IBERDROLA
RENEWABLES

AVIAN AND BAT PROTECTION PLAN

October 10, 2008

IBERDROLA RENEWABLES			
DOCUMENT AMENDMENT RECORD			
Version	**Date Issued**	**Date Effective**	**Purpose of Issue and Description of Amendment**
A (draft—will become Version 1 upon final approval)	31- December 2007		Initial Issue
1	10-10-08	10-10-08	Final Approved Document

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Introduction

IBERDROLA RENEWABLES and its subsidiaries (collectively, Iberdrola) believes that conservation of the environment must be integral to the conduct of company activities. As an environmentally conscious company, Iberdrola is committed to promoting development of clean energy production, with its associated environmental benefits, while limiting the adverse environmental effects that can be associated with such clean energy production. Iberdrola is also committed to sustaining that obligation during facility operations. Iberdrola recognizes that the development and operation of wind energy projects may have direct and indirect impacts on birds, bats, and other wildlife resources and their habitats. Direct impacts include strike mortality from turbine blades, power lines and related infrastructure, electrocution from overhead collector and transmission lines, and loss of habitat from the footprint of the project. Indirect impacts may include displacement of birds and bats and other wildlife from their habitats, site avoidance, and behavioral modification. This Avian and Bat Protection Plan ("ABPP" or "Plan") supports practices and processes intended to minimize impacts to birds and bats from Iberdrola wind projects.

Iberdrola wind projects are subject to multiple Federal and state laws that protect birds and other wildlife and their habitats. Most birds in the United States are protected by the Migratory Bird Treaty Act (MBTA)[1]. In addition, bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (BGEPA), and some other species potentially found at wind project sites are protected by the Endangered Species Act. These laws provide for possible penalties for "take" of such species. "Take" under the MBTA is defined as to "pursue ,hunt, take, capture, kill…possess, offer for sale, sell…purchase…ship, export, import…transport or cause to be transported…any migratory bird, any part, nest, or eggs of any such bird…." The MBTA and BGEPA do not include language that provides for the issuance of "incidental" or "accidental "permits to take protected birds that are killed incidental to otherwise lawful activities, and thus any death of a protected bird at a wind project is a violation of these statutes. [2] Wildlife protection statutes in many states have similar provisions (e.g., California's "Fully Protected Species, Fish and Game Code").

The goal of this ABPP is to implement a series of best practices for all of Iberdrola's US wind activities, in order to operate in an environmentally sustainable manner to avoid or minimize and reduce risk to birds, bats and their habitats[3]. This ABPP is modeled on similar Avian Protection Plans (APPs) that have been developed by U.S. electric utilities to protect birds

[1] Most avian species are protected; exceptions are non-native and nonmigratory species, which are the following: house sparrows, European starlings, rock doves (or common/feral pigeons), monk parakeets, and nonmigratory upland game birds.

[2] The USFWS is developing a final rule under BGEPA to establish a permit program to authorize "take" that is associated with otherwise lawful activities. The Service anticipates that permits issued under the regulation will usually authorize disturbance only; however, in some limited cases, a permit may authorize lethal take that results from but is not the purpose of the activity. Programmatic take (take that is recurring and not in a specific, identifiable timeframe and/or location) would be authorized only where it is unavoidable despite implementation of comprehensive measures developed in cooperation with the Service to reduce the take below current levels (see the Service's Draft Environmental Assessment released August 14, 2008, for additional details regarding "Programmatic permits"). This type of authorization could be extended to industries, such as electric utilities or some transportation industries, that currently take eagles without authorization but who can implement additional, exceptionally comprehensive measures to reduce take to the level where it is essentially unavoidable.

[3] Iberdrola recognizes that its obligations under the law as well as its wildlife stewardship responsibilities extend to trust wildlife resources other than birds and bats. Nothing in this plan is intended to overlook those responsibilities; however, because birds and bats are potentially issues at all sites, whereas other wildlife issues are typically site specific, the focus of this plan is on birds and bats. Other wildlife issues will be addressed in project-specific Avian and Bat Protection Plans.

and manage their risk under wildlife statutes—risk primarily associated with collisions and electrocution from overhead transmission and distribution lines and other utility equipment. Those plans were developed following the *Avian Protection Plan (APP) Guidelines* issued by the Edison Electric Institute's Avian Power Line Interaction Committee (APLIC) and the U.S. Fish and Wildlife Service (USFWS or Service) in April 2005. Iberdrola worked with the USFWS to "translate" the wires-oriented APP guidelines to apply to the particular issues faced by a wind energy generation company. Because habitat fragmentation and bat mortality have emerged as concerns at wind projects in a number of locations around the country, Iberdrola has expanded the scope of the Plan to address these issues as well.

This ABPP applies to all of Iberdrola's wind activities, including project development, construction, operations, and decommissioning, as well as any projects acquired from third parties. Iberdrola's development pipeline had numerous projects in various stages of development or acquisition before this ABPP was developed. Therefore, most portions of the Plan are effective on approval of this plan by Iberdrola management, but other sections will be implemented over time (see Section 6, Implementation).

For each wind project constructed after January 1, 2010, Iberdrola will implement a project-specific ABPP to address issues particular to the project site, and to outline how the corporate ABPP is applied to a specific project. The project-specific ABPP will summarize information about the project's species and habitats, development-stage surveys and studies, post-construction monitoring, mitigation commitments, and other variables specific to each site that could affect wildlife and their habitats. An outline of a project-specific ABPP is provided in Appendix A.

A key element of this corporate ABPP and each project-specific ABPP will be discussion with the USFWS and other relevant wildlife agencies early in the development process (within the constraints imposed by competition for land rights and other competitive aspects of the business). Early-stage consultation may include telephone conversations, in-person meetings, database requests, and other information sharing. In all cases, Iberdrola expects discussion with the USFWS to occur before irretrievable commitments are made to develop a project.

In 2007, USFWS appointed a Wind Turbine Guidelines Advisory Committee (including an Iberdrola representative) to advise the USFWS about "effective measures to avoid or minimize impacts to wildlife and their habitats related to land-based wind energy facilities." It is anticipated that once the USFWS has issued new guidelines, based in part on recommendations from the advisory committee, expected to be available in approximately two years, Iberdrola may revise the corporate ABPP as necessary. After that, the ABPP will be reviewed periodically and revised as necessarily to reflect new knowledge gained from current science as well as from Iberdrola experience with constructing and operating wind projects. All appropriate Iberdrola personnel involved in the development, operation, and oversight of Iberdrola wind projects will be trained in the development, implementation, and follow-up of this ABPP. Periodic audits will be conducted to confirm that Iberdrola's activities continue to comply with its provisions.

SECTION 1

Corporate Policy

Iberdrola policy is that wind projects shall be sited, designed, constructed, and operated in an environmentally sustainable manner to avoid or minimize adverse environmental impacts. Wind projects that comply with this principle will minimize potential impacts to birds, bats, and other wildlife and their habitats. However, it is recognized that wind turbines and associated overhead transmission and collector lines may cause injuries and deaths to birds and bats in spite of best efforts, including birds and bats protected by Federal and state laws and regulations. This ABPP is intended to support Iberdrola's compliance with key wildlife laws, by instituting clear and consistent procedures to minimize impacts to birds and bats and their habitats and to address impacts where they are identified.

To fulfill this commitment, Iberdrola will do the following:

- Implement and comply with its own comprehensive ABPP.
- Ensure its actions comply with all applicable state and Federal laws, regulations, permits, and ABPP procedures.
- Follow procedures described in this ABPP during the development of all new wind projects in order to understand avian and bat risk at each site and to incorporate features to avoid or minimize impacts to these species.
- For development or operational projects acquired from third parties in merger or acquisition transactions, ensure through the due diligence and acquisition process that preproject or operational practices employed by third parties prior to Iberdrola ownership are consistent with the ABPP, or if not consistent, document inconsistencies, develop a strategy for implementing ABPP practices, and implement ABPP practices as soon as practical.
- Document bird and bat mortalities and injuries at projects and/or structures in order to implement adaptive management actions as necessary.
- Provide information, training, and resources to improve staff knowledge and awareness of the requirements of the ABPP in order to support the ABPP's successful implementation at both the company level and as applied at specific projects.
- Participate with public and private organizations in programs and scientific research to identify causes and effective controls of detrimental effects of bird and bat interactions with wind projects.
- Continue to enhance the ABPP by applying lessons learned, research results, new technologies, and latest regulations and guidelines.

Through the proactive and innovative resolution of bird and bat interactions with our wind projects, this ABPP will support Iberdrola's regulatory compliance and leadership position in the wind industry, reduce risk to birds and bats and their habitats, enhance stakeholder acceptance of our wind projects, and support the responsible growth of the wind industry.

Signature: *Terry Hudgens*

Terry Hudgens, President and CEO, IBERDROLA RENEWABLES

Date: October 10, 2008

SECTION 2

Site Suitability Assessment and Project Design

Iberdrola will use the best available accepted science in its siting decisions, and will participate in industry/stakeholder research to continuously improve decisions about siting and designing wind projects and reducing environmental impacts.

Normally, site assessment and design will parallel other project development activities and include the following:

- Preliminary site assessment: fatal flaw assessment and/or Phase 1 avian or bat risk assessment
- Site-specific avian and wildlife studies
- Incorporation of information from environmental studies in the layout and design of projects
- Where Iberdrola is expanding an existing wind project or developing a new wind project adjacent to a project for which abundant relevant environmental information is available, one or more of these steps may be modified based on the amount and value of previously collected environmental information.

As a standard practice, Iberdrola will meet with agencies and stakeholders, early in the process of evaluating the potential to develop a wind project at a particular site, and before permit applications are submitted or irretrievable commitments of resources are made. These stakeholder and agency discussions are a screening process for environmental issues at potential sites to help identify appropriate preproject environmental studies. Early discussions with agencies and nongovernmental organizations (NGOs) can also help identify areas or regions with known sensitive habitats and/or resources that should be avoided for wind project development. Furthermore, building key stakeholder relationships early in the process can improve the development process.

Figure 1 shows a preconstruction avian point count survey in progress.

figure 1: Preconstruction Avian Point Count Survey (Photo courtesy of Karen Kronner)

"Fatal flaw assessments" and "Phase 1 Avian or Bat Risk Assessments" are both tools to identify risk early in the development process: the "Phase 1 Avian or Bat Risk Assessment" is focused on wildlife issues, while a "Fatal Flaw Assessment" may also address other issues, such as visual impacts. In most cases, they are internal documents used to guide Iberdrola decision-making, and will not normally be available for agency or public review. One or both types of assessment may be used.

2.1 Preliminary Site Assessment

Early in project development, the Iberdrola permitting team will prepare a "fatal flaw" or "key issues" report, which will identify key wildlife, important habitats, and other environmental issues at the site and identify likely permit requirements. The existence and adequacy of this report will be confirmed by Iberdrola's Wind Permitting Director or another designated person before significant or irreversible commitments are made to develop a site for wind energy. This report will identify species protected by the MBTA, BGEPA, ESA, and state wildlife laws that may be present in the project vicinity, and identify the likelihood of the species being present on the site. It will also identify the presence of any designated critical habitat for protected species, and summarize other available information on the presence of sensitive species (e.g., Birds of Conservation Concern, Breeding Bird Survey declining species, imperiled water birds, known migratory corridors, known migratory stop-over locations, and watchlist species). This report will be used in the decision about whether or not to proceed with next steps in project development, and to guide the appropriate level of formal or informal consultation with Federal and state wildlife agencies. This fatal flaw report may not be necessary in locations where Iberdrola is expanding an existing project or developing a project near an existing project where there is abundant relevant environmental information.

A Phase 1 Avian and Bat Risk Assessment is another preliminary site assessment tool that provides a level of information intermediate between a fatal flaw analysis and preconstruction surveys. It is typically used where additional wildlife information, beyond what would be provided by a fatal flaw study, is needed in order to identify key site-specific wildlife issues and refine the scope for preconstruction surveys. The goals of a Phase 1 Avian or Bat Risk Assessment are typically to:

- Collect information about the type, number and seasonality of use of birds and bats known or suspected to use a project site and the area surrounding the site
- Determine the degree and type of risk to birds and bats from wind power development at a particular site, and whether such risks are great enough to cease project development efforts
- Understand concerns of regulators and environmental organizations
- Identify options for avoiding or mitigating impacts
- Identify further research needed to assess specific risk or fill information gaps needed to assess risk

The data sources that are used for a Phase 1 Avian and Bat Risk Assessment will vary from site to site, but will include, as appropriate to the site:

- Agency consultation and review of databases, including USFWS, state natural heritage program, Breeding Bird Surveys, USGS Breeding Bird Atlas, Audubon Important Bird Area maps, and other relevant state or local information sources.
- Site reconnaissance visit by a wildlife biologist to observe site conditions and identify habitats present

Information from a project Fatal Flaw Assessment, Avian and Bat Risk Assessment, or both will be used internally by Iberdrola management in its assessment of whether to:

- Move ahead with the additional studies necessary to evaluate and mitigate avian and bat risks during project development; or
- Move ahead with additional wildlife studies but hold off decisions to develop a project pending the results of such additional studies; or
- Decide to terminate efforts to develop a site.

In all cases, consideration of wildlife issues will be integral to deciding whether a project should be developed or terminated.

2.2 Preconstruction Studies

Iberdrola will typically conduct at least 1 year of preconstruction avian surveys using statistically valid methods appropriate for the site, season, and species being studied (Anderson et al. 1999 and 2003). The determination of the appropriate survey design, including the number of seasons, will be documented in the project-specific ABPP and based on the characteristics of the site and the availability of information appropriate for extrapolation from nearby areas with similar habitats and topographical features. The need for new avian use surveys may be modified or reduced based on the availability of relevant information on avian use developed in connection with an existing wind project or otherwise pertinent to the proposed development site.

Where data review and agency consultation identify substantial displacement of resident birds as a potential impact of the project, preconstruction surveys should include bird use surveys. Displacement studies may require more intense study (e.g., a denser network of survey points or use of transects). Where there is a concern about substantial impacts to breeding birds, surveys will be conducted during the appropriate breeding season.

Iberdrola will conduct raptor nest surveys near all project facilities where raptors are expected to nest, and will develop appropriate buffer distances between active nests and (1) construction during nesting/fledging season and (2) turbine locations[4]. The survey area size and methodology will vary according to project terrain and cover (for example, aerial surveys may be appropriate in steep open terrain, while surveys on foot using taped calls may be more appropriate in forested areas).

Preconstruction study methods to assess risk to bats are less well developed than for birds. Iberdrola is participating in research through the Bat Wind Energy Cooperative (BWEC) at several Iberdrola project sites to develop better assessment methods. Iberdrola will install

[4] Guidelines on appropriate buffer distances vary by region and species, and appropriate state and Federal wildlife agency references should be consulted.

Anabat acoustic monitors on a sample of met towers at a range of prospective project locations across the country, reflecting a range of habitats and regions (Figure 2). Data will be collected at these sites using methodologies developed in consultation with the BWEC, and based on peer-reviewed protocols published in recent scientific journals. The goal of this data collection will be to contribute to the evaluation of bat risk assessment methodology being conducted by the BWEC, and, as the methodology is validated at multiple sites, to use the data to assess potential risk to bats. Anabat results will be analyzed by a qualified bat specialist to evaluate potential bat use of the sites.

Figure 2: Anabat and "Bat Hat" Installed at Dillon Wind Project, CA

Preproject assessment will also include species-specific surveys for state and Federal sensitive species that are indicated to have the potential to occur on the project site.

The level and nature of other environmental studies (such as habitat mapping and wetlands studies) will be determined based on characteristics of the site and the information available about the site or nearby sites with similar characteristics. Iberdrola would normally expect to do more environmental studies at sites in regions that do not have existing wind projects than those where studies have been performed.

Preproject surveys will not typically include night radar monitoring, except in cases where there is evidence of the likelihood of especially high numbers and low flight altitudes of migratory birds, or particular concern with "fall out" conditions or migratory stop-over locations in the project vicinity. Nocturnal radar studies at a broad range of project areas have consistently shown the large majority of night migrants (birds and bats) fly at altitudes well above turbine height in normal weather conditions (Young et al. 2006). However, Iberdrola recognizes that at some locations (e.g., areas where there is evidence of substantial migratory movements in the project area, evidence of weather events that may cause bird "fallout," and little information about the altitude of migration), radar or other nocturnal measurement tools may be appropriate. An example of such a situation is wind development along the South Texas Coast, where Iberdrola has conducted 3 years of studies, including the use of radar and infrared sensors. All nocturnal investigations will follow the advice on design and methodology contained in the NWCC nocturnal methods and metrics guidance (Kunz et al. 2007).

Results of preconstruction studies will be used to evaluate the level of wildlife risk at each project and to influence project design to reduce wildlife risk. In some cases, these studies may lead Iberdrola to cease development of a project with undue wildlife risk, or in other cases to build wildlife avoidance and mitigation features into the project design and budget.

2.3 Site Design

Iberdrola project design will observe the following guidelines:

- Project turbine design/layout:
  - To the extent practicable and commercially reasonable, development should be maximized in cultivated or otherwise disturbed or fragmented habitats (e.g., the Klondike II Project in Oregon, located on land cultivated for wheat, or the Casselman Project in Pennsylvania, located on reclaimed strip mine) and minimized in contiguous high quality habitats.
  - Turbine towers should be set back an appropriate distance from defined canyon "breaks" or cliff edges where avian surveys indicate that such areas have high avian use (for example, the 300-foot setback from canyon rim used at the Big Horn Project in Washington; see Northwest Wildlife Consultants, 2008). The appropriate distance will be based on site-specific considerations of topography and avian use.
  - All permanent meteorological towers should be unguyed and unlit unless required to be lit by the FAA.
- Collector/Transmission system
  - There are two ways that overhead lines create potential risk to birds: risk of electrocution and risk of collision. *Suggested Practices for Avian Protection on Power Lines, the State of the Art in 2006* provides the current advice about electrocution avoidance; *Mitigating Bird Collisions with Power Lines: the State of the Art in 1994* is the most current sourcebook for designs to reduce the risk of collision (and is due to be updated over the next two years). Both documents are available from APLIC (http://www.aplic.org/) or in hard copy from the Edison Electric Institute).
  - To the extent commercially reasonable, collector lines should be placed underground and overhead lines minimized except as required to avoid wetlands, and canyon crossings, to otherwise to reduce environmental impacts, or because of geotechnical conditions. Where placing collector lines underground is not feasible, avian-safe designs must be employed.
  - Overhead lines should be designed per APLIC's current standards in *Suggested Practices for Avian Protection on Power Lines, the State of the Art in 2006* and *Mitigating Bird Collisions with Power Lines: the State of the Art in 1994* and updates) for avian-safe design contained in the two documents referenced above. All collector and transmission line design contracts must specify this design standard. Design includes the following and other standards:
    - Minimum separation of 150 cm (60 inches) between phase conductor and phase conductor and grounded hardware
    - Where such separation is not feasible, insulation should be used to prevent electrocution
    - Appropriate markers should be used in locations with elevated collision risk
- Other facilities:
  - Minimize lighting at O&M and substation facilities; motion-detector and/or (second choice) down-cast lights must be used. Where lighting must be used, it should have the minimum intensity while meeting safety and operational requirements.

Figure 3 illustrates a problem 69-kilovolt (kV) overhead transmission system pole. Figure 4 illustrates a raptor-safe 69-kV overhead transmission pole.

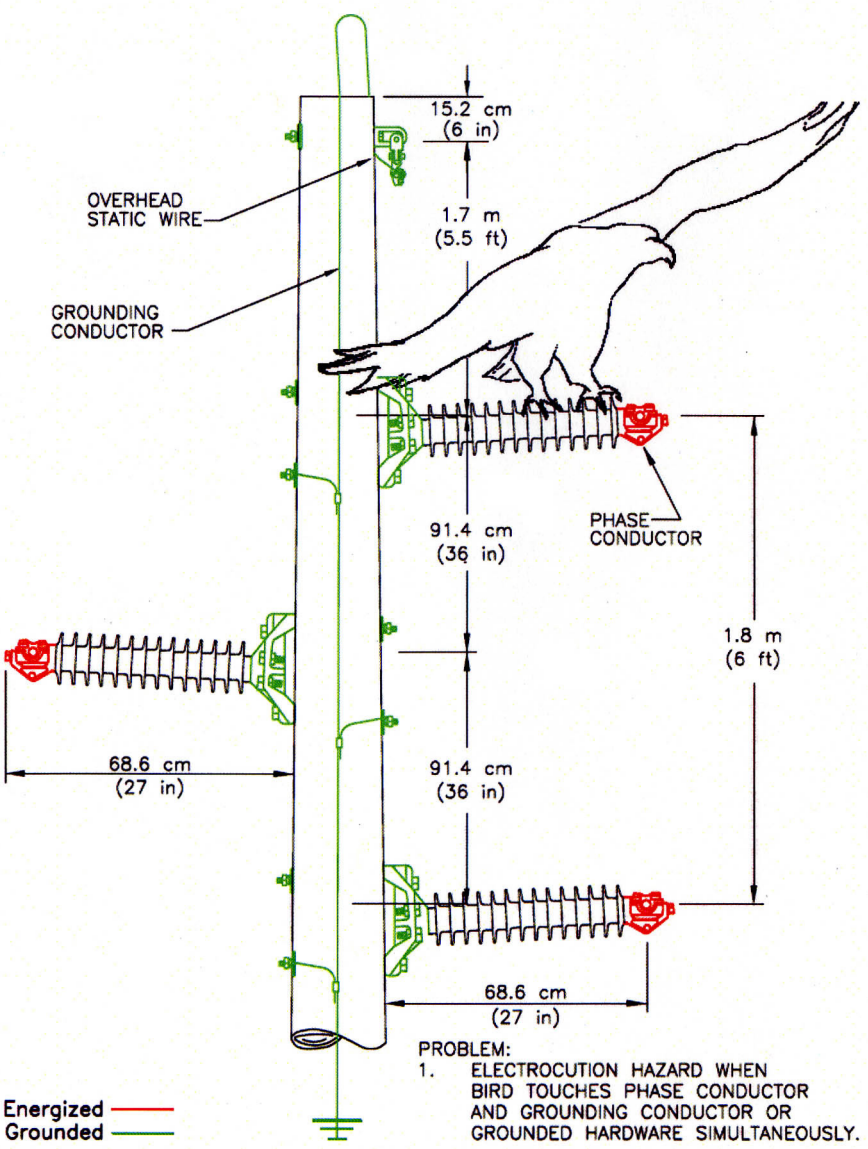

Figure 3: Example of Problem 69-kV Overhead Transmission System Pole

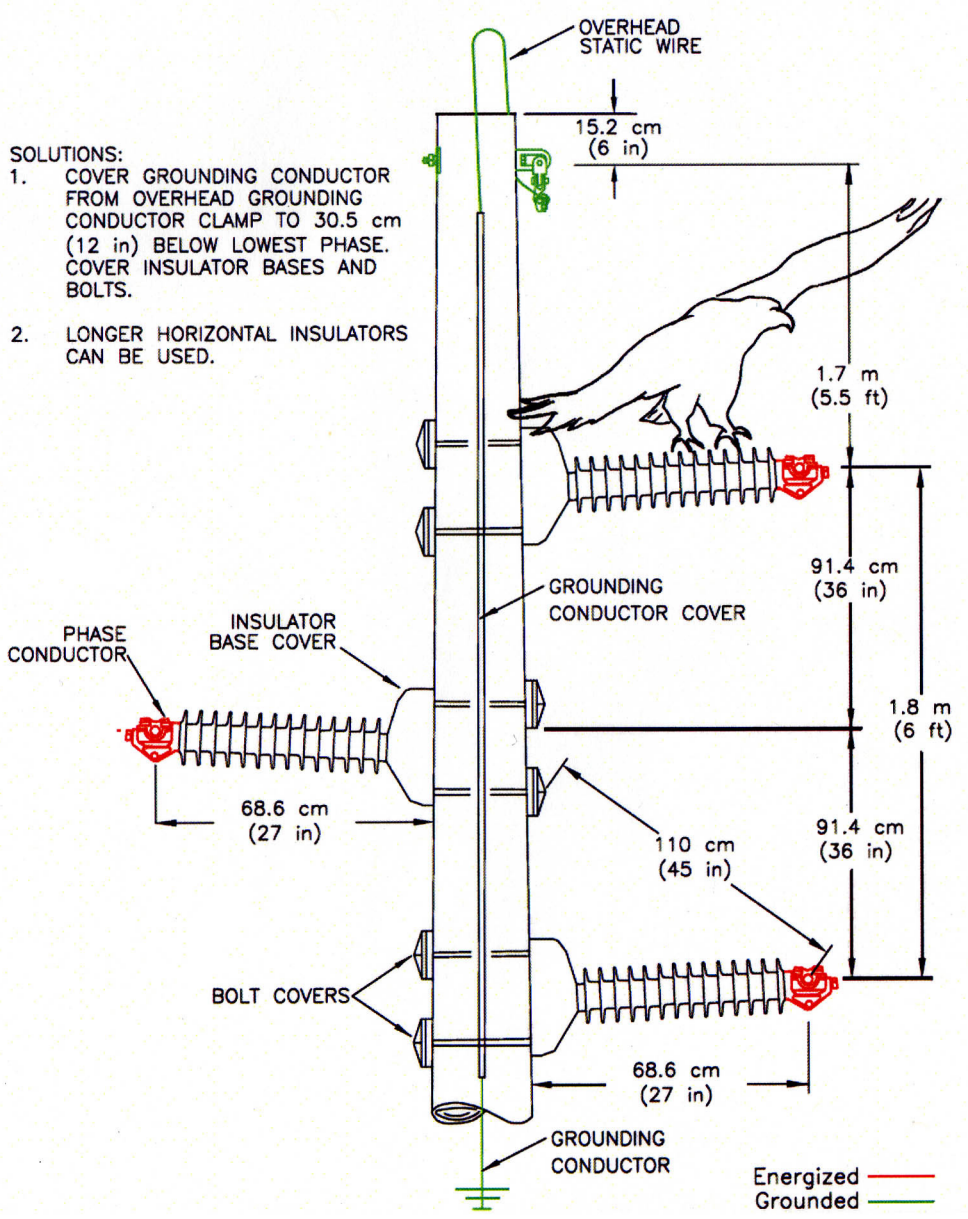

Figure 4: Example of Raptor-Safe 69-kV Overhead Transmission Pole

SECTION 3

Wildlife Considerations at Operating Projects

3.1 Post-Construction Monitoring

3.1.1 Formal Monitoring Programs

Formal post-construction avian and bat monitoring conducted by trained consultants will occur at most sites starting the first year of commercial operations, even if not required by permit. Post-construction monitoring, when not required by permit, will help Iberdrola identify and address any avian or bat issues, at existing and possibly at future sites. Exceptions are appropriate where there are already multiple years of monitoring at nearby sites with similar vegetation, topography, land use and wildlife species, or where little uncertainty exists regarding impacts (e.g., a new project proposed for an area like the Buffalo Ridge wind resource area of Minnesota/South Dakota, for which four years of monitoring were conducted by the State of Minnesota). Typically at least 1 year of post-construction mortality monitoring will occur—more where specified by permit or voluntary agreement, where the first years' monitoring suggests an extraordinary fatality rate and/or where weather conditions are highly variable, substantially affecting migration timing and intensity.

The type of monitoring that will be conducted at each site will be selected as appropriate to the site, and may include avian and bat mortality monitoring (conducted by trained biologists sometimes aided by search dogs), avian use surveys, raptor nest surveys, radar studies and/or thermal imaging. All monitoring programs will follow the guidance of Anderson et al., 1999, Kunz et al. 2007, and updates of these and other guidance documents. All monitoring programs will be reviewed by a qualified biostatistician, and will include corrections for searcher efficiency and carcass removal rates appropriate for the species of concern and the site, as well as estimates of the precision and variance of the survey results. Post-construction monitoring will typically consist of fatality studies. However, studies may be expanded to consider wildlife use or behavior if required by permits, or if deemed necessary to make comparisons with preconstruction data, when that is an objective of monitoring.

Figure 5 shows post-construction monitoring in action at the Big Horn Wind Project in Bickleton, Washington.

Figure 5: Post-Construction Monitoring at Big Horn Project, Bickleton, WA
(Photo courtesy of Karen Kronner)

The cost of post-construction monitoring varies greatly depending on the number of years, the percent of turbines sampled, and the sample interval. These factors will vary from project to project, depending on the following factors:

- **Purpose of the monitoring**. If the goal of monitoring is to confirm the general level of avian mortality predicted in preconstruction studies or to estimate the quantity of raptor fatalities, then a less frequent sampling interval may be suitable, assuming the sampling is relatively continuous within the project area. If the goal of monitoring is to quantify bat mortalities or to identify correlations between mortality and other factors such as weather, or impacts to specific species, more frequent monitoring may be necessary.
- **Carcass removal rates**. Sampling frequency may also be adjusted where scavenging is especially high, and more frequent sampling is necessary to provide accurate results.
- **Ground cover/visibility**. Where there is dense vegetation, mowing or clearing under the turbines to be sampled should be considered if feasible. In some cases, where visibility is low, the use of trained dogs may be a useful supplement to human searchers. Dogs have been shown to have high detection rates in some circumstances; however, they have the disadvantage of lower detection in very dry conditions, and they tend to tire more quickly than trained human searchers.
- **Availability of appropriate post-construction monitoring data from other projects in the area or from other sources of relevant available data**. Where such monitoring results are available, less intense or no formal monitoring may be needed at the new project to confirm the general level of avian and bat mortality.

A summary of the results of post-construction monitoring will typically be shared with wildlife agencies and the public once the monitoring report has been reviewed by Iberdrola, and consultants will be encouraged to publish data where appropriate.

When formal fatality monitoring is being conducted, any time plant operations staff or contractors find a dead bird or bat, the operator should photograph it, leave it in place, and inform the monitor, who will log the location and characteristics of the animal and as necessary inform Iberdrola environmental staff. If the Service has an operating mortality reporting system for wind projects similar to what is now being utilized by the electric utility industry (see Section 3.1.3, Reporting), Iberdrola staff will input that mortality information into the Service's reporting database. However, until that system is operating, Iberdrola staff will immediately report to the Service mortalities of any eagle, any sensitive species (including any listed birds and/orb bats), and more than five birds or bats found under a single turbine. If a bird or bat is alive but injured, the operator should notify the wildlife rehabilitation center that has been identified as appropriate to the project location.

3.1.2 Informal Monitoring

After formal monitoring is complete, all projects will implement a site-specific Wildlife Reporting and Handling System (WRHS). The operator who finds a dead bird or bat should leave it in place, photograph it, and record the finding (including the location, date, and species) on the WRHS reporting form (Appendix C). If the bird is a protected species, that fact should be reported to Iberdrola environmental staff, who will inform the appropriate state or Federal wildlife agencies. Any eagle carcass must ultimately be delivered to the National Eagle Repository in Denver following contact with the Service. If a bird or bat is alive but injured, the operator should notify the wildlife rehabilitation center that has been identified as appropriate to the project location. Posters will be prepared for each project to show species that are NOT protected; to specify reporting protocols; and to identify key contacts. Once the Service's on-line database can accept wind project data, any mortality of a protected bird should also be reported to the database.

3.1.3 Reporting

During both formal and informal monitoring, all avian and bat incidents (mortalities and injuries) will be entered into the Iberdrola WRHS database. USFWS currently maintains a database that electric utilities can use to record transmission/distribution system avian incidents. The Service is considering modifying that database to allow it to be used for recording wind project incidents. Iberdrola will work with the Service to pilot-test the use of the database for wind projects and, when it is functioning, to use it to report avian and bat incidents (in which case, the Service's database will be used instead of Iberdrola's database).

For each plant site, posters will be prepared showing reporting protocols, which birds must be reported, and key wildlife contacts.

Each year, avian and bat mortality statistics will be compiled into an annual Iberdrola summary report, plus other performance indicators about this ABPP and recommendations for improvement. This ABPP summary report will be reviewed by a team including identified Iberdrola Executive Management, Iberdrola Environment, Health, and Safety and Office of General Counsel and other appropriate personnel at Iberdrola. Once the review is complete, a summary of avian and bat mortality and any related observations or recommendations will be provided to the USFWS.

3.2 Impact Assessment

Sources of information about avian or bat impacts at operating projects include results of formal post-construction monitoring as well as operations reports of wildlife incidents.

Where results of formal monitoring indicate that either project-wide or per turbine mortality, whether for birds or bats, is higher than anticipated based on preproject evaluations, on comparisons with regional averages, and/or on discussions with wildlife agencies, that finding will be considered an action level to reexamine the scope and sources of the avian or bat risk (see Section 4.1, Impact Reduction and Mitigation Measures) and to discuss causes and mitigation with state wildlife agencies and the USFWS. Because variation in mortality could reflect annual variation in bird or bat use of the area and/or the survey's statistical methods, and because determination of the significance of the fatalities may require additional monitoring (e.g., estimation of use), monitoring may be an appropriate step.

If formal monitoring is not being conducted, a report by operating staff of any "incident" of unusual mortality event will be a trigger action to re-examine the scope and sources of the avian or bat risk. The need for additional study or action will depend on the species found—there will be less concern for non-native species such as pigeons that are not protected by the MBTA than for native species including species protected by the MBTA, with particular concern for more sensitive, declining, or imperiled species.

3.3 Nest Management

Some birds, including hawks and ravens, may use transmission and distribution poles, which provide substrate for nests. In some cases, bird nests can cause operational problems and may cause outages. For utilities with many miles of transmission and distribution lines and associated poles, managing nests is an important issue. Chapter 6 of APLIC's *Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006* provides detailed instructions on handling problem nests and for creating safe nest structures, as well as requirements for permits, which may be required under both Federal and state wildlife statutes[5]. For wind power companies, nest management is rarely an issue that affects operations or avian safety because of the relatively limited amounts of overhead transmission. However, all affected staff should be aware of this potential.

In the following cases, operations staff must contact Iberdrola environmental staff for further guidance:

- Where birds have constructed nests in locations where they may affect operations or safety
- Where providing a nest platform or other substrate has been identified as a goal (e.g., as a mitigation action)

Operations staff will not remove or modify nests unless directed by Iberdrola environmental staff.

Figure 6 shows a ferruginous hawk nest in Sherman County, Oregon.

[5] Not all nests are of equal sensitivity: the USFWS is concerned about increasing densities of crows and ravens as a result of increased foraging and nesting opportunities associated with growing infrastructure in the arid west.

Figure 6: Ferruginous Hawk Nest in Sherman County, OR
(Photo courtesy of Karen Kronner)

SECTION 4

Mortality Reduction, Mitigation, Research, and Other Initiatives

4.1 Impact Reduction and Mitigation Measures

The tools identified in Section 2 are the primary methods to reduce potential avian and bat impacts at projects. However, where, despite the use of such methods, an operating project identifies unexpectedly high mortality or unexpected impacts to protected species or their habitats, the project will identify appropriate adaptive management mortality reduction or mitigation measures. Adaptive management measures must be tailored to the identified problem (e.g., a specific species, specific location, or specific season). Additional monitoring may be an appropriate first step if it is not clear why the risks to birds or bats were unusually high; however, monitoring alone will not be considered adequate mortality reduction or mitigation if that additional monitoring confirms elevated risk levels.

If additional monitoring confirms elevated risks to birds, then the following adaptive management measures may be considered:

- In extreme cases of documented mortality, Iberdrola recognizes that agencies will expect Iberdrola to consider operational changes to reduce mortality. Iberdrola may deploy technology to reduce risk to migrating birds. For example, Iberdrola is exploring the use of permanent onsite radar to detect major migration events and movements in the vicinity of turbines; movements of certain volumes or proximities to turbines might trigger short-term turbine curtailment to reduce the risk of mortality to migrating birds. Curtailments and/or relocation of turbines should be considered a “last resort” action, but Iberdrola understands that under the MBTA and other relevant wildlife laws, high levels of avian mortality may require that special actions be taken to reduce or avoid mortality.
- Modification of farmers’ onsite land management, such as changes to hay mowing schedules to reduce loss of ground-nesting grassland birds or modification of grazing to improve habitat for ground-nesting birds, may be a useful mitigation measure at some wind projects, with landowner agreement.
- Installation of nest platforms may increase avian productivity where nesting structures limit populations (see the *2006 Suggested Practices* document).
- Offsite retrofitting of transmission and distribution lines with avian-safe design (i.e., at nonproject facilities) may reduce other sources of avian mortality. This kind of mitigation would generally require cooperation of other parties (i.e., the retail utility whose distribution and transmission lines would be modified).

For bats, adaptive management measures will likely include research actions, because the sources and parameters of bat mortality are less understood than for birds. The following measures may be considered:

- In extreme cases of documented bat mortality, Iberdrola recognizes that agencies and the public will expect Iberdrola to consider operational changes to reduce mortality. Management actions such as curtailments or relocation of turbines should be considered a “last resort” action, but may be appropriate actions, especially if additional experimentation with curtailment indicates that it can be done effectively and at relatively low cost in terms of lost power revenue
- Experimentation with seasonal curtailment to determine whether management actions such as changing turbine cut-in wind speed in certain combinations of wind speed, time of year, and time of night can significantly reduce bat mortality
- Expanded research in bat deterrent devices, to identify if bats can be conditioned to avoid wind turbines
- Expanded research in bat risk assessment, to develop more effective tools for identifying sites with varying levels of bat risk
- Habitat conservation, habitat enhancement or both may secure or protect habitat to replace the habitat effectively lost because of the bat mortality, although (because of the low reproduction rate and long life of bats) the primary focus for bats at wind projects should be on mortality reduction. This may be habitat acquired or conserved by the project or habitat acquired via a conservation bank.

Where direct loss of rare or sensitive wildlife habitats or indirect loss of habitat value through displacement of species are a substantial concern, Iberdrola will consider participating in regional conservation banks or acquiring conservation rights in appropriate habitats.

Figure 7 shows a long-billed curlew in flight at the Leaning Juniper II Wind Project. The long-billed curlew is classified by the USFWS as a bird of conservation concern.

Figure 7: Long-Billed Curlew (USFWS Bird of Conservation Concern, USFWS 2002) at Leaning Juniper II Wind Project
(Photo courtesy of Karen Kronner)

4.2 Research

Iberdrola will be an active participant in initiatives to increase our knowledge about wildlife interactions with wind energy. Current activities include the following:

- Since 2006, Iberdrola has participated in and assisted in funding research being conducted by Kansas State University on the “Effects of Wind Power Development on Greater Prairie-Chickens.”
- In 2007, Iberdrola funded a study of lesser prairie chickens conducted by Texas Tech University and Texas Fish and Wildlife Department at two potential Iberdrola wind project sites in the panhandle of Texas.

- Iberdrola is a founding funder of the Bat Wind Energy Cooperative, and has made its Casselman, Hoosac, South Chestnut, Maple Ridge, and Dillon project sites available for research conducted by Bat Conservation International on ways to assess and reduce bat risk from wind projects.

Iberdrola is a founding member of the American Wind Wildlife Institute and supports the research and other initiatives of the AWWI. Iberdrola will continue to seek out other opportunities to contribute to knowledge and implementation of effective tools to reduce risk to birds and bats from wind power. Although decisions will be made on a case-by-case basis, Iberdrola's intends to continue to allow studies to progress, to develop and implement new research opportunities, and to continue to allow researchers access to sites to further advancement of understanding of ways to reduce impacts to wildlife.

4.3 Other Initiatives

Iberdrola will continue to look for opportunities to participate in local, regional, and national forums to further our understanding of wildlife interactions with wind turbines, help interpret those findings, and educate others about the effects of wind turbines on wildlife. The following are examples of initiatives that Iberdrola has been involved in:

- At the Big Horn Wind Project in Klickitat County, Washington, Iberdrola has provided funding and volunteers to install blue bird boxes in the Bickleton area, continuing a tradition that goes back several decades in that community.
- Iberdrola has been an active participant in efforts to develop effective guidelines for wind power projects guidelines to minimize their effects on wildlife in California, Texas, Pennsylvania, Oregon, Washington, and at the Federal level.
- Iberdrola is a founding member of the American Wind Wildlife Institute.

SECTION 5

Permit Compliance

Because Iberdrola operates in many states and environmental settings, the permits that apply to project development, construction, and operations vary considerably among project locations. In some cases, state requirements will require different or additional studies than those prescribed in this ABPP. For example, California has issued *California Guidelines for Reducing Impacts to Birds and Bats from Wind Energy Development* (September 2007), which include detailed recommendations about pre- and post-construction measures. In other cases, permit conditions may impose additional provisions regarding birds or bats. In all cases, Iberdrola will comply with the more stringent of requirements of this ABPP or applicable statutory or permit requirements.

In addition to the permits required for wind project development, permits from the USFWS and/or state wildlife agencies are required for handling dead or injured birds protected by Federal and State wildlife laws[6]. In general, Iberdrola will not handle dead or injured birds; instead, these will be handled by contractors with the appropriate handling permits.

Permit compliance will occur in several stages of project development and operation.

1. **Internal Approvals**

Before a project is reviewed through Iberdrola's risk process, the Wind Permitting Director will confirm that a project-specific ABPP has been prepared as well as a plan for obtaining and complying with applicable permits.

2. **Construction**

Before project construction contractors are under contract, Iberdrola permitting staff or consultants will prepare an Environmental Permits Compliance Matrix for Construction and constraints maps that identify key environmental constraints such as sensitive habitats or locations to be avoided and that list applicable environmental permit compliance requirements. The construction environmental permits matrix will be cited in relevant construction contracts and all construction contractors will be responsible for compliance with all permit conditions. Environmental monitors will be used during construction at sites where there is elevated risk to species or habitats located near the construction activities.

3. **Operations**

Operations will be responsible for making sure that all operating projects maintain copies of applicable permits and permit conditions, including, where applicable, copies of take permits acquired per Federal or state Endangered Species Acts. Operations will also be responsible for maintaining all copies of annual permit reports to the USFWS and to any state agencies where required.

[6] In the case of Federal permits, allowing the 'possession' of the bird/carcass requires the possession of a Rehabilitation, Special Purpose, Scientific Collecting, or related permit. The issuance and use of Federal Migratory Bird permits also require annual reporting to USFWS.

At each project, any project staff handling birds or bird carcasses will have appropriate Federal and/or state wildlife handling permits. Iberdrola will assure that wildlife rehabilitation centers and consulting staff will also have appropriate permits if they will be responsible for transporting dead or injured birds protected by those statutes.

Asset management will also be responsible for ensuring the project complies with permits as well as the ABPP.

SECTION 6

Implementation

6.1 Training

Iberdrola training will include the following components:

Development stage environmental training: Wind project development staff who are permitting and developing wind projects, including meteorological and engineering staff, will be trained in the requirements of the ABPP and in avian and bat issues that are of concern for sites that they are developing.

Construction stage environmental training: At each construction site, all construction staff will receive training on the environmental constraints and issues specific to the site, including sensitive habitats to be avoided (such as buffers around raptor nests or habitat of sensitive species) and how they are marked in the field, practices to minimize impacts to wildlife (such as project-specific speed limits), and procedures for handling injured or dead birds and other wildlife. Materials to support this training will include maps showing sensitive areas to be avoided.

Operations stage environmental training: Training in the key components of this ABPP and relevant elements of project-specific ABPPs will be part of the training provided to each new operations staff within 90 days of hire. In addition, all operations contractor staff who operate Iberdrola projects and Iberdrola Asset Management and remote Operations Staff will be trained as well. This training will include a general orientation to state and Federal wildlife laws and procedures for handling and reporting dead or injured birds (Figure 8). Materials to support this training will include a flowchart (Figure 9) showing how dead or injured birds and bats should be handled, as well as project-specific posters showing species that are of particular conservation concern or that have special status that may be present at the site.

External Training: APLIC training in ways to reduce collision mortality or risk of electrocutions may be required of certain staff. Valuable short courses and workshops on avian protection planning and practices are offered by the Avian Power Line Interaction Committee (www.aplic.org) and occasionally by state and Federal wildlife agencies. Similar training should be considered by Iberdrola staff who are implementing the ABPPs.

Figure 8: Raptor Identification Training for Wind Project Staff
(Photo courtesy of Karen Kronner)

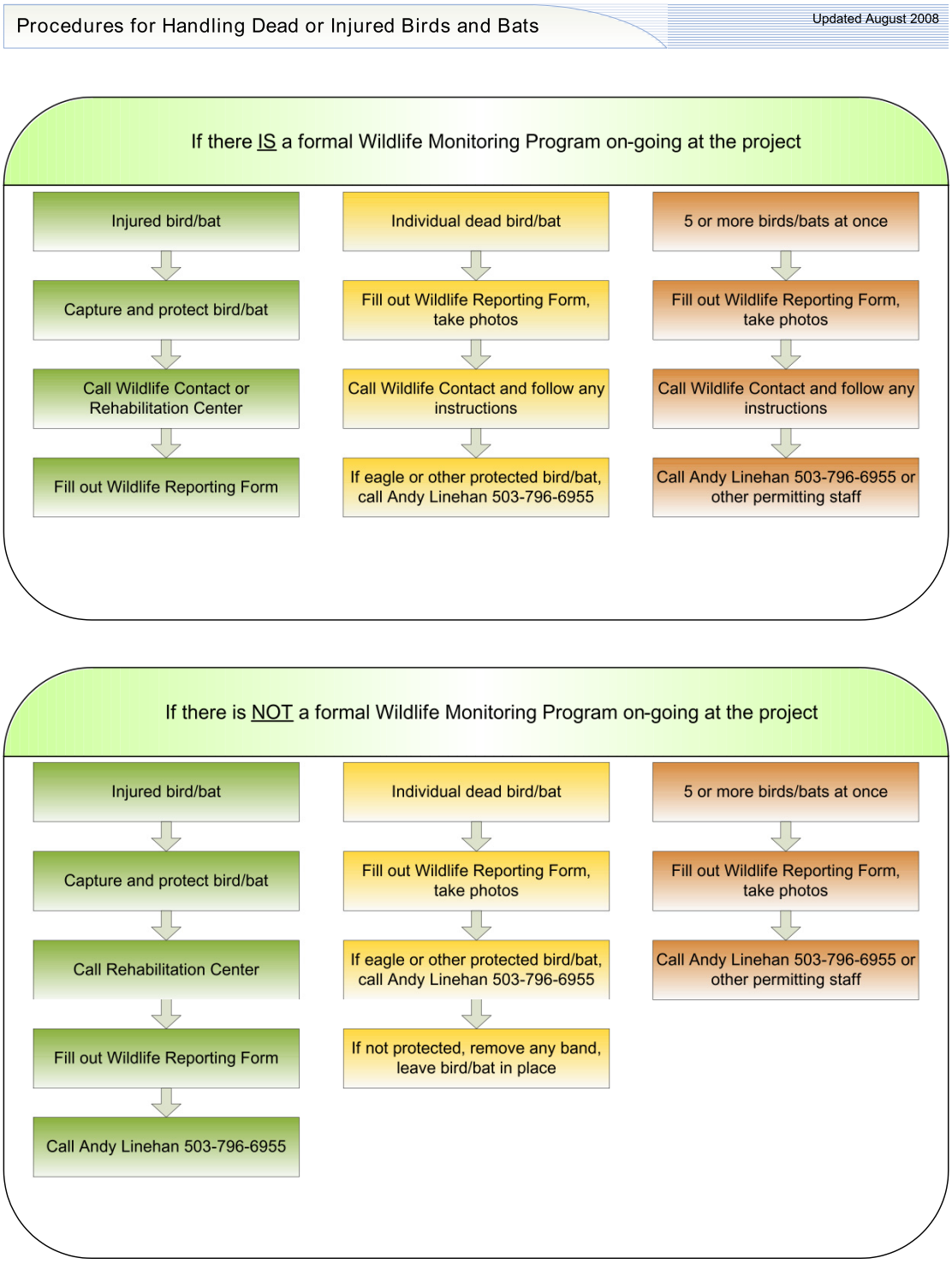

Figure 9: Procedures for Handling Dead or Injured Birds and Bats

Note: “Formal” monitoring refers to monitoring conducted according to a formal sampling plan by trained wildlife biologists, usually under contract, and typically during the first few years of a project’s operation.

6.2 Quality Control

Compliance with the corporate ABPP and project-specific ABPPs will be integrated into the annual Environment, Health, and Safety (EHS) audit process. Any noted deficiencies and recommendations will be given corrective action plans, which will be implemented on a schedule that matches the urgency of the deficiency. Action plans will be followed up as part of the audit process. In addition, projects will be reviewed annually by Iberdrola audit or environmental staff to confirm that a project-specific ABPP is in place for each operating project and projects going through risk review; that operating project staff have adequate training and training materials, and that avian or bat mortality monitoring forms are being completed and provided to environmental staff on a regular basis.

Upon completion of the final USFWS wind turbine siting guidelines, anticipated by 2011, Iberdrola will revise the corporate ABPP as necessary. After that, the corporate ABPP will be reviewed as part of the ABPP annual reporting process and revised as recommended.

Once USFWS electronic mortality monitoring is in operation, Iberdrola will work with the Service to fine-tune the reporting procedures and responses.

6.2 Key Resources

Key resources include in-house permitting and environmental staff:

- Andy Linehan/Portland: 503-796-6955; andy.linehan@iberdrolausa.com
- Kristen Goland/Boston: 508-397-6130; kristen.goland@iberdrolausa.com
- Dave De Caro/Radnor, PA: 610-230-0333; ddecaro@iberdrolausa.com
- Max Musich/Portland: 503-796-7740; Michael.Musich@iberdrolausa.com
- Sarah Emery/Minneapolis: (612) 309-2713; Sarah.Emery@iberdrolausa.com

Each project, as part of its project-specific ABPP, will identify a list of local wildlife experts who can assist the project in addressing wildlife issues that evolve.

Other Iberdrola contacts are as follows:

- General Counsel—North American Renewables: W. Benjamin Lackey: 503-796-7127; Benjamin.Lackey@iberdrolausa.com
- Asset Management: Gerald Froese: 503-796-7196
- Operations: Stephanie Carey: EHS Manager: 503-796-7131; Stephanie.Carey@iberdrolausa.com
- Environment, Health, and Safety Director: Gary LeMoine: 503-796-7736; Gary.Lemoine@iberdrolausa.com

Key wildlife documents, such as copies of reporting forms, this ABPP, APLIC standards, permits with permit conditions, and permitting and legal references, are available to all Iberdrola staff at the following intranet folder: O:\PGC\PROJECTS\PERMITTING.

6.3 Public Awareness

Iberdrola will typically make summaries of avian and bat pre- and post-construction studies, when complete and reviewed by Iberdrola, available to NGOs, the agencies, and the general public, as a way of demonstrating to stakeholders the transparency of Iberdrola's avian and bat protection plan activities. Iberdrola environmental, operations, and development staff will provide Iberdrola's public affairs staff regular updates on accomplishments under the ABPP.

6.4 Cost Implications

Implementation of this ABPP will incur a number of new costs, beyond the costs of existing environmental due diligence/permitting currently incurred for most projects. These new costs include those associated with the following study/mitigation elements:

- Preconstruction avian surveys: For a 100-MW project, a year of preconstruction point count surveys and raptor nest surveys will typically cost in the range of $50,000 to $100,000.
- Preconstruction bat surveys: For a 100-MW project, a year of preconstruction anabat surveys will typically cost in the range of $50,000 to $75,000. A key constraint may be the availability of anabat monitors and consulting biologists experienced with analyzing bat call data.
- Underground collector lines: Underground collector lines typically cost one to three times the cost of overhead lines with the same capacity.
- Post-construction bird/bat mortality surveys: For a 100-MW project, a year of post-construction mortality surveys will typically cost in the range of range of $80,000 to $200,000.
- Habitat conservation areas: Habitat conservation area costs vary significantly, according to the local land market and the type of land transaction—costs per ace can range from a few hundred dollars to several thousand dollars.
- Avian radar used for operational monitoring and temporary curtailment costs approximately $275,000 (capital cost of equipment) plus the on-going cost of foregone power revenues.
- Post-construction mitigation: Post-construction mitigation costs can also vary substantially, from relatively minor cost items (such as installation of collision avoidance devices on transmission lines and artificial nest platforms) to potentially very expensive mitigation such as operational changes.

Long-term cost savings: In the long-term, compliance with this ABPP should reduce the costs of developing and operating wind projects. Permitting should become easier and less costly, as agencies become familiar with Iberdrola's ABPP and the reduced risk associated with Iberdrola projects. The ABPP should reduce the risk of expensive mitigation actions.

6.5 Implementation Schedule

The sections of this Plan are effective as indicated below:

- **Section 1, Corporate Policy**: Effective on signature.
- **Section 2, Site Suitability Assessment and Project Design**:

  Projects in Development—Effective on all projects, including those acquired from third parties through acquisitions and mergers, with construction beginning after January 1, 2010; good faith efforts will be made to apply to all projects with construction beginning before that date.

  Operating Projects—Effective on all projects with Commercial Operation Date (COD) after January 1, 2009.
- **Section 3, Wildlife Considerations at Operating Projects**: Effective as each project is COD after January 1, 2009.
- **Section 4, Mortality Reduction, Mitigation, Research, and Additional Measures**:

  Effective as post-construction monitoring data become available for each project COD after January 1, 2009.
- **Section 5, Permit Compliance**: Effective immediately for sites currently in development.
- **Section 6, Implementation:**

  Training: Construction training is effective as each new project with a COD after January 1, 2009, comes online; operations training is completed at each project within the first year of operation.

  Quality Control: First audit to be conducted no later than fourth quarter 2009. Subsequently, audits integrated with EHS audit schedule.

For each project, the corporate ABPP will be implemented by preparing a project-specific ABPP, which will outline how the corporate ABPP is being applied to each project. An outline of a project-specific ABPP is provided in Appendix A. The project-specific ABPP will be developed in stages, reviewed and approved by environmental permitting staff, and updated regularly. During project development, the project-specific ABPP will be developed in sufficient detail for Iberdrola environmental staff to review before the project goes through risk review. Before project construction is initiated, the ABPP should be revised to include construction phase monitoring/impact reduction methods. The project-specific ABPP should be maintained at each operating project and reviewed and updated as necessary annually.

SECTION 7

References

Anderson et al. 1999. *Studying Wind Energy/Bird Interactions: A Guidance Document Metrics and Methods for Determining or Monitoring Potential Impacts On Birds At Existing And Proposed Wind Energy Sites*. National Wind Coordinating Committee

Anderson et al. 2003. *The Proper Use of "Studying Wind Energy/Bird Interactions: A Guidance Document*" (addendum to the 1999 document). National Wind Coordinating Committee

Avian Power Line Interaction Committee and U.S. Fish and Wildlife. 2005. *Avian Protection Plan (APP) Guidelines*. April 2005. [Includes example APP sections from APPs prepared by PacifiCorp and Southern California Edison.]

Avian Power Line Interaction Committee. 2006. *Suggested Practices for Avian Protection on Power Lines, the State of the Art in 2006*.

California Department of Fish and Game and California Energy Commission. 2007. *California Guidelines for Reducing Impacts to Birds and Bats from Wind Energy Development*.

Kunz et al. 2007. *Assessing Impacts of Wind-Energy Development on Nocturnally Active Birds and Bats: A Guidance Document*. ***Journal Wildlife Management 71(8): 2249-2486.***

Northwest Wildlife Consultants, Inc. 2008. *Big Horn Wind Power Project Wildlife Fatality Monitoring Study 2006-2007.*

PPM Energy. 2005. "Wind Project Siting and Avian Policy," signed October 26, 2005.

U.S. Fish and Wildlife Service. 2002. Division of Migratory Bird Management, Arlington, Virginia. *Birds of Conservation Concern 2002.* [Online version available at http://www.fws.gov/migratorybirds/reports/bcc2002.pdf]

APPENDIX A

Outline of Project-Specific Avian and Bat Protection Plan

1. Project Environmental Setting
    a. Project location and scope
    b. Habitats present
    c. Results of Federal and state database queries
2. Development Stage Measures
    a. Avian monitoring scope and duration
    b. Bat monitoring scope and duration
    c. Special status species surveys (if applicable)
    d. Other applicable studies (e.g., habitat mapping, bird use surveys)
    e. Avian or bat impact reduction/mitigation measures
3. Operating Project Measures
    a. Summary of results of development stage measures
    b. Post-construction avian or bat mortality monitoring scope and duration
    c. Avian or bat mortality thresholds
    d. Other applicable studies (e.g., displacement studies, special status species studies)
    e. Any on-going impact reduction/mitigation measures

APPENDIX B

Key Federal Wildlife Statutes

The following discussion is quoted from the *Avian Protection Plan Guidelines* (APLIC, 2005).

> The **Migratory Bird Treaty Act** (16 U.S.C. 703-712; MBTA), which is administered by USFWS, is the cornerstone of migratory bird conservation and protection in the United States. The MBTA implements four treaties that provide for international protection of migratory birds. It is a strict liability statute wherein proof of intent is not an element of a taking violation. Wording is clear in that most actions that result in a "taking" or possession (permanent or temporary) of a protected species can be a violation.
>
> Specifically, the MBTA states: "Unless and except as permitted by regulations …it shall be unlawful at any time, by any means, or in any manner to pursue, hunt, take, capture, kill … possess, offer for sale, sell … purchase … ship, export, import …transport or cause to be transported … any migratory bird, any part, nest, or eggs of any such bird … (The Act) prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when specifically authorized by the Department of the Interior." The word "take" is defined as "to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to pursue, hunt, shoot, wound, kill, trap, capture, or collect."
>
> A 1972 amendment to the MBTA resulted in inclusion of bald eagles and other birds of prey in the definition of a migratory bird. The MBTA provides criminal penalties for persons who, by any means or in any manner, pursue, hunt, take, capture, kill, attempt to take, capture, or kill, possess, offer for sale, sell, offer to barter, barter, offer to purchase, purchase, deliver for shipment, ship, export, import, cause to be shipped, exported, or imported, deliver for transportation, transport or cause to be transported, carry or cause to be carried, or receive for shipment, transportation, carriage, or export, any migratory bird. The MBTA offers protection to 836 species of migratory birds, including waterfowl, shorebirds, seabirds, wading birds, raptors, and passerines.
>
> Generally speaking, the MBTA protects all birds occurring in the U.S. in the wild except for house (English) sparrows, European starlings, rock doves (pigeons), any recently listed unprotected species in the Federal Register and nonmigratory upland game birds.
>
> For a complete list of species protected under the MBTA see http://migratorybirds.fws.gov/intrnltr/mbta/mbtintro.html. A violation of the MBTA by an individual can result in a fine of up to $15,000 and/or imprisonment for up to six months for a misdemeanor, and up to $250,000 and/or imprisonment for up to two years for a felony. Fines may be doubled for organizations. Penalties increase greatly for offenses involving commercialization and/or the sale of migratory birds and/or their parts.

Under authority of the **Bald and Golden Eagle Protection Act** (16 U.S.C. 668-668d; BGEPA), bald and golden eagles are afforded additional legal protection. Penalties for the "take" of an eagle may result in a fine of up to $100,000 and/or imprisonment for up to one year. The BGEPA has additional provisions wherein the case of a second or subsequent conviction of the BGEPA, penalties may be imposed of up to $250,000 fine and/or two years imprisonment.[7]

The **Endangered Species Act** (16 U.S.C. 1531-1544; ESA) was passed by Congress in 1973 in recognition that many of our Nation's native plants and animals were in danger of becoming extinct. The purposes of the Act are to protect these endangered and threatened species and to provide a means to conserve their ecosystems. To this end,

Federal agencies are directed to utilize their authorities to conserve listed species, and make sure that their actions do not jeopardize the continued existence of these species.

Federal agencies are encouraged to do the same with respect to "candidate" species which may be listed in the near future. The law is administered by USFWS and the

Commerce Department's National Marine Fisheries Service (NMFS). USFWS has primary responsibility for terrestrial and freshwater organisms, while NMFS has responsibility for marine species such as whales and salmon. These two agencies work with other agencies to plan or modify Federal projects so that they will have minimal impact on listed species and their habitats. Protection of species is also achieved through partnerships with the States, with Federal financial assistance and a system of incentives available to encourage State participation. USFWS also works with private landowners, providing financial and technical assistance for management actions on their lands to benefit both listed and nonlisted species.

Section 9 of the ESA makes it unlawful for a person to "take" a listed species. Take is defined as "…to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct." The Secretary of the Interior, through regulations, defined the term "harm" as "an act which actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering." However, permits for "incidental take" can be obtained from USFWS for take of endangered species which would occur as a result of an otherwise legal activity.

Section 10 of the ESA allows for the development of "Habitat Conservation Plans" for endangered species on private lands or for the maintenance of facilities on private

[7] The Service is finalizing new regulations to permit "take" of bald eagles and golden eagles under BGEPA along with a draft environmental assessment.

In June of 2007, the Service proposed regulations (72 FR 31141, June 5, 2007) to accomplish the following three goals.

1. Extend Eagle Act authorization to take previously authorized under the Endangered Species Act (ESA) as seamlessly as possible.
2. Create a new permit type to authorize take of eagles that is associated with, but not the purpose of, the activity.
3. Create a second new permit type to authorize purposeful take of eagle nests that pose a threat to human or eagle safety.

USFWS split the "proposed rule" into two separate final rulemakings to expedite promulgation of the regulations that "grandfather" previously issued ESA take authorizations under the Eagle Act. Those regulations are categorically excluded from the National Environmental Policy Act (NEPA) requirement and have been finalized. The remainder of the rulemaking is undergoing review under NEPA.

lands. This provision is designed to assist private landowners in incorporating conservation measures for listed species with their land and/or water development plans. Private landowners who develop and implement an approved habitat conservation plan can receive an incidental take permit that allows their development to proceed.

While the Service generally does not authorize incidental take under these Acts, USFWS realizes that some birds may be killed even if all reasonable measures to avoid the take are implemented. USFWS Office of Law Enforcement carries out its mission to protect migratory birds through investigations and enforcement, as well as by fostering relationships with individuals, companies, and industries who seek to minimize their impacts on migratory birds. Unless the take is authorized, it is not possible to absolve individuals, companies, or agencies from liability even if they implement avian mortality avoidance or similar conservation measures. However, the Office of Law Enforcement focuses on those individuals, companies, or agencies that take migratory birds with disregard for their actions and the law, especially when conservation measures have been developed but are not properly implemented.

State Regulations

Individual states may have regulations that protect avian species and Iberdrola must consult with respective State resource agency(s) to determine what regulations apply and if permits are required.

APPENDIX C

Wildlife Reporting and Handling System Form

Wildlife Incident Reporting Form

SECTION NO. 1 - DISCOVERY DATA

Report Date: _____

(Date on which the animal(s) was found and the report completed)

Injury/Fatality

(Circle appropriate choice)

Complete/Dismembered/Feathers

(Circle appropriate description. Complete would indicate a complete and intact carcass or injured animal. Dismembered would indicate a missing or amputated wing or other appendage. Feathers would indicate that only feathers were found.)

Notification to _____ **Date/Time** _____

For Injured Animals, Notify Rehabilitation Center. If the injured animal is found after normal weekday office hours, protect the animal and report it the Rehabilitation Center on the next available working day.

For Fatalities, Notify Wildlife Consultant and/or IBERDROLA RENEWABLES Permitting Department

If during formal monitoring:

- Eagle or protected species carcass call → Wildlife Consultant and IBERDROLA RENEWABLES
- 5 carcasses or more call → Wildlife Consultant and IBERDROLA RENEWABLES
- Non-protected carcass call → Wildlife Consultant

If after formal monitoring:

- Eagle or protected species carcass call → IBERDROLA RENEWABLES
- 5 carcasses or more call → IBERDROLA RENEWABLES
- Non-protected carcass → No call necessary. Just fill out report.

SECTION NO. 2 - LOCATION OF FIND

Structure:

_____

(Include turbine number, Pole number, or other landmark feature if nothing is nearby)

Location Remarks:

_____
_____
_____

(Include closest turbine number, distance from turbine, and general direction [for ex, 50 feet south of turbine A-1]. Include any other details, such as –found on the road, power lines overhead, etc.)

SECTION NO. 3 - WILDLIFE IDENTIFICATION

Species:

_____

(If known, write the species. If not sure, write Unidentified.)

Field marks used:_____

(Identification marks that helped you determine the species of the bird, if you are not sure and have an educated guess, put it here. For example, red tail and white chest)

Number of Photos Attached: _____

(Print digital photos and attach to Wildlife Incident Reporting Form)

SECTION NO. 4 – OBSERVATIONAL DATA

Physical condition:

_____
_____
_____

(Describe the physical condition at the time of discovery, including broken wings, all appendages attached?, all pieces found?, skeleton visible?, infested with anything?, etc)

Estimated Time since Death or Injury (days): _____ (<1, <4, <7, <14, <30, >30)

(Use your best judgment. Carcasses less than a few days old will have round, fluid filled eyes and will lack insect infestation. Carcasses with maggots are probably one to two weeks old. If bones are visible, the carcass is probably over 30 days old. Bones visible indicate over 30 days. Keep in mind that in cold weather carcasses will look fresh for much longer than in warmer weather.)

Other Field Notes:

_____

(Note anything else relevant to incident such as presence of other fatalities in the area, evidence of electrocution details, extreme weather conditions, or other details).

Ultimate Disposition of the Bird:

_____

(Taken to rehab center, Left in the field, or Placed in avian freezer)

SECTION NO. 5 - RESPONDENT

Respondent Name: _____ Date_____

Signature: _____Date_____

All Wildlife Incident Reporting Forms should be sent to IBERDROLA RENEWABLES Permitting Department at the end of each calendar year.

APPENDIX D

U.S. Fish and Wildlife Service Regional Office Contacts

The following are USFWS regional permits offices:

Region 1
U.S. Fish and Wildlife Service
Migratory Bird Permit Office/ARW
Eastside Federal Complex
911 N.E. 11th Avenue
Portland, Oregon 97232
(503) 872-2715

Region 2
U.S. Fish and Wildlife Service
Migratory Bird Permit Office
Room 5504
P.O. Box 1306
Albuquerque, New Mexico 87103
(505) 248-7882

Region 3
U.S. Fish and Wildlife Service
Migratory Bird Permit Office
1 Federal Drive, Box 45
Ft. Snelling, Minnesota 55111
(612) 713-5436

Region 4
U.S. Fish and Wildlife Service
Permit Section
1875 Century Boulevard
Atlanta, Georgia 30345
(404) 679-7051

Region 5
U.S. Fish and Wildlife Service
Migratory Bird Permit Office
300 Westgate Center Drive
Hadley, Massachusetts 01035
(413) 253-8643

Region 6
U.S. Fish and Wildlife Service
Migratory Bird Permit Office

P.O. Box 25486, DFC (60130)
Denver, Colorado 80225
(303) 236-8145

Region 7
U.S. Fish and Wildlife Service
Migratory Bird Permit Office
1011 E. Tutor Road, Room 155
Anchorage, Alaska 99501
(907) 786-3693

APPENDIX E

Regional Wildlife Rehabilitation Centers

[To be added]