members, and others updated on relevant issues and activities and to offer the Core Group an opportunity to guide various initiatives.
- Update event table on workgroup conference calls and post on the NWCC website to track and coordinate with other wind/wildlife initiatives.
- Plan, host, and conduct follow-up for national Wildlife Research Meeting VI, November 14-16, 2006.
- Coordinate and support efforts to establish a dialogue on reducing the risk of wildlife impacts from the siting and operation of wind power projects.
- Continue to conduct outreach to parties interested in getting more information about wind and wildlife issues.
- Track and make available on NWCC website State policy guidelines, as published.

#### 2006-2007 Projects/Subgroups
- **Grassland/Shrub Steppe Species Collaborative (GS3C)**
  - Track progress on prairie chicken and wind energy research in Kansas and assist researchers to ensure adequate funds are in place.
  - Complete contract with the Ornithological Council to conduct a critical literature review on the impacts of energy-related activities on grassland and shrub steppe avian species.
- **Nocturnal Methods and Metrics**
  - Complete contract with Dr. Kunz and team to develop an Update to the *Methods and Metrics* document to address nocturnal birds and bats.
  - Have document expert reviewed and published in appropriate location.
- **Risk Assessment**
  - Hold a session on risk assessment at the Wildlife Research Meeting VI.
  - Review draft risk assessment paper and incorporate risk communication, relative risk, and other concepts so paper applies directly to wind/wildlife issues.
- **Mitigation Toolbox**
  - Create and publish on the NWCC web site Mitigation Toolbox based on experience in the U.S. and internationally.
- **Research Gaps**
  - Prioritize list of needed research.

#### Possible Activities, 2007 or Future
- Publish list of prioritized research needs to address impacts from wind power.
- Raise funds to have research conducted to address issues.
- Publish proceedings from Wildlife Research Meeting VI.
- Continue to explore ways to incorporate peer review processes into publication activities.
- Revise the birds and bats factsheet.
- Edit the Methods and Metrics Document.
- Identify and explore other wildlife issues related to near-shore and offshore wind facilities.
# Siting Workgroup

**Proposed Products and Activities – August 2006 and Beyond**

## Proposed Products and Activities

<table>
<thead>
<tr>
<th>Outreach</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Conduct regularly scheduled conference calls</strong> (every 8 weeks) to brief participants on relevant issues and activities.</td>
</tr>
</tbody>
</table>

2006-2007 or beyond--Projects to Consider

<table>
<thead>
<tr>
<th>Outreach</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Create web-based tool on wind turbine siting</strong> to aid in evaluation and consideration of proposed wind projects by decision makers.</td>
</tr>
<tr>
<td><strong>Convene a workshop on siting transmission</strong> which provides information and tools for legislators and others to use in designing policies to increase transmission availability for wind.</td>
</tr>
<tr>
<td><strong>Conduct a workshop to strengthen regional coordination</strong> on siting and transmission for wind energy projects.</td>
</tr>
<tr>
<td><strong>Host a meeting for comparison of siting guidelines</strong> among experts from the U.S., Europe, and elsewhere, where they discuss the guideline components, pros and cons, and any plans for revision.</td>
</tr>
<tr>
<td><strong>Consult with key NWCC members to identify additional useful tasks or products.</strong></td>
</tr>
</tbody>
</table>
# Appendix B

## Proposed Schedule of NWCC Meetings and Workshops August 2006 – 2007 *

<table>
<thead>
<tr>
<th>Event</th>
<th>Proposed Subject Matter</th>
<th>Time Frame</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radar Issue Forum &amp; Business Meeting #37</td>
<td>Blueprint revision &amp; direction-setting, issue forum on radar</td>
<td>July 27, 2006</td>
<td>Reno, NV</td>
</tr>
<tr>
<td>Wildlife Research Meeting VI</td>
<td>Wildlife research update</td>
<td>November 14-15, 2006</td>
<td>San Antonio, TX</td>
</tr>
<tr>
<td>Wildlife Core Group Meeting</td>
<td>Follow up from Research VI Meeting &amp; monitor subgroup activities</td>
<td>November 16, 2006</td>
<td>San Antonio, TX</td>
</tr>
<tr>
<td>Midwest Transmission Workshop (VI)</td>
<td>Discuss policy &amp; market drivers for wind energy transmission; update on regional</td>
<td>Dec 4-5 2006</td>
<td>Minneapolis, MN</td>
</tr>
<tr>
<td></td>
<td>transmission activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPP Transmission Workshop (III)</td>
<td>If there is interest, topic to be determined</td>
<td>Winter/Spring 2007</td>
<td>TBD (SPP)</td>
</tr>
<tr>
<td>Wildlife Core Group Meeting</td>
<td>TBD</td>
<td>Feb/March 2007</td>
<td>TBD</td>
</tr>
<tr>
<td>Business Meeting #38</td>
<td>TBD</td>
<td>Feb/March 2007</td>
<td>TBD</td>
</tr>
<tr>
<td>Siting Transmission Workshop</td>
<td>Info &amp; tools for transmission siting policies</td>
<td>Spring/Summer 2007</td>
<td>TBD (West)</td>
</tr>
<tr>
<td>Wildlife Core Group Meeting</td>
<td>TBD</td>
<td>Summer/Fall 2007</td>
<td>TBD</td>
</tr>
<tr>
<td>Western Transmission Workshop (V)</td>
<td>Progress on CDEAC recommendation implementation &amp; strategic planning</td>
<td>Summer/Fall 2007</td>
<td>TBD</td>
</tr>
<tr>
<td>Business Meeting #39</td>
<td>TBD</td>
<td>Sept/Oct 2007</td>
<td>TBD</td>
</tr>
<tr>
<td>Regional Coordination Workshop</td>
<td>Strengthen coordination on siting and transmission issues at the regional level</td>
<td>Fall/Winter 2007</td>
<td>TBD (New England)</td>
</tr>
</tbody>
</table>

* 2006 meetings are scheduled; 2007 meeting times, activities, and locations are proposed
Appendix C
Agenda

National Wind Coordinating Committee
Wind Power & Radar Interaction Issue Forum
&
Business Meeting #37

Thursday, July 27, 2006
Harrah’s Reno
219 North Center Street
Reno, NV 89501

FINAL AGENDA

1:30 – 1:45  
**Introductions, Session Purpose and Expectations**
Abby Arnold, Meeting Participants

1:45 – 3:45  
**Issue Forum: Wind Power and Radar Interaction**
What influences, if any, do wind power facilities have on radar? What types of radar might be affected? What mitigation measures can be utilized for wind energy and radar to co-exist?

Presentations followed by an opportunity for questions & answers.

**Federal Agency Coordination & Radar Case History**
Speakers: Phil Dougherty, U.S. Department of Energy
Gary Seifert, Idaho National Laboratory

**Radar for Civilian Air Navigation**
Speaker: Howard Swancy, FAA

**Military Radar Interaction**
  - Wind Turbine Siting Policy
  - Long Range Military Radar
  - Other Military Radar Issues
Speakers: Kenneth Kingsmore, U.S. Department of Defense
Steven Arenson, U.S. Air Force Center for Environmental Excellence, Western Regional Office

3:45  
Adjourn Issue Forum / Break

4:00  
NWCC Business Meeting #37
4:00  NWCC Budget Update  
Katie Kalinowski, RESOLVE

4:15  Workgroup Reports and Discussion of Blueprints  
Facilitator: Abby Arnold, RESOLVE

- Transmission Workgroup
- Wildlife Workgroup
- Siting Workgroup
- Other Activities

5:15  Update on NWCC Meetings and Outreach Schedule for 2006 – 2007  
Katie Kalinowski, RESOLVE

5:30  Business Meeting Adjourns
## Appendix D

### Participants List

**National Wind Coordinating Committee**  
**Wind Power & Radar Interaction Issue Forum**  
**July 27, 2006**

### Final Participants List

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* - In-person participant list may contain some inaccuracies

+ - Webcast participants listed as they identified themselves online