Meyer Glitzenstein & Crystal 1601 Connecticut Avenue, N.W. Suite 700 Washington, D.C. 20009-1056

Katherine A. Meyer Eric R. Glitzenstein Howard M. Crystal William S. Eubanks II Jessica Almy Telephone (202) 588-5206 Fax (202) 588-5049 meyerglitz@meyerglitz.com

October 1, 2012

VIA E-RULEMAKING PORTAL AND FIRST CLASS MAIL

Public Comments Processing Attn: FWS-R5-ES-2012-0032 Division of Policy and Directives Management U.S. Fish and Wildlife Service 4401 N. Fairfax Drive MS 2042-PDM Arlington, VA 22203

Re: Public Comments Concerning The Draft Environmental Assessment, Habitat Conservation Plan, And Application For An Incidental Take Permit By Criterion Power Partners, LLC (FWS–R5–ES–2012–0032)

We submit the following public comments on behalf of a coalition of conservation organizations that includes Save Western Maryland, American Bird Conservancy, Friends of Blackwater, Allegheny Highlands Alliance, Friends of Beautiful Pendleton County, Laurel Mountain Preservation Association, Allegheny Front Alliance, and West Virginia Highlands Conservancy. These comments are in response to the U.S. Fish and Wildlife Service's ("FWS" or "Service") Draft Environmental Assessment ("Draft EA"), Criterion Power Partner, LLC's ("Criterion") Habitat Conservation Plan ("HCP"), and Criterion's application for an Incidental Take Permit ("ITP application"), all of which the Service requested public comment on in the Federal Register. *See* 77 Fed. Reg. 45368 (July 31, 2012).

We recognize the potential value and benefit of renewable energy in mitigating the anticipated effects of climate change. We note, however, that any renewable energy project – or any energy project for that matter – must be sited, constructed, and operated in a manner that is environmentally sustainable to obtain the purported benefits of that project. This includes full compliance with all federal environmental laws, including but not limited to the Endangered Species Act ("ESA"), 16 U.S.C. §§ 1531-1544, National Environmental Policy Act ("NEPA"), 42 U.S.C. §§ 4321-4370f, the Migratory Bird Treaty Act ("MBTA"), 16 U.S.C. §§ 703-712, and the Bald and Golden Eagle Protection Act ("BGEPA"), 16 U.S.C. §§ 668-668c.

Therefore, while we applaud the Service and Criterion for taking certain steps in an effort to make this wind project more environmentally sustainable, we raise various concerns with respect to the Service's and Criterion's compliance with federal law, and request that the Service and company address these concerns before issuance of any ITP. The four primary concerns are: 1) that the HCP is not based on the best available science, in violation of the ESA; 2) that preparation of an environmental assessment is inadequate and a full environmental impact statement is warranted under NEPA; 3) that the Service's Draft EA does not adequately analyze alternatives, in violation of NEPA; and 4) that without appropriate authorization, Criterion will violate the MBTA and BGEPA, leaving FWS vulnerable to litigation.

These concerns are magnified here because the Service's issuance of an ITP, should the agency ultimately grant Criterion's application, has immense precedential value in terms of the legal and regulatory mandates that apply to wind companies seeking ITPs, considering that this project might very well be the first wind energy project in the continental United States to receive a permit of this kind. We will return to these concerns after first providing a legal and factual background pertinent to the concerns identified below.

STATUTORY AND REGULATORY FRAMEWORK

A. Endangered Species Act

Congress enacted the ESA to ensure that "the ecosystems upon which endangered and threatened species depend [are] conserved, [and] to provide a program for the conservation of such endangered species and threatened species." 16 U.S.C. § 1531. The ESA reflects "an explicit congressional decision to afford first priority to the declared national policy of saving endangered species." *Tenn. Valley Auth. v. Hill*, 437 U.S. 153, 185 (1978).

Section 9 of the ESA prohibits any "person" from "taking" any member of an endangered species. 16 U.S.C. § 1538(a). The term "take" is defined broadly to include "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect." *Id.* § 1532(19). The Service has further defined "harass" to include "an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns, including breeding, feeding, or sheltering." 50 C.F.R. § 17.3. In addition, "harm" is defined to "include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding." *Id.*

Section 10 of the ESA provides a limited exception to the otherwise strict prohibition against the taking of an endangered species. Pursuant to section 10, the Service may issue a permit allowing the taking of a listed species where such taking is "incidental to, and not the purpose of, carrying out of an otherwise lawful activity." 16 U.S.C. § 1539(a)(1)(B). An applicant seeking an ITP under section 10 of the ESA must submit a detailed "conservation plan," referred to as an HCP, describing, among other things: (1) the impacts of the proposed taking; (2) procedures the applicant will use to mitigate, monitor, and minimize such impacts; (3) an explanation of why there are no feasible alternatives to the proposed taking; and (4) information establishing that sufficient funding exists to implement the plan. *Id*.

§ 1539(a)(2)(A); 50 C.F.R. § 17.22. Before granting an ITP, the Service must find that the HCP ensures that (i) the taking authorized by the ITP will be incidental; (ii) the applicant will, to the maximum extent practicable, minimize and mitigate the impacts of such taking; (iii) the applicant will ensure that adequate funding for the plan will be provided; (iv) the taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild. 16 U.S.C. § 1539(a)(2)(B).

B. <u>National Environmental Policy Act</u>

Congress created NEPA more than four decades ago "[t]o declare a national policy which will encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment" 42 U.S.C. § 4321. In light of this mandate, the Supreme Court has reasoned that NEPA is "intended to reduce or eliminate environmental damage and to promote 'the understanding of the ecological systems and natural resources important to' the United States." *Dep't of Transp. v. Pub. Citizen*, 541 U.S. 752, 756 (2004) (quoting 42 U.S.C. § 4321).

In achieving NEPA's substantive goals, Congress created two specific mechanisms whereby federal agencies must evaluate the environmental and related impacts of a particular federal action - an EA and an environmental impact statement ("EIS"). See 42 U.S.C. § 4332(c). These procedural mechanisms are designed to inject environmental considerations "in the agency decisionmaking process itself," and to "help public officials make decisions that are based on understanding of environmental consequences, and take actions that protect, restore, and enhance the environment." Pub. Citizen, 541 U.S. at 768-69 (emphasis added) (quoting 40 C.F.R. § 1500.1(c)). Therefore, "NEPA's core focus [is] on improving agency decisionmaking," Pub. Citizen, 541 U.S. at 769 n.2, and specifically on ensuring that agencies take a "hard look" at potential environmental impacts and environmentally enhancing alternatives "as part of the agency's process of deciding whether to pursue a particular federal action." Baltimore Gas and Elec. Co. v. Natural Res. Def. Council, 462 U.S. 87, 100 (1983). The alternatives analysis "is the heart" of an EIS or EA. 40 C.F.R. § 1502.14. NEPA's implementing regulations require that the decisionmaking agency "present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decisionmaker and the public." Id.

An EIS must be prepared by an agency for every "major Federal action significantly affecting the quality of the human environment." 42 U.S.C. § 4332(c). Under the Council on Environmental Quality's ("CEQ") regulations that implement NEPA, "significance" requires consideration of both context and intensity. "Context" considerations include the affected region, interests and locality, varying with the setting of the action, and include both short and long-term effects. "Intensity" refers to the severity of impact, including impacts that may be both beneficial and adverse; unique characteristics of the geographic area, such as proximity to wetlands, wild and scenic rivers, or ecologically critical areas; the degree to which the effects on the quality of the human environment are likely to be highly controversial; the degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration; whether the action is related to other actions with individually insignificant but cumulatively significant impacts; the degree to which the

action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act; and whether the action threatens a violation of federal law imposed for the protection of the environment. *See* 40 C.F.R. § 1508.27.

Where a significant environmental impact is not expected, the agency must still prepare an EA and a Finding of No Significant Impact ("FONSI"). *Id.* §§ 1508.9, 1501.3.

C. <u>Migratory Bird Treaty Act</u>

The MBTA strictly prohibits killing listed birds without authorization from the Interior Department. Enacted to fulfill the United States' treaty obligations, the MBTA provides that "[u]nless and except as permitted by regulations made as hereinafter provided in this subchapter, it shall be unlawful *at any time, by any means or in any manner*, to pursue, hunt, take, capture, kill, attempt to take, capture, or kill . . . any migratory bird." 16 U.S.C. § 703(a) (emphasis added). The Secretary is authorized to permit the killing of birds otherwise protected by the MBTA when doing so would be compatible with migratory bird conventions. *Id.* § 704(a).

Where agencies authorize a project to proceed without first obtaining authorization from the Interior Department to kill migratory birds, the agency's actions are unlawful. *See Humane Soc'y of the U.S. v. Glickman*, 217 F.3d 882, 884-88 (D.C. Cir. 2000) (holding that federal agencies must obtain authorization from the Department of the Interior before they kill birds protected by the MBT A, or permit state agencies to do so); *see also City of Sausalito* v. *O'Neill*, 386 F.3d 1186, 1204 (9th Cir. 2004) (holding that "anyone who is 'adversely affected or aggrieved' by an agency action alleged to have violated the MBTA has standing to seek judicial review of that action"). The violation exists even where the activity is not intended to kill birds. *See United States* v. *Moon Lake Elec. Ass 'n*, 45 F. Supp. 2d 1070 (D. Colo. 1999) (holding that the MBTA prohibits the unintentional killing of protected birds by power lines); *United States* v. *Corbin Farm Serv.*, 444 F. Supp. 510, 532-36 (E.D. Cal. 1978) (holding that the MBTA prohibits the unintentional killing of protected poisoning).

D. Bald And Golden Eagle Protection Act

BGEPA strictly prohibits taking any bald or golden eagles without appropriate authorization from the Interior Department, 16 U.S.C. § 668, and "taking" is defined broadly under the Act to encompass all activities that "pursue, shoot, shoot at, poison, *wound, kill*, capture, trap, collect, molest or *disturb*" eagles. *Id.* § 668(c) (emphases added). The Service has defined "disturb" as "to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior." 50 C.F.R. § 22.3.

As federal courts have recognized, "[a] permit to take a bald or golden eagle can only be issued if the FWS determines that the kill is 'compatible with the [eagle's] preservation . . . [and] only [after] the Director of FWS has the authority to grant such a permit." *United States* v. *Jim*, 888 F. Supp. 1058, 1060-61 (D. Or. 1995) (citations omitted).

E. Land-Based Wind Energy Guidelines

In March 2012, the Service issued final land-based wind energy guidelines ("Guidelines"), which are available at <u>http://www.fws.gov/windenergy/docs/WEG_final.pdf</u>. Those voluntary guidelines purport to help wind energy project developers avoid, minimize, and mitigate impacts of land-based wind projects on wildlife and their habitats, by using a tiered approach to identify sites with low risk to wildlife, and to assess, mitigate, and monitor any adverse effects of wind energy projects on wildlife and their habitats. The guidelines are explicit in stating that "[a]dherence to the Guidelines is voluntary and *does not relieve any individual, company, or agency of the responsibility to comply with laws and regulations.*" *Id.* at vii. However, the Service has stated that if a violation occurs the Service "will consider a developer's documented efforts to communicate with the Service and adhere to the Guidelines" when deciding whether, and how, to enforce the laws under the Service's jurisdiction. *Id.*

With respect to migratory birds and raptors, the Guidelines state that "it is not possible to absolve individuals or companies from MBTA or BGEPA liability." Guidelines at 6. Nevertheless, the Guidelines state that "the Office of Law Enforcement focuses its resources on investigating and prosecuting those who take migratory birds without identifying and implementing reasonable and effective measures to avoid the take. The Service will regard a developer's or operator's adherence to these Guidelines, including communication with the Service, as appropriate means of identifying and implementing reasonable and effective measures to avoid the take of species protected under the MBTA and BGEPA." *Id.* With respect to eagles, the Guidelines state that if information "identif[ies] a potential to take eagles, developers should consider developing an ECP and, if necessary, apply for a take permit." *Id.* n.3.

FACTUAL BACKGROUND

A. <u>The Criterion Wind Project</u>

Criterion, a wholly owned subsidiary of Exelon Corporation, owns and operates the project. The Project is located on 117 acres of private land along nine miles of ridgeline in Garrett County, Maryland, and consists of 28 fully constructed industrial-scale wind turbines and associated facilities described in the Draft EA. The turbines are located along the ridge of Backbone Mountain, extending northeast approximately 9 miles from Allegheny Heights to just south of Wild Turkey Rock. The ridgeline maintains an elevation of approximately 3,200 feet above sea level. There are at least eight operating or proposed projects within 40 miles of the Criterion project.

The project has been constructed and in operation since December 2010. In response to a lawsuit brought by Save Western Maryland and other interested parties, Criterion agreed to seek an ITP to comply with the ESA. *See Save Western Maryland v. Constellation Green Energy, LLC*, Civ. No. 10-3565 (D. Md.).

During its first full year of operation (2011), Criterion conducted daily monitoring of all 28 turbines for bat and bird mortality between April 5 and November 15. At least 706 bats were killed by the project (25.2 bats per turbine), although no Indiana bat deaths were confirmed. Adjusting for searcher efficiency and scavenging, Criterion estimates that, in 2011, the project killed approximately 1,093 bats (39.03 bats per turbine) in that one year alone.

In addition, according to the company's data, there were 262 confirmed bird deaths in 2011 as a result of the project (9.35 birds per turbine). Adjusting for searcher efficiency, scavenging, and search area correction, Criterion estimates that, in 2011, the project killed 448 birds (16.01 birds per turbine), which is described in the draft EA as the highest per-turbine bird mortality ever estimated at a studied wind project in the United States and as the highest per-turbine bird mortality ever documented in North America. Draft EA at 4-19 and 5-22.¹

Based on the 2011 data, Criterion estimates that the project, without minimization and mitigation measures, would result in approximately 17,927 bat fatalities (with a possible range from 13,238 - 26,477 deaths). Criterion further estimates approximately 8,960 bird fatalities during the 20-year operational life of the project – each of which is a distinct violation of the MBTA, a strict liability statute that prohibits the killing of birds even when the killing is unintentional.² In addition to migratory birds in general, bald and golden eagles have been routinely seen on and near Backbone Mountain where the project is located, and according to the Service, "it is expected that Bald and Golden Eagles would pass by as they use the ridgeline for migration." Draft EA at 5-26.

B. <u>The ITP, HCP, and Draft EA</u>

On December 2, 2011, Criterion submitted an ITP application to the Service pursuant to section 10 of the ESA seeking take authorization for up to fourteen endangered Indiana bats as a result of the project's wind turbine operations over twenty-one years. With that application, Criterion submitted an HCP outlining the company's proposed minimization and mitigation measures to reduce harm to Indiana bats.

¹ The Draft EA suggests that there was a "very high mortality" event when the nacelle lights for two turbines were left on for a period in the fall. Excluding that event, the bird fatality estimate for 2011 was 308 birds (11.0 birds per turbine), which is still very high compared to studies at other wind projects. Oddly, the project's Avian Protection Plan ("APP") does not mention Criterion's high mortality, and instead gives the impression that the project is expected to have low mortality, *e.g.*, "Avian mortality from collision with wind turbines occurs to some extent at all wind projects, but mortality rates at wind projects in the Appalachian Mountain area is low compared to that in other areas, especially raptor mortality which can be high in some western states." APP at 4. The APP's discussion of potential risk should be revised to include the mortality data obtained to date from the Criterion project; the on-site avian mortality data shows the facility has already produced higher avian mortality than nearby facilities.

 $^{^{2}}$ The 8,960 estimate is based on a year of post-construction mortality data and is nearly double the mortality prediction that was based on other wind power plants in the region, showing how much deadlier to birds the Criterion project has already proven to be. Draft EA at 5-22.

In particular, Criterion proposes to adjust the turbine blade pitch at wind speeds below 5.0 m/s to minimize rotation of the rotor from sunset to sunrise during the period from July 15 to October 15 each year, which the scientific literature indicates will reduce bat mortality due to turbine operations by approximately 44 to 78%, meaning that approximately 9,100 bats will be killed (with a possible range from 6,720 - 13,440). Criterion also proposed to implement a monitoring regime in which the company will conduct two years of post-ITP monitoring using weekly turbine searches of at least 50% of the project's turbines to gather bat and bird fatality data (Years 2 and 3 of full operation, since Year 1 was pre-ITP). Criterion will also conduct follow-up compliance monitoring in Years 8, 13, and 18. Finally, the company proposes certain off-site mitigation measures, such as cave gating projects, to provide benefits to bats.

In July 2012, the Service completed its Draft EA. In the Draft EA, the Service explained that it is taking a "mitigated FONSI" approach because of its view that an EIS is not necessary where "an agency develops and makes a commitment to implement mitigation measures to avoid, minimize, rectify, reduce, or compensate for significant environmental impacts." Draft EA at 1-4. Thus, as the Service stated, "the basis for not preparing the EIS is the commitment to perform those mitigation measures identified as necessary to reduce the environmental impacts of the proposed action to a point or level where they are determined to no longer be significant as part of the approved action." *Id.*

Despite finding that the proposed action will not result in significant environmental impacts, the Draft EA's alternatives analysis included only one alternative that could measurably reduce bird mortality at this project site (*i.e.*, turbine curtailment) – Alternative 3 – but rejected this alternative. Indeed, the no-action alternative and the proposed action have the same number of bird mortalities expected, *see* Draft EA at 5-4, since the Avian Protection Plan (which would be implemented under the proposed action) does nothing to reduce the significant *turbine operation* impacts to birds, and instead simply commits to leaving lights off and educating hunters. *See* Avian Protection Plan at 21.³

DISCUSSION – SPECIFIC FAILURES OF THE HCP AND DRAFT EA

A. Criterion Has Failed To Demonstrate That Its HCP Is Based On <u>The Best Available Scientific Evidence.</u>

In Year 1, Criterion monitored for bat and bird mortality despite having not yet obtained an ITP. In its HCP, Criterion proposes to conduct only two consecutive years of post-ITP monitoring of bat and bird mortality immediately after obtaining the ITP (Years 2 and 3), and proposes to conduct follow-up monitoring in Years 8, 13, and 18. While the monitoring in Year 1 was conducted on all 28 turbines (100%) on a daily basis, all future monitoring would be conducted on 14 turbines (50%) on a weekly basis.

³ Minimizing night lighting is something that all wind energy facilities are already expected to do if they want to receive law enforcement consideration. It is included in the Best Management Practices of the voluntary Guidelines. More should be required of the Criterion project because it has a much higher avian mortality rate than other wind facilities. At minimum, turbines should be curtailed during peak migration in low-visibility, adverse weather conditions.

As explained by the attached declaration from leading bat biologist Dr. Lynn Robbins, the best available scientific evidence supports at least three years of *post-ITP* monitoring:

While the one year of post-construction, pre-ITP data already gathered by the company (gathered between April 1 and November 15, 2011) will be helpful in creating a baseline of bat (and bird) mortality in order to compare that baseline to the post-ITP mortality data, it is my professional opinion that a minimum of three years of *post-ITP* monitoring should be required here since that is invariably the minimum amount of post-ITP monitoring typically required by the Service as part of the ITP process. Particularly where a rare species such as the endangered Indiana bat is involved, three years of post-ITP data would provide a much more accurate reflection of the effects of the project on Indiana bats (and other species), and thus the consequences to larger populations or recovery units. Therefore, it is my opinion that the best available scientific evidence, including as applied at other wind energy facilities seeking an ITP, compels a minimum of three consecutive years of post-ITP monitoring.

See Exhibit 1 (Declaration of Dr. Lynn W. Robbins), ¶ 3a. Similarly, in terms of search intervals and intensity, Dr. Robbins explains that the best available evidence supports daily searches of all 28 turbines:

As to the search intervals and intensity of searches in years 2 and 3 (as well as Years 8, 13, and 18), Criterion plans to search approximately 50% of the turbines on a weekly basis, although Criterion searched 100% of the turbines on a daily basis in Year 1 – before any ITP was issued and any feathering of blades was implemented. From a scientific standpoint, it would be far more biologically defensible to search 100% of turbines on a daily basis in Years 2 and 3, considering that the Indiana bat is a rare species. Moreover, without comparative search methodologies between pre-ITP data collection (Year 1) and post-ITP data collection (Years 2 and 3), it will be difficult, if not impossible, to draw accurate conclusions from the effect of implementing the ITP's minimization measures. Therefore, it is my opinion that the same search intervals and intensity from Year 1 be carried through to, at minimum, Years 2 and 3 (and it is my opinion that if at all practicable, it should be carried through to Years 8, 13, and 18).

Id., ¶ 3b. Accordingly, in light of that declaration and consistent with standard scientific protocol for achieving the most biologically defensible results, the Service and the company should endeavor for at least three consecutive years of immediate post-ITP monitoring, and conduct such monitoring on all 28 turbines on a daily basis from April 1 to November 15.

Additionally, we note that the HCP and Draft EA rely on the fact that three Indiana bat deaths have been confirmed from wind energy, only one of which occurred in the eastern United States. However, a fourth confirmed fatality was recently documented, and indeed it was found at the AES Laurel Mountain site, which is located approximately 40 miles from the Criterion project and has many of the same physical attributes as the Criterion project site. Thus, this

highly pertinent, new information must be analyzed in the final NEPA document and HCP since, at minimum, it will invariably influence the accuracy of any assessment of the likelihood of take at this site based on a recently confirmed Indiana bat death at a nearby and similarly situated site.

Finally, Criterion has not demonstrated, as it must, that the measures identified in the HCP (primarily implementation of a cut-in speed of 5.0 meters per second during nighttime hours from July 15 to October 15 each year) would minimize take to the "maximum extent practicable." 16 U.S.C. § 1539(a)(2)(B)(ii). As the Service has indicated in its guidance for wind energy companies seeking ITPs, "[a]n applicant must first minimize to the maximum extent practicable" before implementing mitigation to compensate for takes that cannot be avoided.⁴

Here, instead, Criterion proposed to implement a cut-in speed regime of 5.0 meters per second, and only during nights between July 15 and October 15, and then simply to tack on certain off-site mitigation measures to address take that cannot be avoided. Neither the company nor the Service has considered at all whether higher cut-in speeds (*e.g.*, 6.0 or 6.5 meters per second) will kill fewer bats, and whether such a cut-in speed would be practicable under the circumstances, in light of various leading scientific studies that suggest that there are significant and measurable bat mortality benefits between cut-in speeds of 5.0 meters per second and cut-in speeds of 6.5 meters per second.⁵

Indeed, the exact approach proposed here by Criterion (5.0 m/s cut-in speed only during the fall season) was expressly *rejected* by the Service at the Buckeye wind project in Ohio – which is also currently seeking an ITP for Indiana bats – in favor of an approach whereby the Buckeye project will implement a cut-in speed of 5.0 meters per second at nights in the spring season, a range of cut-in speeds from 5.5 to 6.0 meters per second in the summer season, and a range of cut-in speeds from 5.75 to 6.0 meters per second in the fall season. *See* Buckeye Wind HCP, available at http://www.fws.gov/midwest/endangered/permits/hcp/buckeyewind/
pdf/BuckeyeDraftHCP01June2012.pdf. Therefore, because other wind projects seeking the same permit as Criterion have demonstrated that greater minimization measures to protect Indiana bats while still allowing for profitable wind generation are in fact practicable, as that term is defined by the ESA, Criterion must, at minimum, consider scenarios in its HCP that will result in greater protection to Indiana bats here.

⁴ *See* FWS, Indiana Bat Section 7 and 10 Guidance for Wind Energy Projects, at 47 (Oct. 26, 2011), available at <u>http://www.fws.gov/midwest/endangered/mammals/inba/pdf/inbaS7and10</u> WindGuidanceFinal26Oct2011.pdf.

⁵ See Arnett, et al., Effectiveness of changing wind turbine cut-in speed to reduce bat fatalities at wind facilities. A final report submitted to the Bats and Wind Energy Cooperative (May 2010); Good et al., Bat Monitoring Studies at the Fowler Ridge Wind Energy Facility, Benton County, Indiana, April 13 – October 15, 2010, A report prepared for Fowler Ridge Wind Farm (Jan. 28, 2011); see also Good et al., Bat Monitoring Studies at the Fowles at the Fowler Ridge Wind Farm, Benton County, Indiana, April 1 – October 31, 2011, A report prepared for Fowler Ridge Wind Farm (Jan. 31, 2012).

Unless and until these issues are resolved, the HCP and Draft EA fail to rely on the best available scientific evidence and thus do not satisfy the criteria for issuance under section 10 of the ESA.

B. <u>The Service Is Required To Prepare An EIS Here.</u>

The Service's decision to prepare an EA here, in lieu of an EIS, is not supported by NEPA or its implementing regulations, nor is it consistent with the agency's own practice in issuing ITPs for other wind energy facilities.

In light of the many significant environmental impacts that will result from this project – *even with all minimization and mitigation measures proposed by the HCP* – an EIS must be completed here to fulfill the Service's NEPA obligations. Indeed, almost all of the NEPA "significance" factors are triggered by the proposed action, although the presence of only one significance factor is enough to require preparation of an EIS. *Pub. Citizen v. Dept. of Transp.*, 316 F.3d 1002, 1023 (9th Cir. 2003) ("If the agency's action is environmentally 'significant' according to any of these criteria [set forth in 40 C.F.R. 1508.27], then DOT erred in failing to prepare an EIS."); *Humane Soc'y of the U.S. v. Johanns*, 520 F. Supp. 2d 8, 20 (D.D.C. 2007) (explaining that "courts have found that the presence of one or more of [the CEQ significance] factors should result in an agency decision to prepare an EIS") (citations omitted); *Fund For Animals* v. *Norton*, 281 F. Supp. 2d 209, 218 (D.D.C. 2003) (same). The following significant factors are triggered here, thus requiring preparation of an EIS:

- <u>40 C.F.R. § 1508.27(b)(2)</u> This factor addresses "[t]he degree to which the proposed action affects public health or safety." Recent information suggests a correlation between wind turbine operation (and consequent long-term localized bat mortality) and increased risk of West Nile Virus, carried by mosquitoes, due to reduced numbers of predators (bats) to eat mosquitoes. For example, in southwest Minnesota, there have been a disproportionate number of West Nile Virus cases compared to elsewhere in the state and region, *see* <u>http://diseasemaps.usgs.gov/wnv_us_human.html</u>, despite the low population density there (approximately 2 people per square mile). At the same time, southwest Minnesota has had many operating wind energy projects for years.⁶ Therefore, at minimum, the Service should analyze the potential long-term public health impacts of the Criterion project, in conjunction with other projects in the range of the bat species affected by the project, with respect to mosquito-borne and other insect-borne illnesses.
- <u>40 C.F.R. § 1508.27(b)(3)</u> This factor is triggered where the proposed action will affect "[u]nique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically

⁶ See http://www.google.com/imgres?imgurl=http://www.bls.gov/green/wind_energy/map_ 1_revise.png&imgrefurl=http://www.bls.gov/green/wind_energy/&h=670&w=720&sz=67&tbni d=stStSUv0vVroMM:&tbnh=95&tbnw=102&zoom=1&usg=__PmwmupQuWpZFrRLvVhQhz AhAtW4=&docid=SQinLCD30jId4M&hl=en&sa=X&ei=YUs2UNj5LOugyAHll4GABg&ved= 0CIcBEPUBMAQ&dur=101

critical areas." This wind project is indisputably expected to adversely affect nearby farmlands, HCP at 6; Draft EA at 4-1, in particular by killing approximately 9,100 bats over twenty years which are the primary predators of agricultural pests. Thus, because "prime farmlands" will be impacted by the project's significant bat mortality, this factor is triggered.⁷

- <u>40 C.F.R. § 1508.27(b)(4)</u> This factor addresses "[t]he degree to which the effects on the quality of the human environment are likely to be highly controversial." Here, as exemplified by the filing of federal litigation in 2010 over the wildlife impacts of this project, and as demonstrated by the expected mortality of 9,100 bats and 8,960 birds by this project, the Service's authorization of this project, via an ITP and accompanying HCP, is "highly controversial" as that phrase is defined under NEPA. Further, as exemplified by the Robbins Declaration, bat experts believe that the measures currently being adopted are inadequate to address bat impacts, thus rendering the project more controversial.
- <u>40 C.F.R. § 1508.27(b)(5)</u> This factor addresses "[t]he degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks." Several of the bats species that will be adversely impacted by this project, including the endangered Indiana bat, are susceptible to white-nose syndrome ("WNS"). The Service conceded in the Draft EA that it is "unknown what the overall impact of WNS will be on states where the disease has been confirmed" but asserted that "[i]f the general trend seen in the northeast continues, the effects on population numbers could be significant." Draft EA at 6-5. In the face of such uncertainty concerning population dynamics as a result of WNS, which undoubtedly bears on the magnitude of effects of this and other wind projects in the region causing additive mortality on top of the WNS baseline, there are uncertain or unknown risks as that phrase is defined under NEPA.
- <u>40 C.F.R. § 1508.27(b)(6)</u> This factor addresses "[t]he degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration." Along with two other projects currently being considered by the Service for ITP issuance,⁸ the Criterion project will serve as the first-ever ITP for a wind energy facility in the continental United States. Thus, this ITP has immense precedential value in terms of the legal and regulatory mandates that apply to

⁷ In addition, because local farmers will necessarily have to compensate for the lack of natural pest predation by using far more synthetic pesticides than would otherwise be the case, prime farmlands as well as other terrestrial and aquatic resources will be adversely impacted by the project – something the Draft EA has not considered at all. Nor, for that matter, has the Service considered the increased socioeconomic costs that a reduction in the local bat population will impose on farmers in the vicinity who will likely have to purchase insecticides and other chemicals to combat pests that would otherwise be kept in check by bats.

⁸ The two other projects are the Buckeye Wind Project in Ohio, *see* <u>http://www.fws.gov/</u> <u>midwest/endangered/permits/hcp/buckeyewind/index.html</u>, and the Beech Ridge Wind Project in West Virginia, *see* <u>http://www.fws.gov/westvirginiafieldoffice/beech_ridge_wind_power.html</u>.

wind companies seeking ITPs, and will be relied on by the Service when considering applications for other wind energy facilities in the future. Therefore, because this project has "significant effects" that will collectively kill nearly 18,000 birds and bats even with full implementation of the proposed minimization and mitigation measures, and because the ITP and Draft EA set a precedent for authorizing that substantial level of mortality in an ITP, this factor is implicated.

- <u>40 C.F.R. § 1508.27(b)(7)</u> This factor is triggered if "the action is related to other actions with individually insignificant but cumulatively significant impacts; [s]ignificance exists if it is reasonable to anticipate a cumulatively significant impact on the environment." Here, the Draft EA concedes that this project, in combination with other wind projects in the Indiana bat's Appalachian Mountain Recovery Unit, will kill up to 86,688 bats and tens of thousands of birds, which is clearly "significant" under NEPA. *See* Draft EA at 6-31. Moreover, whereas bats and birds likely to be present on the Criterion project site at various times of the year migrate farther than the arbitrary boundaries of the Appalachian Mountain Recovery Unit, any cumulative impacts analysis must consider a broader scope of wind projects reasonably likely to be within the flight radius of bats and birds using this project site. Thus, there are serious cumulative impacts that must be considered here in a more detailed EIS.
- <u>40 C.F.R. § 1508.27(b)(9)</u> This factor addresses "[t]he degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973." Because the explicit purpose of the ITP sought by Criterion is to obtain authorization from the Service to *lethally* take up to fourteen members of the federally endangered Indiana bat, not to mention various non-lethal takes that will occur through the harassment and harm forms of take, *see* 50 C.F.R. § 17.3, this factor is triggered. In addition, because this rare species is threatened not only by up to fourteen deaths here, but also various risks due to WNS and other wind projects in the region, there is no question that the Service's authorization of this project will, in fact, "adversely affect an endangered ... species."
- <u>40 C.F.R. § 1508.27(b)(10)</u> This factor is triggered if "the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment." As described in more detail below, Criterion has conceded that it violated the MBTA on at least 242 separate occasions last year (and estimates that it was actually 448 violations) when migratory birds were killed without *any* take authorization as required by that law. *See* 16 U.S.C. § 703(a) ("[u]nless and except as permitted by regulations made as hereinafter provided in this subchapter, it shall be unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, kill, attempt to take, capture, or kill . . . any migratory bird"). The company's HCP and the Draft EA do not make any operational modifications to the project to minimize bird mortality, meaning that in future years the company will continue to be in massive violation of the MBTA, and quite likely BGEPA. Therefore, since the proposed action not only "threatens a violation of Federal . . . law," but is indeed *certain* to violate federal law, this factor is triggered.

An EIS is required when even one of these factors is implicated. Because eight of the ten significance factors are triggered here, it is unlawful for the Service to prepare only an EA under the circumstances in lieu of an EIS.⁹

The Service's attempt to avoid preparing an EIS contravenes the agency's own practice of preparing an EIS to analyze the impacts of ITP issuance for wind energy operation. For the other two ITPs currently being considered by the Service – the only other wind projects that have ever publicly sought an endangered species ITP for wind turbine operation in the continental United States – the Service *is preparing an EIS. See* Beech Ridge Wind Project EIS, available at <u>http://www.fws.gov/westvirginiafieldoffice/ beech_ridge_wind_power.html</u>; Buckeye Wind Project EIS, available at <u>http://www.fws.gov/midwest/endangered/permits/hcp/</u> buckeyewind/index.html. Therefore, it makes little sense, and is unlawful, for the Service to deviate from its standard practice of preparing an EIS to analyze the immense environmental impacts of ITP issuance in this context, particularly in light of the significant wildlife impacts that result from wind energy operation.

Finally, the sheer length of the Draft EA – 228 pages including attachments – strongly indicates that an EIS is required here. In helping agencies understand when to prepare an EIS or an EA, the Council on Environmental Quality explained that "[i]n most cases . . . *a lengthy EA indicates that an EIS is needed*" because it reflects that, at minimum, "it is extremely difficult to determine whether the proposal could have significant environmental effects." *See Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations*, 46 Fed. Reg. 18026, 18037 (1981) (emphasis added). Indeed, in a case considering a similar circumstance where an EA included "at least seven documents containing 350 pages of text, plus numerous pages of diagrams, maps, and technical drawings," the First Circuit Court of Appeals held that an EIS was required "because an EA and an EIS serve very different purposes." *Sierra Club v. Marsh*, 769 F.2d 868, 874 (1st Cir. 1985) (Breyer, J.). As the court explained, "[t]o announce that these documents – despite their length and complexity – demonstrate no need for an EIS is rather like the mathematics teacher who, after filling three blackboards with equations, announces to the class, 'You see, it is obvious.'" *Id.* Accordingly, because the Draft EA here is

⁹ While an agency may, under certain conditions, rely on mitigation measures that reduce environmental impacts to levels that are no longer significant and prepare an EA and mitigated FONSI on that basis, this is *not* that scenario. Here, where under the proposed action and with all minimization and mitigation measures in place the project will nevertheless kill approximately 9,100 bats and 8,960 birds, there is absolutely no basis for asserting that such high wildlife mortality in the local environment does not rise to the level of "significant" as that term is defined under NEPA. This is particularly true in light of the Service's acknowledgement that in 2011 this project documented "the highest estimated rate" of bird mortality at any wind energy "site studied in the U.S. to date." Draft EA at 4-19. Indeed, in situations where a proposed action would kill far less birds in the local area than the Service plans to authorize here, courts have rejected an agency's attempt to prepare on an EA due to the significance of wildlife mortality on that scale. *See, e.g., Fund for Animals v. Norton*, 281 F. Supp. 2d 209, 232-33 (D.D.C. 2003) (finding that plaintiffs were likely to prevail on their claim that an EIS was necessary where agency proposed to authorize, via permit, the killing of 525 mute swans in the state of Maryland, and 3,100 birds in the Atlantic flyway).

not only lengthy but covers many technical, complex issues on the frontiers of biology, engineering, and population modeling, an EA is not sufficient and an EIS is required.

C. <u>The Service's Alternatives Analysis In The Draft EA Is Flawed.</u>

The alternatives analysis is of such central importance to an agency's compliance with NEPA that the Council on Environmental Quality has described the alternatives analysis as "the heart" of a NEPA document. 40 C.F.R. § 1502.14. NEPA's implementing regulations require that the decisionmaking agency "present the environmental impacts of the proposal and the alternatives in *comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decisionmaker and the public.*" *Id.* (emphasis added).

With respect to bats, the Service failed to even consider a single alternative whereby Criterion would be required, as a condition of the ITP, to implement a cut-in regime that is higher than 5.0 meters per second to achieve a substantial reduction in overall bat mortality, including for Indiana bats. Nor, for that matter, did the Service even consider an alternative that would require any feathering (*i.e.*, use of cut-in speed regime) during spring and summer, when Indiana bats are likely to use and migrate through this site. While Alternative 3 considered *full* curtailment of all turbine operations during nights in spring, summer, and fall, *see* Draft EA at 3-11, that is far different – from a practicability and bat mortality standpoint – from a reasonable, and indeed obvious, alternative that would consider and analyze cut-in speeds of, for example, 5.5, 6.0, and 6.5 meters per second during nights in spring, summer, and fall.

Again, as the Service has recognized in reviewing the Buckeye Wind project's ITP application to take Indiana bats in Ohio, such an alternative is crucial to providing the public and the agency with the information needed to make a well-informed decision concerning minimization measures. Tellingly, the Service *rejected* an alternative for the Buckeye wind project that is almost *identical* to the proposed action here – there, the agency rejected what it termed the "minimally restricted operations alternative" that would have implemented a cut-in speed of 5.0 meters per second from August 1 to October 31.¹⁰ Therefore, it incumbent upon the Service here, consistent with its NEPA obligations, to consider and analyze – based on the best available scientific evidence – all reasonable alternatives for minimizing takes of Indiana bats through various cut-in regimes across all seasons when bats are active on the landscape.

Moreover, with respect to birds, despite the fact that the Service acknowledges the record number of per-turbine bird mortalities at this project site in 2011, *see* Draft EA at 4-19, only one of the four alternatives considered by the Service – Alternative 3 – requires any significant measure to minimize bird mortality risk at the site (*i.e.*, nighttime curtailment which would reduce mortality of nocturnal migrant bird species). Alternative 3 is *not* the Service's preferred alternative, as the Service rejected that approach in lieu of the preferred alternative's turbine feathering that does not reduce bird mortality at all. Indeed, whereas the no-action alternative expects up to 448 bird deaths per year, *see id.* at 5-4, so too does the proposed action. *Id*.

¹⁰ See FWS, Draft EIS for the Buckeye Wind HCP, available at <u>http://www.fws.gov/midwest/</u>endangered/permits/hcp/buckeyewind/pdf/BuckeyeDEIS22June2012Voll_Chapter3.pdf.

Importantly, the Service's overly narrow alternatives analysis does not even consider measures that would be expected to minimize bird deaths for *all* bird species that are likely to use or migrate through this project site, but instead, a single alternative – which the Service rejected – considered measures that would potentially reduce mortality only for nocturnal migrant bird species, which appear to make up roughly half of all bird species at the project site. *See* Draft EA at 5-4, 4-16. Even in Alternative 3, the Service stated that implementation of nighttime curtailment during certain periods would only result in "minimal benefits (reduced collisions) [to birds] from on-site operational curtailment." *Id.* at 5-4.

In light of the fact that many birds that use and migrate through this project site are active during the day, and are particularly susceptible to turbine collisions during peak migration, at minimum the Service should have considered an alternative that analyzed 24-hour turbine curtailment during peak bird migration or some portion thereof. Moreover, even with respect to nighttime curtailment to reduce mortality of nocturnal migrants, the Service should have considered an alternative which was not so expansive that it would curtail operations from April 1 to November 15, due to the potentially prohibitive costs of that course of action which led to its rejection, but rather that focused specifically on implementing nighttime curtailment during the narrow window of peak nocturnal bird migration in the region (*e.g.*, between September 2 and October 6, according to Criterion's own bird monitoring records) or some portion thereof.

By failing to consider those two obvious alternatives that could have substantially reduced the risks to birds at this project site without sacrificing project practicability and viability, the Service's Draft EA fails to meet NEPA's basic mandate that alternatives must be sharply defined for the public, and must provide a clear basis for choice among options, in order to make an informed decision. 40 C.F.R. § 1502.14. Moreover, by only considering a single significant bird mortality reduction measure in an alternative that was summarily discarded by the agency, it appears that the agency has already decided to reach a pre-determined outcome by forgoing consideration of any significant bird mortality measures, and thus the Service has violated the legal requirement that the NEPA process serve as "an important contribution to the decisionmaking process and . . . *not be used to rationalize or justify decisions already made.*" *Id.* § 1502.5 (emphasis added); *see also id.* § 1502.2 (NEPA process "shall serve as the means of assessing the environmental impact of proposed agency actions, rather than justifying decisions already made").

Accordingly, unless and until the Service considers reasonable alternatives – including, at minimum, reasonable bird mortality minimization measures and various cut-in speed regimes as part of its NEPA process – the agency's alternatives analysis is legally flawed.

D. Because The Company Will Not Have Legally Required Authorization, Criterion's Activities Will Violate The MBTA and May Violate BGEPA.

The MBTA protects most, if not all, birds that traverse the project on Backbone Mountain migratory pathway. *See* 50 C.F.R. § 10.13 (listing the birds protected by the MBTA); Final List of Bird Species to Which the MBTA Does Not Apply, 70 Fed. Reg. 12710 (Mar. 15, 2005). Collisions with Criterion's wind turbines are anticipated to kill up to 448 birds annually – and

each of those deaths will be a distinct violation of the MBTA in the absence of a permit because it is a strict liability statute. Moreover, the project's wind turbines may present a barrier to the flight path of migrating birds, thereby disrupting their foraging and other essential biological behaviors. In granting a permit to an industrial wind power facility that is reasonably certain to kill and adversely affect many birds each year and that does not and will not have MBTA take authorization from the Secretary of the Interior, the Service would be authorizing unlawful activity. *See Glickman*, 217 F.3d at 884-88; *City of Sausalito*, 386 F.3d at 1204.¹¹

This is particularly concerning because, in admitting that the company will kill up to 448 birds *each year*, neither Criterion nor the Service has proposed a single operating modification (*e.g.*, curtailment during peak bird migration between September 2 and October 6, or some portion thereof) as part of the proposed action that would result in *any* measurable reduction in bird mortality – which, as of 2011, was the *highest per-turbine mortality rate ever estimated in North America*. Draft EA at 5-4 and 4-19. Therefore, by authorizing a project to proceed without an MBTA permit that, by the Service's own admission is causing the largest per-turbine fatality rate of migratory birds in the country (and thus the most MBTA violations on a perturbine basis), brings the agency directly into conflict with the MBTA's prohibitions.¹²

In addition, it does not appear that Criterion has sought, or plans to seek, eagle take authorization pursuant to BGEPA, despite the fact that "it is expected that Bald and Golden Eagles would pass by as they use the ridgeline for migration." Draft EA at 5-26. In its Draft EA, the Service concluded, on the basis of one study in Alaska, that eagles "have good vision and may be able to avoid collision with wind turbines" at this site. *Id.* While an interesting theory, in practice eagles have routinely been killed by operating wind turbines, calling into serious question the single study relied on by the Service in summarily dismissing the risks to eagles at this site due to their purported vision.¹³

 12 The existence of the voluntary Guidelines is of no help to the company or the Service, because those Guidelines, at minimum, require companies to "identify and implement reasonable and effective measures to avoid the take of species protected under the MBTA and BGEPA," Guidelines at 6 – something which the company has not committed to here, nor has the Service even seriously considered in the alternatives analyzed in the Draft EA.

¹³ As of October 2011, the Service knew of five Bald Eagles killed at North American wind energy facilities (three in the United States) and 54 Golden Eagles killed at U.S. wind energy facilities in addition to the many well-known Golden Eagle deaths at Altamont Pass, California. By January 2012, that number had already increased (personal communication between FWS's Dr. Joel Pagel and Kelly Fuller of American Bird Conservancy, January 5, 2012). Since then,

¹¹ Currently there is no MBTA permit the Criterion project can seek because the Service has refused to promulgate permitting regulations. In December 2011, American Bird Conservancy petitioned the Service to create a wind project permitting system using the authority of the Secretary of the Interior to promulgate regulations under the MBTA. The system would have regulated the impacts of wind energy on migratory birds and brought adhering wind energy companies into full compliance with MBTA. The Service rejected the 109-page rulemaking petition three months later, on the same day it published the voluntary Guidelines, even though its 1.5-page rejection letter found no legal or scientific fault in the petition.

Particularly because eagles have been observed at this site during past surveys, and in light of other turbine-eagle mortalities throughout the U.S., the Service will also be brought into conflict with BGEPA by authorizing this project without analyzing, much less considering, any specific measures aimed at minimizing mortality risk to migrating eagles at this project site (*e.g.*, certain curtailment schemes during eagle migration), in the event that the company fails to seek an eagle take permit.¹⁴

This is of particular concern because the Draft EA likely underestimates risk to eagles. Eagles winter in the Appalachian Mountains, yet no wintering eagle surveys were conducted. Wintering eagles will forage, a behavior that places them at greater risk of collision with the turbines. In addition, the Draft EA acknowledges that the project's surveys ended before the end of the eagle migration season. Draft EA at 25. For these reasons, the Draft EA is also deficient.

CONCLUSION

In sum, because the HCP and the Draft EA suffer from various legal flaws identified above, the underlying legal schemes compel the conclusion that an ITP cannot issue pursuant to section 10 of the ESA until and unless these deficiencies are addressed. Thank you for your consideration of these comments.

Respectfully submitted,

William S. Eulasta TL

William S. Eubanks II Eric R. Glitzenstein

the Service has publicly acknowledged that a Bald Eagle was killed by a wind turbine at the Eastern Neck National Wildlife Refuge in Maryland. *See <u>http://www.fws.gov/northeast/</u><u>easternneck/pdf/Eastern_Neck_Wind_Turbine_Article_7_2012_Final.pdf</u>. Furthermore, the Criterion APP should be revised to remove the patently inaccurate statement that "no bald eagles have been reported as casualties at wind-energy facilities within the United States," <i>see* APP at 17, since there have been at least four confirmed bald eagle mortalities in the U.S.

¹⁴ The Draft EA is also troubling because it encourages the applicant to coordinate with the Service in applying for an eagle take permit if eagles are killed at the facility. However, the Federal Register notice for the 2009 eagle take permit rule stated that the Serive will not issue programmatic incidental take permits for Golden Eagles east of the 100th meridian. While the 2007 eagle take permit rule allows Golden Eagles to be included in a multi-species Habitat Conservation Plan, the 2009 prohibition against authorizing take of eastern Golden Eagles still applies. The Service will need to do additional environmental review under NEPA, such as an a supplemental EA to the 2009 eagle take permit Final EA, before it allows take of Golden Eagles east of the 100th meridian.