TETRA TECH

Memo

To: Dave Kobus, Scout Renewable Energy

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Cc: Tim McMahan, Stoel Rives

Date: January 20, 2022

Subject: **The Application of Novel Ferruginous Hawk (*Buteo regalis*) Data and Recommendations for the Horse Heaven Clean Energy Center, Benton County, Washington.**

BACKGROUND

Since 2017, Scout Clean Energy (Scout) has been in the process of planning and developing the Horse Heaven Clean Energy Center (HHCEC) proposed for Benton County, Washington. As described in the Horse Heaven Wind Farm Bird and Bat Conservation Strategy, the Project has been developed to avoid, minimize, or mitigate potential effects to avian species, consistent with the U.S. Fish and Wildlife Service (USFWS) Land-Based Wind Energy Guidelines (WEG; USFWS 2012), the USFWS Eagle Conservation Plan Guidance (USFWS 2013), the Washington Department of Fish and Wildlife (WDFW) Wind Power Guidelines (WDFW 2009), and consistent with Washington Administrative Code (WAC) 463-60-332, which outlines the standards for the assessment of habitat, vegetation, fish, and wildlife resources during the siting of energy facilities.

Consistent with the WEG, HHCEC coordinated with the USFWS and WDFW on baseline studies, survey protocols and design as well as minimization measures to reduce impacts to avian and wildlife species. HHCEC met with USFWS and WDFW in two joint consultation meetings regarding the proposed Project on September 19, 2017 and January 28, 2020. Following the January 28, 2020 meeting, WDFW provided spatial and temporal buffers surrounding ferruginous hawk (*Buteo regalis*) nests consistent with Priority Habitats and Species (PHS) management recommendations (Larsen et al. 2004). Subsequent virtual meetings with WDFW occurred on January 27, 2021 to provide Project status updates as well as a summary of the avian habitat surveys completed in 2020. On April 1, 2021 WDFW provided written comment to the Energy Facility Site Evaluation Council (EFSEC). At no time during this multi-year coordination effort did WDFW suggest that alternative analyses or buffers, other than those described by Larsen et al. (2004), be used to minimize effects to ferruginous hawk or their habitats.

Scout has been proceeding with the work on the HHCEC with EFSEC and WDFW with the understanding that avoidance and minimization measures described in PHS Management Recommendations be applied for ferruginous hawk. On December 14, 2021, Mike Ritter (WDFW) mentioned a potential restrictive area surrounding active ferruginous hawk nests (5 and 10 km radius) that may need to be implemented to protect the species based on recent agency research. However, it was not until a follow-up meeting occurred on January 06, 2022 to discuss the status of ferruginous hawk in Washington and behavioral research conducted by Jim Watson (WDFW), that WDFW explained how the research may apply to the HHCEC. Watson, a recognized raptor biologist, and co-author of the publication considered by the Washington Fish & Wildlife Commissioners to uplist the species to state endangered (Hayes and Watson 2021), provided a summary from

studies conducted in southcentral Washington, 2007-2014. Watson stated 17 birds (33 home ranges) were fitted with satellite receivers to measure daily movement. Aggregated daily movements provided a measure of bird use on the landscape surrounding a single nest site during the breeding period. Based on the research, WDFW determined that an area with a 3.2 km radius surrounding the nest is considered a core use area and 10 km is considered the full home range during the nesting period in Washington.

APPLICATION OF NEW INFORMATION

In a research capacity, satellite GPS data represent the most accurate form of animal movement on the landscape available. However, Scout believes the data in its current form and potential application to HHCEC should not be considered during the State Environmental Protection Act (SEPA) analysis for the Site Certificate for the following reasons:

Informal Guidance and Unclear Application

To date, the recommended application and implementation for these data, which is yet to be published and peer reviewed, is informal. The consideration of these data has come from WDFW staff at project meetings and is not part of any published statewide guidance; the agency is in fact still developing guidance, including confirming any buffers and how they may be applied. WDFW staff made it clear during the January 06, 2022 meeting with Scout and EFSEC that the HHCEC is the first project under consideration for this new approach. It was not clear when, or if, more formal guidance from WDFW would be forthcoming. Further, the idea of using core use area and home range buffers was presented by WDFW without any specific instruction for how the buffers should or could be utilized in a SEPA analysis. The use of these data in any assessment at this time is by definition a novel exercise that has not been vetted by peers, resource agencies, regulators, or stakeholders. Guidance of this sort, which could have wide-ranging implications on renewable energy development in Washington, should be approached in a measured and thoughtful manner when formally released and broadly adopted by agencies and stakeholders.

Not Representative of Best Available Science

Per Washington Administrative Code, “best available science” means current scientific information used in the process to designate, protect, or restore critical areas that is derived from a valid scientific process following WAC 365-195-900 through 365-195-925. Indeed, expert opinion is a source of scientific information but lacks many elements inherent to a robust scientific process. The information relayed in the meeting on January 6, 2022 has not been peer reviewed and there are inconsistencies between what WDFW states and the limited information that is available. The only published source of the information is found in the periodic status assessment where Hayes and Watson (2021) state: home ranges averaged 315.9 km^2 (Brownian Bridge 95% isopleths) and 32.3 km^2 (50% isopleths) for seventeen breeding pairs in southcentral Washington and northcentral Oregon from 2007 to 2014 (J. Watson, WDFW, unpublished data). However, there is no distinction of how alternative nest territories, occupied inactive or failed nests, or historic nests are considered and, more importantly, how these data should be applied in a management context. Clearly, these discrepancies represent the preliminary nature of the data and future vetting and consideration is needed to ensure:

- The data are being implemented in a manner that is consistent with its intended purpose,

- Analyses are robust and peer-reviewed,
- Implementation of the data in a management setting are within the bounds of inference that can be made from the original data,
- Recommendations are adopted or codified in a manner that ensures the consistent application and interpretation across land use decisions in Washington.

For example, determinations of minimum habitat thresholds, resource use and selection, and land use intensity thresholds within core use areas and home ranges are beyond the inferences that can be made from data (J. Watson, WDFW, pers comm). The application of preliminary use data to create a novel analytical framework that evaluates an effect to a species is by definition not the best available science.

As stated on WDFW's website, the WAC refers to PHS in sections dealing with Critical Area Ordinances, Shoreline Master Programs, and the EFSEC. The state supreme court has held that PHS is a valid source of best available science for the Growth Management Act. Accordingly, Scout has incorporated into its project design the existing management recommendation for ferruginous hawk as described by the current published Priority Species recommendations (Larsen et al. 2004) and as instructed by WDFW during pre-application consultation meetings.

Inappropriate Timing of New Guidance

Scout has been diligently working on the HHCEC with EFSEC since 2020 and with WDFW since 2017 consistent with the WEG and the WDFW Wind Power Guidelines and is committed to implementing actions that are protective of the ferruginous hawk consistent with available data and guidance. The information presented by WDFW on January 6, 2022 was collected between 2007-2014. Data now being used to justify the proposed guidance have been available since 2014 but have not yet been published or otherwise made publicly available. Although ferruginous hawks have only recently been listed as state endangered, WDFW has had concerns for years regarding this species. Raptor nest surveys were completed annually within 2-miles of the HHCEC project boundaries from 2017 to 2019 and the presence of ferruginous hawk nest locations near the project site have been known to WDFW since 2017. If WDFW wanted this information to be considered in the SEPA analysis, then it should have raised it during pre-application consultation meetings or in the Environmental Impact Statement (EIS) scoping process, to allow for proper vetting and incorporating into project design documents. The SEPA scoping period ended in June 2021 and the EIS is expected to be completed in May 2022. Combined with the unprecedented application, inserting new information late into the planning process, particularly new requirements of this magnitude, will very likely result in costly schedule delays. The HHCEC needs to be constructed by 2024 in order to meet the anticipated interconnection date, which is responsive to regional utility plans resulting from state carbon-reduction policy initiatives.

Burden for Guideline Development

The burden for the development of new guidelines rests with WDFW. Utilization of core use area and home range buffers for ferruginous hawk may have significant implications on whether or how renewable energy projects are built in Washington State. How the buffers should be used in project planning and SEPA analyses

has not been made clear by WDFW. At present, WDFW seems to be relying on EFSEC, and their consultants for the HHCEC SEPA review, to create that methodology. The implications of these buffers on renewable energy development go far beyond the HHCEC and therefore should not move forward without the ability for stakeholder involvement and thoughtful analyses. Wide-ranging precedent like this should not be set haphazardly. It should be done with careful consideration of the short- and long-term implications for Washington's renewable energy future.

PROPOSED MITIGATION APPROACH IN LIEU OF GUIDANCE

Despite the concern regarding the premature application of these buffers for this Project at this time, Scout intends to continue to implement measures to minimize impacts on ferruginous hawk, as described in the Application for Site Certification (ASC) and Habitat Mitigation Plan (Appendix L to the ASC), and develop compensatory habitat mitigation to offset any potential remaining impacts to ferruginous hawk once minimization measures have been implemented (Larsen et al. 2004). Scout has worked with WDFW and EFSEC since 2017 to characterize the potential for ferruginous hawk, and other raptors, to occur in or near the project area and tailored minimization and mitigation measures specifically to minimize and mitigate impacts to ferruginous hawk. In addition to providing mitigation to meet the tenets discussed in the WDFW 2009 Wind Power Guidelines and related administrative codes, Scout intends to identify a mitigation approach that meaningfully contributes to the conservation of suitable foraging and nesting habitat, which are identified as conservation priorities (Hayes and Watson 2021). Scout is committed to providing habitat mitigation consistent with the mitigation ratios presented in the Habitat Mitigation Plan (HMP), which include shrub-steppe and grassland habitat, both of which provide suitable habitat for ferruginous hawk. When finalizing a mitigation approach, Scout will consider areas of high prey concentration as mapped by Washington Wildlife Habitat Connectivity Working Group and locations within core use areas or home ranges for ferruginous hawk, such that the final mitigation solution provides conservation value relative to the potential impacts the project may have. This general strategy is consistent with the approach that was discussed in the HMP submitted with the ASC (Appendix L), yet broadens the criteria to include species-specific characteristics that would benefit ferruginous hawk.

RECOMMENDED FERRUGINOUS HAWK ASSESSMENT METHOD

Scout has been working in coordination with WDFW since 2017 and has followed the USFWS Land-Based Wind Energy Guidelines, the USFWS Eagle Conservation Plan Guidance, the WDFW Wind Power Guidelines and had been proceeding with the work on the HHCEC with the understanding that the avoidance, minimization and mitigation measures for the ferruginous hawk were consistent with WAC 463-60-332 and WAC 365-195-900 through 365-195-925. However, in light of WDFW's recent discussions regarding its informal guidance, Scout proposes to implement additional conservation measures utilizing the following approach which will provide

context for land cover types surrounding a nest and potential benefits from mitigation activities, when occupied[1] ferruginous hawk nests are observed near project-related infrastructure.

In order to confirm that the mitigation approach meaningfully contributes to the conservation of ferruginous hawk, and potential impacts to ferruginous hawk from the project are adequately offset, the following assessment process is proposed. This assessment process will be incorporated in the HMP and utilized when selecting the location of the final mitigation approach (i.e., placement of a conservation easement or contribution to relevant conservation efforts).

General Assessment Steps

1. An assessment will be conducted for all occupied[1] nests in the PHS database within 10 km of the project boundary. If recent information about the status of a nest within 10 km is not known it will be considered occupied, unless data is available to state otherwise.
2. Within the 3.2 km and 10 km buffers of the occupied nests identified in #1, the following information will be assessed and summarized to the extent possible. Additional information that is relevant to ferruginous hawk ecology will be included as available.
    a. Acres and percent of buffer that is suitable habitat for ferruginous hawk (as defined in Management Recommendations for Washington's Priority Species – Volume IV: Birds [Larsen et al. 2004]).
    b. Acres and percent of buffer that is comprised of habitat concentrations for prey species.
    c. Acres and percent of buffer that is comprised of human altered habitat (e.g., urban, paved roads, industrial, vineyards or other intensive agriculture that would not provide suitable habitat for ferruginous hawk).
3. Utilizing the data from #2 the estimated impacts from the project due to habitat loss or alteration will be considered within the context of resources available to ferruginous hawk within the core use area and home range, allowing for a statement of relative impact that the project may have on a nest location.
4. Similarly, using the data from #2, the potential benefits of any proposed mitigation approach will be considered. For example, if a proposed mitigation area is located within a known ferruginous hawk core use area or home range, the resources (as noted in #2) within the mitigation area will be evaluated relative to the needs of ferruginous hawk. These available resources will then be assessed in context with impacts estimated at the project site, and the relation of those impacts to ferruginous hawk ecology. The mitigation approach will offset project effects within core use areas and home ranges for known nest locations.

[1] Larsen et al. (2004) uses the term occupied nest but does not provide a definition. Recommend reference to USFWS 2013 for definitions and determination of nest status.

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