

Please accept these comments on behalf of the Environmental Protection Information Center and the Northcoast Environmental Center. These comments supplement, but do not replace, our previously submitted comments.

Our organizations are concerned with the impact to bald and golden eagles and the project's adherence to the Bald and Golden Eagle Protection Act (BGEPA). According to USFWS guidance, under the BGEPA, wind energy sites are to prioritize avoidance and minimization of take prior to compensatory mitigation, such that compensatory mitigation should only be pursued *after* other means to avoid or minimize take have been exhausted. USFWS (2013); *see also* Allison et al. (2017)

The DEIR likewise fails to present information in a manner that is useful to the reviewing public. USFWS (2013) presents a way to gauge the relative risk of potential wind sites, dividing each site into a risk category. *See also* Allison et al. (2017). Risk Class 1 are high risk sites, based on pre-construction eagle surveys and where predicted take exceeds 5% of the local population; Risk Class 2 are lower risk, where predicted take is greater than .03 eagles/year and 5% of the local population, and Risk Class 3 are the lowest risk sites, where predicted take is less .03 eagles/year. USFWS (2013). The DEIR fails to provide any site classification, but instead provides raw hour survey data.

Based on conversations with the project developer, estimating eagle take has not yet occurred. This seems somewhat problematic, as the site classification plays an important role in the go/no-go stage of a project: "The result of this step can form the basis of a decision to build or not build a project or to alter its size and configuration, thereby reducing the take prediction." Allison et al. (2017).

Furthermore, in development of further mitigation measures, the FEIR should consider all of the mitigation measures identified in Allison et al. (2017), presented in Table 1, excerpted below:

Table 1. A summary and brief description of options to avoid, minimize, and compensate for take of Golden Eagles as discussed in the text. Listed references describe use of the options at operating facilities or provide more theoretical support for the application of the option.

STRATEGY	OPTION	DESCRIPTION	REFERENCES
Avoid	Macro-siting	Avoid siting projects in high-use areas and high-risk topography	Smallwood et al. 2009, Katzner et al. 2012b, Miller et al. 2014
Avoid	Reduce turbine number	Eliminate turbines from high-risk areas and/or reduce exposure	Bay et al. 2016, ICF International 2016
Minimize	Attractant removal	Remove carrion, perches, and attractions for eagle prey	United States vs. Duke Energy Renewables 2013
Minimize	Flight diverters	Install pylons to divert birds around projects or guyed MET towers	U.S.F.W.S. 2013
Minimize	Nest management	Inhibit nest-building; remove or modify nest sites	U.S.F.W.S. 2016b
Minimize	Curtailment	Shutdown high-risk turbines or when eagles are at risk of take	De Lucas et al. 2012, Tetra Tech 2012
Minimize	Turbine micro-siting	Use turbine setbacks or avoid high-risk areas	Young et al. 2003, Smallwood et al. 2009, Katzner et al. 2012b, Miller et al. 2014
Minimize	Deterrence	Employ systems that detect and emit acoustic signals intended to alter flight path	May et al. 2012
Compensate	Power pole retrofitting	Replace "problem" poles with APLIC-recommended equipment	U.S.F.W.S. 2013
Compensate	Voluntary lead abatement	Subsidize use of non-lead ammunition or removal of gut piles	Cochrane et al. 2015
Compensate	Roadkill removal	Remove roadkill to reduce vehicle strikes	Tetra Tech 2012
Compensate	Prey habitat improvement	Improve prey habitat to increase eagle productivity	Steenhof et al. 1997
Compensate	Nest-site enhancement	Provide protection or shading for nests	Kochert et al. 2002
Compensate	Rehabilitation	Rehabilitate non-collision injured eagles	Wiemeyer 1981, Martell et al. 1991

The project appears to consider attractant removal (Mitigation Measure 3.5-5a) and power pole retrofits (Mitigation Measure 3.5-5c) but not others. EPIC again encourage the project developer to minimize the project footprint and avoid the coastal prairies of Bear River Ridge, although we do note that that plots 11, 12 and 13 (within Monument Ridge) have fairly high eagle use, based on the Eagle Use Survey Report in Appendix H. Here, we again recommend operational curtailment paired view Identiflight or other similar technology to reduce operational impacts *prior to* imposition of compensatory mitigation.

Citations:

Allison, T. D., Cochrane, J. F., Lonsdorf, E., & Sanders-Reed, C. (2017). A review of options for mitigating take of Golden Eagles at wind energy facilities. *Journal of Raptor Research*, 51(3), 319-334.

USFWS 2013. Eagle conservation plan guidance: Module 1–land-based wind energy. Version 2. Division of Migratory Bird Management, U.S.D.I. Fish and Wildlife Service, Washington, DC U.S.A. <https://www.fws.gov/migratorybirds/pdf/management/eagleconservationplanguidance.pdf> (last accessed 14 June 2019).

