U.S. Department of the Interior

Attached please find the Department of the Interior's comments.



United States Department of the Interior

OFFICE OF THE SECRETARY Office of Environmental Policy and Compliance 911 NE 11th Avenue, Suite 661 Portland, Oregon 97232

IN REPLY REFER TO: ER24/0418 4111

October 25, 2024

Mark Daniel Clean Energy Coordination Department of Ecology P.O. Box 47709 Olympia, Washington mark.daniel@ecy.wa.gov

Subject: PEIS Utility-Scale Solar Energy Programmatic Environmental Impact

Statement, Washington State

Dear Mr. Daniel,

The Department of the Interior (Department) has reviewed the PEIS Utility-Scale Solar Energy Programmatic Environmental Impact Statement, Washington State. The Department offers the attached specific comments for use in developing the final environmental impact statement for this project.

We appreciate the opportunity to comment. If you have any questions or concerns, please don't hesitate to contact me at (503) 720-1212.

Sincerely,

T. Allison Hall Regional Environmental Officer

INTERIOR REGION 9 • COLUMBIA-PACIFIC NORTHWEST

Document	Section	Page/para/ line	Comment
Draft Solar PEIS	2.5.3	Pg. 25	Appreciate description of water use for cleaning - given the aridity of the PEIS coverage area, suggest recommending manual/robot cleaning of panels for water conservation wherever practicable.
	4.6.2	Pg. 81	Under terrestrial species and/or special status species included for analysis, recommend adding Birds of Conservation Concern (FWS designated at-risk species).
	4.6.3.1	Pg. 85	Include bats in Migratory Species.
	4.6.3.1	Pg. 86	Description of operation impacts is missing potential collision mortality with panels themselves. Water-dependent avian species, such as grebes and loons, are known to collide with panels, presumably mistaking it for a water body. Recommend including this potential impact in the list of adverse effects.
	4.6.3.1	Pg. 86	Insects and bats may mistake panels for a water body due to their smooth acoustic surface (bats) and/or reflection (bats/insects), see comment above. Recommend including these impacts in the list of adverse effects.
	7.1	Pg. 182	Recommend revising first bullet on the Eagle Act as follows - "Bald and Golden Eagle Protection Act (USFWS): Prohibits the take of bald and golden eagles without prior authorization from USFWS. An Eagle Disturbance Take Permit may be needed for construction activities near nesting sites. A Power Line Incidental Take Permit may be recommended for collision and electrocution take associated with operation of a facility's power lines."
	7.1	Pg. 182	Recommend revising fifth bullet on MBTA as follows - "Migratory Bird Treaty Act (USFWS): Prohibits the take of protected migratory birds without prior authorization from USFWS. There are currently few permitting options to authorize take at a facility. It is recommended that facilities consult with USFWS early in the development process to ensure take is avoided or minimized to the extent practicable." Note that this act is not included in the list of potentially required permits list in Appendix E: Biological Resources Report.
Draft Solar PEIS App. E Biological Resources Report	1.1.1	Pg. 1	Under terrestrial species and/or priority species included for analysis, recommend adding Birds of Conservation Concern (FWS designated at-risk species).
	3.2.1.3	Pg. 18	Why is waterfowl habitat handled separately from bird habitat? Much of the description in the waterfowl habitat could be used for many nongame wetland birds, some of which are of higher conservation concern than waterfowl.

3.2.1.3	Pg. 18	Suggested edit in bold: Bats utilize snags, trees, crevices in rocks, talus , tunnels, buildings,
		bridges, caves, and mine shafts for roosting or hibernation.
3.2.2.2	Pp. 25-29	Recommend revising the species groupings to reflect the 4 recognized bird initiatives
		(waterfowl, waterbirds, shorebirds, and landbirds: see Bird Conservation Initiatives on flyway
		website (https://www.pacificflyway.gov/Links.asp).
3.2.2.2.2	Pg. 26	Recommend reviewing the waterfowl, shorebird and waterbird plans (links on
		https://www.pacificflyway.gov/Links.asp) for correct groupings of these species. The current
		list in this section has some of the species in the wrong group (e.g. gulls, terns, skuas, jaegers,
		auks, murres, and puffins are not considered shorebirds). Description of wading birds, with the
		species identified, is also problematic as most of the species included (rails, cranes, bitterns,
		and coots) do not nest or roost in trees, nor in colonies. The wading birds term is one that over
		the years has been used to describe both shorebirds and the group of herons, ibis, egrets, and
		cranes. Suggest removing this term from the document.
3.2.2.2.4	Pg. 27	This section is confusing, for similar reason as the prior bird sections. All species listed in this
		section are considered raptors (including vultures and owls - see McClure et al. 2019 Journal of
		Raptor Research). Recommend renaming this section "Raptors", and revising this section to
		reflect current nomenclature. For example, where the word "raptors" is mentioned in the
		section, change to "diurnal raptors".
3.2.2.2.5	Pg. 28	This section could be merged with the passerine section and renamed "Landbirds" to reflect
		the corresponding bird initiative.
3.4.1.2.2	Pp. 53-54	Appreciate recognition of panel collision risk. Although likely a better fit for the operations
		section (3.4.2). This section appears to be missing mention of collision risk with facility
		infrastructure - particularly power lines and fences.
3.4.2.2.2	Pp. 58-59	Suggest moving discussion of solar panel collisions and Lake Effect to this section. Also
		recommend adding collisions with lines and fences to the second to last paragraph regarding
		injury and mortality.
3.4.2.2.2	Pp. 58-59	Please include panels suggested to alter bat behavior (Barre et al 2023), as the smooth surface
		may act as a sensory trap to bats with similar echolocation effect as water (Grief et al 2017).
		https://www.science.org/doi/10.1126/science.aam7817
		https://besjournals.onlinelibrary.wiley.com/doi/full/10.1111/1365-2664.14555
3.4.2.2.3	Pg. 59	Recommend adding collision with solar panels to second bullet.
3.4.4.1.1	Pg. 66	Consider adding a bullet regarding implementing latest recommendations for reducing solar
		panel collision risk for migratory birds. There is research currently underway regarding this

		issue and ways to mitigate (e.g., tipping up panels at night to break up the visual field). We don't currently have solid recommendations, but likely will in the coming years.
3.4.4.1.1	Pg. 66	Consider adding a bullet for use of panels with visual/light and acoustic-scattering surfaces to reduce bat attraction, sensory traps, or other water-confusion effects.
3.4.4.2.1	Pg. 68	Include BMP to use panels with visual/light and acoustic-scattering surfaces to reduce insect
		and bat attraction, sensory traps, or other water-confusion effects.
3.4.4.2.1	Pg. 70	Avian Protection Plans are typically power company-specific plans, related to collisions and electrocutions. Suggest changing this to Bird and Bat Conservation Strategy. And great to see mention of Birds of Conservation Concern here. Recommend adding this group of species to the list of priority species in section 4.6.2 in the PEIS.
3.4.4.2.1	Pg. 70	See comment above, and consider adding all Washington bat species to include all local and migratory species that may be affected by solar projects to the list of priority species in section 4.6.2 in the PEIS.
3.5.1.1	Pg.72	Recommend including discussion of likely higher risk of Lake Effect collision issues with larger facilities.
3.5.1.1	Pg. 72	Recommend including with the Lake Effect for birds, including more internal area to edge ratio that may increase risk of sensory traps for bats.
3.7.1.1	Pg. 75	Consider adding verbiage regarding potentially lower migratory bird collision risk if panels are more dispersed through the site.
Attachment 1	N/A	Recommend running the IPaC analysis again to capture list of Birds of Conservation Concern. This is a relatively new addition to the IPaC output.
N/A	N/A	Consider using NABat to query nearby bat survey data to inform risk to bats. NABat can also provide survey methods and shielded data repository for documentation of bat species presence at a project location.



United States Department of the Interior

OFFICE OF THE SECRETARY Office of Environmental Policy and Compliance 911 NE 11th Avenue, Suite 661 Portland, Oregon 97232

IN REPLY REFER TO: ER24/0419 4111

October 25, 2024

Mark Daniel Clean Energy Coordination Department of Ecology P.O. Box 47709 Olympia, Washington mark.daniel@ecy.wa.gov

Subject: PEIS Utility-Scale On-Shore Wind Energy Programmatic Environmental

Impact Statement, Washington State

Dear Mr. Daniel,

The Department of the Interior (Department) has reviewed the PEIS Utility-Scale On-Shore Wind Energy Programmatic Environmental Impact Statement, Washington State. The Department offers the attached specific comments for use in developing the final environmental impact statement for this project.

We appreciate the opportunity to comment. If you have any questions or concerns, please don't hesitate to contact me at (503) 720-1212.

Sincerely,

T. Allison Hall Regional Environmental Officer

INTERIOR REGION 9 • COLUMBIA-PACIFIC NORTHWEST

Document	Section	Page/para/ line	Comment
Draft Wind PEIS summary	4.6.1.1	Pg. 81	Recommend including the Teradapt Spatial Priorities mesic habitat map to accompany these figures. Having the sole xeric map without it's accompanying "wet" habitat map provides incomplete picture of two of many important habitats within eastern Washington. The mesic model also does an excellent job delineating potential winter habitat areas for Columbian sharp-tailed and greater sage grouse. There is a greater sage grouse spatial priorities map that would be helpful to include within this section as well.
Draft Wind PEIS	2.2	Pg. 9	Update image to include calculation of aerial acres of rotor-swept area per turbine size.
	2.2.1.1	Pg. 14	Update tower and wind turbine blade sections to better account for projected technologies and include the aerial acres of rotor-swept area per turbine size.
	Biological Information (Table 3)	Pg. 15	A new Periodic Status Review for Pygmy Rabbit in Washington was released in 2024. Recommend citing and linking to this report over the 2018 report which does not address recent habitat losses and population declines due to wildfire.
	4.6.3	Entire	Resolve with comments made in App E for bats.
	4.6.3.1	Pp. 88-89	Edit throughout dEIS and App E for bats: Most publicly available studies estimate between three to five bird fatalities per MW per year but can vary greatly by site, with some sites reporting more than 30 bats per MW per year while others closer to 1 bat per MW per year. (from p. 14 of the in-line link provided). https://www.nwf.org/-/media/Documents/PDFs/NWF-Reports/2019/Responsible-Wind-Power-Wildlife.ashx
Draft Wind PEIS App. E Biological Resources Report	3.2.1.2	Pg. 19	Suggested edit in bold: Bats utilize snags, trees, crevices in rocks, talus , tunnels, buildings, bridges, caves, and mine shafts for roosting or hibernation.
	3.2.1.6.2	Pg. 24	Recommend including the Teradapt Spatial Priorities mesic habitat map to accompany this figure. Having the sole xeric map without its accompanying "wet" habitat map provides an incomplete picture of two of many important habitats within eastern Washington. The mesic model also does an excellent job delineating potential winter habitat areas for Columbian sharp-tailed and greater sage grouse. There is a greater sage grouse spatial priorities map that would be helpful to include within Appendix E as well.

2222	D. 20	
3.2.2.2.3	Pg. 28	Powerlines from dams on the Columbia River have already set up an electricity grid through
		historic greater sage grouse breeding (leking) areas that has severely impacted breeding
		success (e.g., raven habitat, noise, stress) and resulted in reduced population numbers. While
		Appendix E does mention habitat degradation, loss, and further fragmentation, it fails to
		address the compounding interacting factors the existing power grid has on these birds. What's
		missing is how increasing renewable energy infrastructure, particularly in Douglas County
		where many sites have had siting studies and these birds are spatially constrained due to the
		current energy infrastructure, effects will be more concentrated than in other areas. It is
		understood that such considerations will be given when siting potential wind projects, but
		worth mentioning just how important this consideration is for this species.
3.3.1	Pg. 53	Impacts to nests are only part of the concern for wind energy projects. Most wind facilities will
		have turbine collision concerns. Recommend revising this bullet to read: "Bald and Golden
		Eagle Protection Act (USFWS): Prohibits the take of bald and golden eagles without prior
		authorization from USFWS. A Wind Energy Incidental Take Permit may be recommended for
		mitigating mortality related to wind turbine operation. An Eagle Disturbance Take Permit may
		also be needed for construction activities near nesting sites."
3.4.2.2.2	Pg. 63	Edit throughout document: Most publicly available studies estimate between three to five bird
		fatalities per MW per year but can vary greatly by site, with some sites reporting more than
		30 bats per MW per year while others closer to 1 bat per MW per year. (from p. 14 of the in-
		line link provided in the dEIS).
		https://www.nwf.org/-/media/Documents/PDFs/NWF-Reports/2019/Responsible-Wind-
		Power-Wildlife.ashx
3.4.4.1.1	Pg. 72	For bullet starting with "Conduct an assessment and possibly a literature review and consult
		with WDFW and USFWS to determine if bat surveys are needed" edit to encourage
		applicant's review to include querying NABat to inform nearest available bat survey data, and
		encourage applicant to conduct pre-construction bat surveys to establish baseline species
		presence ranging from ground to rotor-swept areas, especially if WNS status has changed in
		the project area since pre-existing surveys were conducted.
3.4.4.1.1	Pg. 73	Suggested edit in bold: Avoid placing turbines near known bat hibernation, breeding, and
		maternity/nursery colonies, in known migration corridors, or in known flight paths between
		colonies and feeding or watering areas.