

## *Appendix A- Technical Guidance*

### \_\_\_\_\_ Wildlife Agency **Procedures for Providing Technical Guidance and Recommendations Concerning Energy Projects on Private Lands**

#### **Purpose**

This memorandum establishes the procedures to be followed by (agency name) staff when responding to a request for technical guidance, information or recommendations concerning proposed energy development projects on private lands, including but not limited to electric transmission lines, pipelines, and power plants (projects).

#### **Background**

\_\_\_\_\_ is the state agency with primary responsibility for protecting the state's wildlife resources, and has statutory authority to provide relevant information and project-specific recommendations for the protection of wildlife resources. *See* (statutory authority). Information and recommendations are currently provided to governmental bodies, such as the Public Utility Commission (PUC) and the Department of Transportation (DOT) that approve, permit, license, or construct projects (regulatory authority).

Private landowners affected by proposed projects also request technical guidance from this agency, often seeking an evaluation of the impacts that proposed projects will have on their property. Information collected by \_\_\_\_\_ while providing technical guidance to private landowners is confidential by law and cannot be released without written landowner consent. *See* (confidentiality statute). It is likely these requests from private landowners will increase as the development of wind energy, other renewable sources, and other energy-related natural resources in (state) continues.

The agency's role in evaluating proposed projects is to identify the wildlife resources that may be impacted and provide information, recommendations and comments for the protection and management of these wildlife resources. The agency does not represent or advocate for private landowners, or developers before governmental bodies that approve, permit, license, or construct projects. The agency may, however, make recommendations to governmental bodies to protect the state's wildlife resources.

#### **Procedures**

- 1) \_\_\_\_\_ (responsible unit) staff shall have primary responsibility for providing information and recommendations to governmental bodies, most commonly the PUC, or DOT, upon request or as directed by the (responsible official (RO)).
- 2) The RO will have primary responsibility for providing technical guidance to landowners regarding projects that may impact private lands. The (unit) staff shall coordinate with the

appropriate Regional Director. If the property is currently covered by a (agency) wildlife management plan, the RO will ensure that the technical guidance recommendations related to the project are consistent with the landowner's goals for the property.

3) If field staff is contacted by a governmental body, private landowner, or developer regarding a project that may impact private land, field staff shall collect contact information from the requestor and notify the RO staff responsible for that county per the attached map or the RO director. Private landowners should also be informed that (agency name) has a formal process for evaluating projects that may impact private lands. (See Attachment \_\_\_) *if the formal process is in written form*

4) Except as provided in this paragraph, correspondence to a governmental body regarding a project shall only come from RO staff, the RO, or a staff attorney. Recommendations made to the agency in connection with a water right or water quality permit matter will come from, or be coordinated with the fisheries and water quality management programs.

5) Landowners must be informed that technical guidance cannot be provided to private landowners unless the landowner signs an agreement with the agency, and that information collected by the agency while providing technical guidance on private lands is confidential by law and cannot be used to provide information or recommendations to any regulatory body unless the landowner consents to the release of the information.

6) All site visits regarding a project shall be coordinated by the local District Leader and RO staff. A narrative of what is observed during site visits should be provided to RO staff.

7) In response to a landowner request for technical guidance regarding a project, (agency name) will provide a letter to the landowner with (agency name) recommendations for the protection and management of the wildlife and habitat resources affected by the proposed project (and any relevant guidelines or procedures). The wildlife agency may send its own letter to the reviewing agency providing its analysis and recommendations for avoiding, minimizing or mitigating any adverse impacts of the project.

8) Staff may not agree to serve or appear as an expert witness or otherwise testify on behalf of any party, except for (agency name), in connection with a permit, license, or construction project. If staff receives a subpoena to produce documents or provide testimony regarding a project, they should contact the Legal Counsel immediately. The Legal Counsel will provide support for the person testifying.

9) Landowners who wish to contest the location of electric transmission facilities on their property should contact the Public Utility Commission or a private attorney.

## *Appendix B – Wildlife Recommendations*

### **Recommendations for Electrical Transmission/Distribution Line Design and Construction**

Construction of the line should be designed and implemented to avoid or minimize adverse impacts to the environment and the local wildlife populations and to restore or enhance environmental quality to the greatest extent practical. In order to minimize the possible project effects upon wildlife, the following measures are recommended.

***THE AGENCY recommends that each power utility develop an Avian Protection Plan to minimize the risks to avian species that are protected by the Migratory Bird Treaty Act, as well as bat species, and other species protected by the Endangered Species Act, and State Conservation Statutes.***

#### **Avian Electrocution Risks**

Birds can be electrocuted by simultaneously contacting energized and/or grounded structures, conductors, hardware, or equipment. Electrocutions may occur because of a combination of biological factors and electrical design. Biological factors are those that influence avian use of poles, such as habitat, prey and species behaviors. The electrical design factor that is most crucial to avian electrocutions is the physical separation between energized and/or grounded structures, conductors, hardware, or equipment that can be bridges by birds to complete a circuit. As a general rule, electrocution can occur on structures with the following:

- Phase conductors separated by less than the wrist-to-wrist or head-to-foot (flesh-to-flesh) distance of a bird;
- Distance between grounded hardware (e.g. grounded wires, metal braces) and any energized phase conductor that is less than the wrist-to-wrist or head-to-foot (flesh-to-flesh) distance of a bird (Avian Power Line Interaction Committee 2006).

To protect raptors and eagles, procedures should be followed as outlined in:

Suggested Practices for Raptor Protection on Power Lines: The State of the Art in 2006. by Avian Power Line Interaction Committee (APLIC). 2006. Distributed by the Avian Power Line Interaction Committee (APLIC).

Mitigating Bird Collisions with Power Lines: the State of the Art in 1994. Avian Power Line Interaction Committee (APLIC). 1994. Edison Electric Institute. Washington D.C.

The APP Guidelines are intended to serve as a “tool box” from which a utility can select and tailor components applicable to its specific needs. These guidelines are intended to be used in conjunction with APLIC’s Suggested Practices for Raptor Protection on Power Lines: The State

of the Art in 1996 and Mitigating Bird Collisions with Power Lines: The State of the Art in 1994, or the most current editions of these documents, which contain more detail on construction design standards and line siting recommendations.

This is a dynamic document and will be periodically updated as new information and resources become available. Additional copies of the APP Guidelines and current information on related issues can be downloaded. See:

<http://www.eei.org/ourissues/TheEnvironment/Land/Documents/AvianProtectionPlanGuidelines.pdf>

Line alterations to prevent bird electrocutions should not necessarily be delayed until after such events occur, as all electrocutions may not be known or documented. Rather, preventative measures should be routinely installed along portions of the routes that are most heavily used by birds (as indicated by frequent sightings) before any electrocutions occur. Preventative measures include: phase covers, bushing cover, arrester covers, cutout covers, jumper wire hoses, and covered conductors. In addition, perch discouragers (guards) may be used to deter birds from landing on hazardous (to birds) pole locations where isolaters, covers, or other insulating techniques cannot be used (Avian Power Line Interaction Committee 2006).

When possible, use wood or non-conducting cross arms, for distribution lines, to minimize the possibility of electrical contact with perching birds.

When possible, for distribution lines, install electrical equipment on the bottom cross arm to leave top cross arm free for perching.

Recommend using nest management strategies such as installing nesting platforms on or near power structures which can provide nesting sites for protected species while minimizing the risks of electrocution, equipment damage, or outages (Avian Power Line Interaction Committee 2006).

### **Avian Collision Risks**

Birds typically establish flight corridors along and within river and creek drainages and other directing features. Transmission lines that cross or are located very near these features should have line markers or bird flight diverters installed at the crossings or closest points to the feature to reduce the potential for collisions by birds flying along or near them.

Transmission lines should be located to avoid passing through areas with tall trees, and if no alternative exists, they should be distinctly above or below the height of the trees to reduce collision risks, as well as habitat fragmentation.

Transmission lines should be located to avoid separating areas regularly used by the same species, including feeding, resting, courting and nesting areas. If this cannot be avoided, lines should be clearly marked to minimize avian collisions with the lines (Avian Power Line Interaction Committee 1994).

When practical, transmission lines should be buried to reduce the risks of avian collisions.

## **Habitat Impacts**

Construction activities should avoid identified wetland areas to the maximum extent possible. Early coordination with appropriate agencies should be accomplished to ensure regulatory compliance. Construction should occur during dry periods, or periods with the least wildlife use, when possible.

Construction should attempt to minimize the area of habitat and numbers of flora and fauna disturbed. Reclamation of construction sites to non-human-dominated uses should emphasize replanting with native species appropriate to the pre-project habitat type.

Existing rights-of-way should be used to upgrade or add facilities, where possible, in order to avoid additional clearing and prevent adverse impacts associated with habitat loss and fragmentation of existing blocks of wooded habitat.

Forest and woody areas provide food and cover for wildlife, and these cover types should be preserved to the maximum extent possible. Mature trees, particularly those which produce mast, should be retained. Shrubs and trees should be trimmed rather than cleared whenever possible. Development and implementation of wildlife management plans along rights-of-way should be considered whenever feasible.

Transmission lines should be designed to cross streams at right angles, at points of narrowest width, and/or at the lowest banks whenever feasible to minimize disturbance to stream corridor habitat. Pole designs should favor single circuit (without arms), where possible, to reduce impacts to the aesthetics of the area. Double circuits may be considered to prevent additional clearing to install new lines. Whenever possible, corridor sharing with other linear features should be considered.