

October 27, 2023

Diane Butorac
Environmental Planner
Clean Energy Coordination
Department of Ecology
P.O. Box 47600
Olympia, WA 98504-7600

RE: Scoping Documents for Programmatic Environmental Impact Statements (PEISs) on Utility-Scale Solar and Onshore Wind Energy Facilities in Washington State

Dear Diane Butorac,

This comment letter is submitted on behalf of Audubon Washington (“Audubon”), a state field office of the National Audubon Society, and the eleven chapter affiliates listed below. The letter is in response to the request for comments on the Scoping Documents for Programmatic Environmental Impact Statement (PEISs) on Utility-Scale Solar and Onshore Wind Energy Facilities in Washington State (“Scoping Documents”).

Audubon supports the build-out of renewable energy infrastructure to support Washington’s Clean Energy Transformation Act and its commitment to an electricity supply free of greenhouse gas emissions by 2045. Audubon’s climate science shows that two thirds of North American birds are at risk of extinction if we don’t limit warming associated with climate change (Bateman et al. 2020). Recent science also shows us what many bird enthusiasts know intuitively - there are 3 billion fewer birds in North America than there were 50 years ago (Rosenburg et al. 2019). We and our 50,000+ members and 25 chapters across the state care deeply about Washington’s lands and waters, and the birds and people that depend on it.

Audubon works across the policy, planning, and project realms to support the build-out of renewable energy infrastructure that is aligned with our values related to biodiversity, landscape resilience and equity, diversity and inclusion, including Tribal interests, treaty rights and resources.

The PEISs are a central piece of our state’s goal to transition to clean energy while also protecting and enhancing biodiversity. The authorizing legislation (HB 1216) envisions the PEISs being used to inform recommendations to the legislature on the creation of clean energy preferred zones for streamlined development. To that end, the PEISs must assess a range of alternatives that reflect full clean energy build-out scenarios across varying degrees of environmental impact, associated mitigation, and cumulative impacts.

As requested, our comments are organized as follows:

- Types of facilities to be evaluated
- Assumptions to use to identify the geographic scope of study for the PEIS analysis
- Potential impacts to environmental resources
- Potential mitigation measures

TYPES OF FACILITIES TO BE EVALUATED

We request that the PEISs analyze a set of alternatives that reflect full build-out scenarios across varying degrees of environmental impact. This will inform our understanding of the potential project, landscape-scale, and cumulative environmental impacts of a full clean energy build-out.

The estimated gigawatts (GW) needed to meet our clean energy transition goals in Washington is approximately 34-45 GW (TNC 2022). The selection and analysis of alternatives, particularly cumulative analyses, should consider a full build-out scenario under different levels of environmental protection.

The siting of solar and wind facilities in relation to natural resource values and landscape connectivity is at least as important as, if not more important than, the footprint of the facility when it comes to impacts to environmental values. An estimated 80% of historic shrub-steppe habitat has been lost in Washington and remaining areas are degraded, fragmented, and increasingly threatened by fire (WDFW 2022). The State and interested parties such as Audubon have invested considerable resources towards the protection and recovery of shrub steppe habitat and species (e.g., WSU Least-Conflict Solar Siting project, Washington Shrubsteppe Restoration and Resiliency Initiative (WSRRI), Arid Lands Initiative (ALI)). For example, if the majority of solar projects were built in least-conflict areas identified in the WSU stakeholder project, the project and cumulative-level impacts would be significantly less than if they were built in native habitat, in close proximity to state-listed species or on prime farmland. Similarly, the value of offsite mitigation for conservation would be much greater if it was implemented according to landscape conservation priorities (WSRRI; report pending, ALI Core Areas and Linkages).

We recommend that the PEISs for wind and solar consider full build-out scenarios that result in different levels of environmental impact, associated mitigation and cumulative impacts. There are readily available spatial resources available to do so. For example, in the Columbia Plateau there are WSU's Least-Conflict maps, WSRRI spatial products (pending in early 2024), ALI Core Areas and Linkages (ALI 2014), the WDFW Priority Species and Habitat Database, and County Critical Areas. Identifying and mapping alternative scenarios that reflect a range of environmental impacts would make the PEISs more useful as a tool in recommending clean energy preferred zones to the state legislature.

ASSUMPTIONS TO USE TO IDENTIFY THE GEOGRAPHIC SCOPE OF STUDY FOR THE PEIS ANALYSIS

Consider narrowing the scope of analysis to 10 miles or less distance from major transmission lines for both wind and solar.

In our experience, many developers say that gen-tie lines greater than 10 miles are not economical, and from an ecological standpoint, longer transmission lines represent increased risk of collision for birds, habitat disturbance and visual impairment.

POTENTIAL IMPACTS TO ENVIRONMENTAL RESOURCES

4.5 Biological Resources (Species and Habitats)

The review of potential impacts to species and habitats in the Scoping Documents is extensive and we applaud Ecology's due diligence on the topic. We recommend that Ecology also consider the following direct and indirect impacts for analysis.

The PEISs must state their assumptions about the placement of individual projects in relation to core habitat areas and wildlife connectivity corridors, as defined by WSRRI and other relevant mapping products, including the maximum acreage of habitat that is encroached upon.

Direct Impacts

The PEISs must include a comprehensive evaluation of both direct and indirect impacts to bird species of conservation concern at risk of collision during the assessment of associated transmission line projects, taking into account flight behavior and population vulnerability as well as distinguishing between compensatory and additive mortality to safeguard our avian populations.

Although most new transmission lines have eliminated electrocution risk, collision remains a significant threat. According to Loss et al. (2014), "between 12 and 64 million birds are killed each year by U.S. power lines, with between 8 and 57 million birds killed by collision and between 0.9 and 11.6 million birds killed by electrocution." Impacts to birds related to gen-tie lines may be more severe than the projects themselves, although indirect impacts related to disturbance, displacement and habitat loss are largely related to the project itself. The direct and indirect impacts to birds associated with transmission lines need to be fully analyzed, particularly in light of the state endangered species at risk for collision (e.g., Greater Sage-Grouse and Ferruginous Hawk).

The best available science indicates that criteria related to flight behavior and population vulnerability should be included when evaluating bird exposure and vulnerability to turbines (Adams et al. 2017).

The analysis of the potential magnitude of impacts related to the project alternatives on population regulation must consider both compensatory mortality and additive mortality, which is mortality that has population-level effects. Species with low populations levels and low reproductive rates like Ferruginous Hawk are more vulnerable to population level effects from mortality due to collision with turbines or other direct and indirect impacts. This contrasts with a compensatory source of mortality, which causes no reduction in total survival until it reaches some threshold value.

Indirect Impacts

The PEISs must comprehensively assess the adverse environmental effects of facility construction and operation, including but not limited to habitat alteration, predator dynamics, fire risk, and landscape connectivity, to safeguard native wildlife populations and ecological integrity.

The PEISs should consider how the construction of facilities, including solar arrays, turbines, fences, posts, transmission lines, and buildings not only results in habitat loss and fragmentation, but alters competitor and predator-prey dynamics by attracting human-adapted species like ravens, crows, and rodents. These altered predator and competitor assemblages may outcompete or put increased predation pressure on native wildlife populations (e.g., Hethcoat and Chalfoun 2015).

The PEISs should consider how the construction and operation of wind and solar facilities, as well as any transmission build-out necessary to bring this energy to market, introduces fire risk to the landscape and the ways that fire mitigation efforts may involve the destruction of native vegetation and trees.

The number and location of turbines has direct implications for the level of severity of direct and indirect impacts on wildlife. This is especially true for impacts to wildlife habitat connectivity, avian mortality loss of foraging habitat, and avian impacts overall.

Due to the mobile nature of birds and other wildlife, impacts associated with the operation of wind and solar facilities should not be limited to the project lease boundaries, and should be considered regional in scale (e.g., Kolar and Bechard 2016).

Cumulative Impacts

The PEISs must identify the maximum acreage of core habitat and connectivity zones, as defined by WSRRI and other relevant mapping tools, that will be lost as a result of wind and solar development, and include a rigorous examination of the combined, cumulative effects of wind and solar development on species population viability and landscape connectivity.

The cumulative impacts of wind and solar development have profound impacts for the long-term viability of birds and other wildlife in Washington and beyond. Species such as state-endangered Ferruginous Hawk and Greater Sage-Grouse may avoid wind energy facilities and transmissions lines, respectively, and abandon historic nesting sites, further exacerbating their vulnerability and impeding state efforts towards species recovery. Analysis of cumulative impacts must consider the landscape and range-wide scope of impacts to habitat condition, sensitive species occurrence, and wildlife corridors. Cumulative impacts analysis must also consider the combined impacts of wind and solar development in high value areas for environmental values.

POTENTIAL MITIGATION MEASURES

The PEISs must provide comprehensive guidelines for assessing and mitigating environmental impacts of wind and solar projects, ensuring robust SEPA reviews, clear mitigation plans, and adherence to state laws, emphasizing the importance of transparent and effective mitigation measures, and incorporating updated guidelines while considering a broad spectrum of mitigation strategies, including habitat restoration and priority conservation areas.

In section 1.4.1 of the Scoping Document, it states: *“The bill states that solar energy project proposals which follow the recommendations to avoid and reduce impacts in the PEIS must be considered to have*

mitigated the probable significant adverse project-specific environmental impacts for which recommendations were specifically developed.” Emphasis added.

This language (referencing HB 1216. Concerning Clean Energy Siting) underscores the importance of clearly defining how to assess potential impacts and identify mitigation measures through avoidance, minimization, and compensatory mitigation.

In our experience reviewing draft environmental impact statements (DEISs) for wind and solar projects, project proponents fail to provide enough information to do the following: analyze likely environmental impacts, identify sufficient specific mitigation measures that will avoid adverse impacts, support the evaluation and determination of significance by the findings and conclusions, or identify and analyze reasonable alternatives. This information is required by state law (WAC 197-11-440). If successful, the PEISs will provide information that will lead to more robust project-level SEPA review. In addition, clear guidance on mitigation measures will help minimize another practice we have seen in DEISs - the deferral of mitigation plans and siting decisions to a technical committee with an unknown level of authority, public oversight, environmental review, and with undefined performance standards.

The PEISs should commit to implementation of wind and solar siting guidelines. As noted in the Scoping Documents, Washington Department of Fish and Wildlife (WDFW) will be publishing updated wind and solar guidelines in 2024 and these should replace existing guidelines once they are available. In addition to WDFW’s guidelines, the [FWS Land-based Wind Turbine guidelines](#) (USFWS 2012) and updated Avian Power Line Interaction Committee ([APLIC](#)) guidelines (APLIC and USFWS 2005; update pending) should be incorporated in the Onshore Wind PEIS.

We request that Ecology consider the full range of needs and opportunities for mitigation associated with project infrastructure, including vegetation management on Right of Ways, wildlife-friendly fencing, micrositing decisions that avoid creating barriers to wildlife movement and sensitive breeding grounds, timing of mowing regimes in relation to nesting birds, and habitat restoration using native plants.

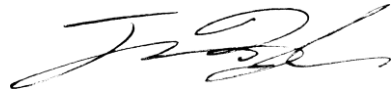
The solar PEIS should employ spatial information from WSRRI landscape priorities for shrubsteppe protection and restoration (report pending to legislature in March 2024) to direct off-site mitigation to priority areas as defined in WSRRI, including “Core Protection Areas”, “Growth Opportunity Areas”, and “Corridors”. Mapping of these areas is underway and is part of a larger effort to conserve the sagebrush biome across the west (Doherty et al. 2022). County conservation priorities can be addressed using the WDFW Priority Habits and Species database and local critical areas ordinances.

CONCLUSION

We commend the State’s commitment to clean energy, environmental values and Tribal rights and resources, and the due diligence exercised by Ecology in creating comprehensive Draft Scoping Documents for Onshore Wind and Solar Facilities. We look forward to working with Ecology and other interested parties to advance responsible clean energy siting in Washington. **Together, we can lead the way in centering biodiversity, landscape resilience, community values and Tribal rights and resources**

in our clean energy planning and siting decisions. The health of Washington's lands, waters and people depend on it.

Sincerely,



Trina Bayard, Ph.D.
Interim Executive Director
Director of Bird Conservation

Alan McCoy
President
Spokane Audubon Society

Dana Ward
Conservation Chair
Lower Columbia Basin Audubon Society

Dan Streiffert
Conservation Chair
Rainier Audubon Society

Steve Loitz
President
Kittitas Audubon Society

Art Campbell
President
North Central Washington Audubon Society

John Day
President
Skagit Audubon Society

Stan Isley
Director and Conservation Chair
Yakima Valley Audubon Society

Glen Mendel
Conservation Committee Chair
Blue Mountain Audubon Society

Susan Saul
Conservation Chair
Vancouver Audubon Society

Jamie Huson
President
North Cascades Audubon Society

Gayle Talbot
President
Central Basin Audubon Society

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