

**DRAFT OTHER MODELS TEMPLATE**

| Other Regulatory Model                 | Description of Model Element                              | Explanation of Model Element Use   | Application to Wind Turbine Guidelines  |
|--|---|--|---|
| <b>Clean Air Act New Source Review</b> | Central reporting of air pollution control performance    | EPA maintains a nationwide database of permitting decisions that includes detailed information regarding the “best available control technology” that has been installed on controlled sources                                 | We recommend the establishment of a repository (public or privately-funded) that is searchable and lists the best management practices, technological innovation, and siting practices to which public officials and project proponents may refer in designing and approving/taking no action on projects.  |
|  | Case-by-case analysis of proposed emission controls       | A state permitting authority reviews each project on a case-by-case basis, applying the emission controls that are best suited to the particular source, taking into account local concerns and issues                         | We recommend the adoption of a case-by-case project review process that—instead applying a fixed set of best management practices—uses a clearly-defined set of project review parameters to allow for the implementation of constantly evolving best management practices in a technology-forcing aspect that will drive improvements in wind development. |
|  | Clearly defined process of establishing emission controls | EPA has published a permitting manual so that federal, state, and local permitting authorities apply the same rules consistently   | We recommend the preparation of a dispositive text or manual to which all interested parties can turn for the guidance on the wildlife interaction elements of siting, constructing, and operating a wind facility.   |
|  | Permit shield   | Once BACT is selected, even though technology improves, the older facility is still entitled to operate under old technology. The strong technology-forcing function of the case-by-case review is of prospective application. | We recommend that any guidelines-based recommendation include the provision that once a project proponent has constructed a wind facility consistent with the case-by-case guidelines, that facility secures protection from enforcement for non-intentional wildlife impacts.  |
|  | Technical feasibility                                     | The case-by-case review carefully reviews whether an air pollution control strategy will actually work to reduce air pollution at the proposed source.   | We recommend the adoption of the position and explanation in a guidance manual that—consistent with a case-by-case approach—it may be that some best management practices validly used at other facilities are simply not technically feasible at a particular proposed facility.   |

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|                              | Economic feasibility                 | Even if the control technology is technically feasible, irrationally expensive controls are precluded. EPA uses a “knee of the curve” statistical analysis that cuts off additional costs on a \$/ton emissions reduced when the incremental cost of the next most-expensive control falls out of line with other costs. | We recommend the adoption of the position and explanation in a guidance manual that—even if an approach is technically feasible—best management practices that are incrementally cost ineffective will not be required. |
| <b>Avian Protection Plan</b> | Corporate Policy                     | In APP, developer agrees to develop and commit to implement specific company policy to address wind/wildlife issues  | APP provides pragmatic mechanism to ensure developers actually use and implement voluntary national guidelines  |
|                              | Permit Compliance                    | In APP, developer identifies and implements a process to ensure compliance with permitting requirements and conditions related to wildlife   | APP provides pragmatic mechanism to ensure developers obtain and comply with relevant permits   |
|                              | Site Selection and Design Practices  | In APP, developer agrees to implement best siting practices as identified by states and USFWS guidance   | APP provides pragmatic mechanism to ensure developers perform macro and micro siting assessment and implement best practices as identified by voluntary national guidance   |
|                              | Consultation and Information Sharing | In APP, developer agrees to share relevant site and study data and to work cooperatively with USFWS  | APP ensures commitment by developer to work with USFWS early before siting decisions are made and to share relevant non-proprietary information   |
|                              | Avian Reporting System               | In APP, developer commits to establish mortality reporting system  | APP ensures study & monitoring data are reported to USFWS [and states] in compatible format to advance adaptive management, learning, and site/region comparisons   |
|                              | Risk Assessment Method               | In APP, developer agrees to implement a rigorous method for evaluating avian risks and to use a risk assessment methodology in making siting decisions   | APP provides mechanism to ensure developers use risk assessments and advances development of risk evaluation approaches   |
|                              | Mortality Reduction Measures         | In APP, developer agrees to use the results of initial risk assessment to revise siting decisions and identify mitigation upfront.   | APP ensures that there is a commitment from developers to use pre-assessment studies to avoid high risk sites and to identify appropriate mitigation upfront  |

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|   | Avian Enhancement Options               | In APP, developer agrees to develop actions to provide a net benefit to habitat and species   | APP ensures that developers pursue innovative actions that go beyond site-specific mitigation and the recommendation of the national guideline provisions to protect migratory birds and bats |
|   | Quality Control and Adaptive Management | In APP, developer agrees to monitor its operations and other wind/wildlife learning continually to improve performance, mitigation, study protocols and methodologies to lower wind-related risks at existing and new sites | APP formalizes and implements adaptive management approach in wind/wildlife context   |
|   | Identification of Key Resources         | In APP, developer identifies key resources and personnel to address wind/wildlife-related issues  | APP ensures company accountability and provides for rapid response capability; also connects company personnel with experts in the field to ensure education and communication                |
| <b>Clean Water Act Stormwater Program</b> | BMPs                                    | Uses a series of BMPs that are standardized   | Could be replicated in some locations   |
|   | Notification Requirements               | Requires notification to EPA in a timely manner   | Minimal value because of site variations  |
|   | Economic benefits                       | Provided a project complies with BMPs, approvals are usually issued quickly   | Uncertain due to various site differences   |
| <b>Clean Water Act Section 316(b)</b>     | Site variability                        | Agencies focus on site-specific considerations  | Allows for unique habitat evaluations   |
|   | Complications                           | Currently under challenge in the Supreme Court  | Uncertain, based on upcoming Supreme Court decision   |
| <b>National Environmental Policy Act</b>  | Environmental assessment                | A (relatively) brief summary of the expected environmental impacts of a project.  | For wind, would include wildlife, historical resources, noise, etc. impacts in a public document.   |
|   | Environmental impact statement          | A full analysis of the expected environmental impacts of a project.   | For wind, would include the above impacts, and perhaps an alternatives analysis.  |

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| <b>Clean Water Act/Clean Air Act<br/>Categorical<br/>Technology<br/>Standards</b> | Categorical standards        | Provide basic requirements for categories of water and air pollution. May be increased in stringency during case-by-case permitting. | We recommend that the guidelines include some basic best management practices that would be used at all developments, to which may be added additional best practices based on a case-by-case approach. |