

BEFORE THE STATE OF WASHINGTON  
ENERGY FACILITY SITING EVALUATION COUNCIL

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In the Matter of the Application of:  
Scout Clean Energy, LLC, for Horse Heaven  
Wind Farm, LLC,  
  
Applicant.

DOCKET NO. EF-210011  
  
REBUTTAL TESTIMONY OF ERIK  
JANSEN ON BEHALF OF SCOUT  
CLEAN ENERGY

**REBUTTAL TESTIMONY OF ERIK JANSEN**  
**ON BEHALF OF**  
**SCOUT CLEAN ENERGY**  
**EXH-1022\_R**

**JUNE 30, 2023**

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1 **I. Introduction**

2 **Q.** Please describe the purpose of this rebuttal testimony.

3 **A.** I am testifying in response to the pre-filed direct testimony of Mr. Mark Nuetzmann  
4 of the Confederated Tribes and Bands of the Yakama Nation.

5 **Q.** How is your rebuttal testimony organized?

6 **A.** Much of my work to support development of materials in the Application and  
7 portions of the Appendices was performed in coordination with Troy Rahmig, the  
8 Endangered Species Program Manager at Tetra Tech. Because our subject matter  
9 areas and work overlap, the Applicant intends for my testimony to be presented in  
10 conjunction with Mr. Rahmig's, including participating in a joint panel during the live  
11 cross-examination portion of the adjudicative proceeding.

12 **Q.** Acknowledging that much of your work was performed in coordination with Mr.  
13 Rahmig, to be clear, which portions of the Application for Site Certification or  
14 supporting materials are you sponsoring?

15 **A.** I am sponsoring portions of Section 3.4 – Habitat, Vegetation, Fish, and Wildlife,  
16 specifically, those related to wildlife (Section 3.4.1.3), impacts (Section 3.4.2), and  
17 mitigation measures (Section 3.4.3). And in addition to the appendices and  
18 supplemental reports listed in my direct testimony (Appendices K and M, and  
19 supplemental reports on Ferruginous Hawk nesting, population assessment, and on  
20 cumulative effects to birds, bats, and land cover), I am also sponsoring Appendix L,  
21 Wildlife and Habitat Mitigation Report.

22 **Q.** Are you able to answer questions under cross examination regarding your testimony?

23 **A.** Yes.

24

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1 **II. Best Available Science and Studies Used to Support Findings**

2 **Q.** Do you believe Mr. Nuetzmann’s testimony used or referenced the best available  
3 science?

4 **A.** No. The basis of Nuetzmann’s assertions, which were unmoored by any Project-  
5 specific biological field data are concerning. From his testimony, it appears  
6 Nuetzmann is not very familiar with the body of independent study and research that  
7 has been conducted for the Horse Heaven Clean Energy Center/Horse Heaven Wind  
8 Farm (Project). Using survey protocols from federal and state wind energy/wildlife  
9 guidance documents, 1,232 hours of large bird use surveys were conducted  
10 throughout the Project from 2018–2020, specifically looking for large-bodied bird  
11 species that includes ferruginous hawk (*Buteo regalis*; Updated ASC; Appendix M).  
12 An additional 160 hours were spent surveying small birds; although small-bodied  
13 birds were the focus of the small bird survey, WDFW Priority Species such as the  
14 ferruginous hawk were documented as well. During approximately 1,392 hours of  
15 avian use surveys, only four observations of ferruginous hawk were recorded which  
16 resulted in low overall ferruginous hawk use (0.01 observations/plot/survey).  
17 Ferruginous hawk had the lowest avian use compared to other congeneric *Buteo*  
18 species that migrate through or nest in the Horse Heaven Hills (e.g., red-tailed hawk  
19 [*B. jamaicensis*], rough-legged hawk [*B. lagopus*], Swainson’s hawk [*B. swainsoni*]).  
20 Overall mean avian use for these three species were 0.32 observations/survey/plot,  
21 0.26 observations/survey/plot, and 0.24 observations/survey/plot, respectively. Multi-  
22 year raptor nesting studies in the Horse Heaven Hills show a similar pattern of low  
23 ferruginous hawk nest occupancy which was similar to the low mean use observed  
24 during avian use surveys (Updated ACS; Appendix K). Based on these data, collision  
25 risk with turbines or disturbance to occupied nesting territories is anticipated to be  
26 low. Our assessments are based on the weight of evidence from biological field data

1 that were collected at the Project over multiple years, modeling data from WDFW  
2 and various conservation partnerships, and supplemental analyses. The Project cast a  
3 wide net that integrated site-specific data, regional data, and expert opinion through  
4 an iterative, stepwise framework, whereas Nuetzmann appears to base many of his  
5 statements on personal opinion.

6 **Q.** Mr. Nuetzmann relies heavily on an article by Leary et al. (1998) to support his  
7 findings. Is this source useful to an analysis of the Project’s impacts on Ferruginous  
8 Hawk?

9 **A.** No. At the beginning of his testimony, I believe Nuetzmann places a disproportionate  
10 level of ecological value on dryland wheat agriculture (the predominant landcover  
11 type in the Horse Heaven Hills) specifically related to the ecological benefits to  
12 ferruginous hawk. Indeed, Nuetzmann, cites a locally relevant study conducted 1994–  
13 1995 on the Hanford Nuclear Site which showed high use of irrigated agriculture  
14 lands in the surrounding area for foraging (Leary et al. 1998). Core use areas  
15 calculated by Leary et al. (1998) showed use concentrated in two areas: centered  
16 around the nest and in irrigated alfalfa fields. The study found that ferruginous hawk  
17 would travel comparatively long distances (>10 kilometers [km]) to access irrigated  
18 alfalfa fields. However, that study is not applicable here because a different farming  
19 method and crop cover type is used for irrigated alfalfa fields. A review of historical  
20 aerial photographs from the mid-1990’s of the Project does not indicate irrigated  
21 agriculture as a historically relevant land cover type at the Project. Indeed, there are  
22 vast areas of irrigated agriculture in southern Benton County, south of the Project.  
23 Although Nuetzmann stated “access to potential prey source (in irrigated agriculture)  
24 would be impacted by the wind turbines (Page 3),” he provides no evidence for this  
25 statement.

1 For the one study that Nuetzmann cites (Leary et al. 1998), there are  
2 numerous more that show ferruginous hawks’ aversion to agricultural lands and the  
3 importance of native habitats for nesting and foraging (Schmutz 1987, Squires et al.  
4 2020, Wallace et al. 2016, Watson 2020, for example). I do not contend there is no  
5 ecological value of agricultural lands to ferruginous hawk. The species needs for  
6 survival in highly fragmented, mostly converted habitats in the Pacific Northwest are  
7 very different compared to other more intact habitats within the species range (e.g.,  
8 Colorado, Nevada, and Wyoming). The WDFWs compensatory mitigation policy for  
9 Class IV habitats defined as Cropland (i.e., cultivated agriculture), Pasture, Urban and  
10 Mixed Environs indicates “no mitigation required” which reflects the inherent low  
11 habitat value of these land cover types (WDFW 2009 §5.0 and 8.2). All reputable  
12 state (WDFW, WDNR, WA Ecology), federal (Department of Energy, US Fish and  
13 Wildlife Service), and professional organizations (Wildlife Society, National Wildlife  
14 Federation, Renewable Energy Wildlife Institute) and scientists encourage siting of  
15 renewable energy facilities on previously disturbed lands that include  
16 cropland/agriculture. This is due to the low value of agricultural lands to support  
17 wildlife.

18 **III. Size of the Project**

19 **Q.** Mr. Nuetzmann claims that it is not feasible to mitigate the impacts of the Project  
20 because it is too large. Do you agree with this assertion?

21 **A.** No. While I agree this is the largest single proposed renewable energy project before  
22 the Washington Energy Facility Site Evaluation Council, the Washington component  
23 of the Stateline Project in Walla Walla County, permitted in Washington by Walla  
24 Walla County, and on the Oregon side of the Columbia River by the Oregon Energy  
25 Facility Siting Council (EFSC), entails 270 operating wind turbines in Washington,  
26

1 and 184 wind turbines in Oregon (454 wind turbines total), making that the largest  
2 wind facility in Washington (Hoen et al. 2023).

3 Although the Project represents the single largest renewable energy facility  
4 proposed by one energy developer, I believe Nuetzmann interprets this metric  
5 incorrectly in the context of existing facilities. As of May 31, 2023, there were 3,812  
6 operating wind turbines composed of 65 projects (including phases) in the Level III  
7 Columbia Plateau Ecoregion of Oregon and Washington (Hoen et al. 2023). Of these,  
8 1,731 wind turbines (45%) were located within the nesting range of the ferruginous  
9 hawk in Washington (WDFW 2015, USGS 2018). The largest solar energy project in  
10 Washington, the Lund Hill Solar Energy Project in Klickitat County, is approximately  
11 1,800 acres (ac) of contiguous solar arrays whereas the proposed solar arrays at the  
12 Project comprise three spatially separate solar siting areas 1,935–2,641 ac that are  
13 subdivided into distinctly smaller areas to facilitate wildlife movement and  
14 connectivity (DEIS Table 2.2). Although the total proposed solar area at the Project is  
15 larger than Lund Hill, the geometry of the solar arrays at the Project are much  
16 different. In addition, land cover at Lund Hill was composed planted grasslands and  
17 shrub-steppe, whereas land cover at the Project affected by solar is primarily  
18 agriculture. There are nuances and aspects in making comparisons solely based on  
19 project size that Nuetzmann does not understand or misinterprets.

20 Although Projects are developed and permitted individually, typically by  
21 separate developers, most projects are co-located in Wind Resource Areas (WRAs)  
22 which are specific geographic areas where the conversion of the wind resource into  
23 energy and access to transmission is optimized. Examples include the Washington  
24 side of the Columbia Gorge WRA in Klickitat County, Lower Snake River WRA in  
25 Garfield and Columbia counties, and the Vancycle Canyon WRA in Walla Walla  
26 County. Because of the relatively close proximity of wind turbines within a WRA,

1 they functionally act as single feature, impacting geographically similar resources  
2 despite being composed of separate “projects.”

3 When combined with the existing Nine Canyon Wind Project in Benton  
4 County, the Project would comprise only the fourth largest WRA in Washington,  
5 much smaller than the Vancycle Canyon WRA = 652 turbines (454 turbines Stateline  
6 Wind, 270 turbines in Washington); WA Columbia Gorge WRA = 601 turbines;  
7 Lower Snake River WRA = 469 turbines, Horse Heaven Hills WRA = 307 turbines;  
8 Lower Kittitas Valley = 209 turbines.

9 Each project in the WRAs mentioned was permitted separately, had their own  
10 analysis, and corresponding mitigation requirements, yet collectively encompasses a  
11 far greater footprint than the Project. It stands to reason and logic that the Project will  
12 be able to comply with the standards set forth by the EFSEC, just as every project  
13 before has been able to.

14 **Q.** Mr. Nuetzmann describes the project in terms of acreage to support his argument that  
15 it is not feasible to mitigate impacts. Is this an accurate method of determining the  
16 feasibility of the Project’s impacts?

17 **A.** No. Describing the scope of the project in terms of acreage under lease agreement  
18 (72,428 ac – incorrectly cited by Nuetzmann as 73,000 ac) is misleading and  
19 misrepresents the magnitude of the Project proposal. A fraction of a particular leased  
20 area is typically developed for access roads, wind turbine pads, solar arrays, and  
21 associated infrastructure (Diffendorfer and Compton 2014, Bolinger and Bolinger  
22 2022). Of the 9,826 ac of ground disturbing activities, just 6,869 ac (9.5% of the  
23 Leased Area) of permanent impacts are anticipated in the Leased Area – the majority  
24 of which would be from solar development (Updated ASC; Table 2.1.1). Permanent  
25 habitat impacts in the Micrositing Corridor from wind turbine development comprise  
26 a small amount (299 ac; 4.4%) of total permanent habitat impacts; the majority of

1 which (252 ac; 84.3%) is located in dryland wheat agriculture (Updated ASC; Table  
2 3.4-14). Similarly, the fenced solar arrays are comprised of 6,646 ac, of which 5,606  
3 ac (84 %) is agricultural land, 719 ac (11%) is shrub-steppe (all of which is  
4 rabbitbrush shrubland), and 321 ac (5%) is grassland (most of which is planted  
5 grassland).

6 In addition, there have been numerous modifications to the Project design  
7 which decreases impacts to wildlife connectivity and potential impacts. For example,  
8 the proposed East Solar field (originally 1,994 ac permanent impacts; DEIS Table 2-  
9 2) which was adjacent to a modeled movement corridor has been reduced by 65%,  
10 removing all proposed infrastructure to the east side of Interstate 82, out of the  
11 connectivity corridor and entirely into cropland, avoiding impacts to modeled  
12 connectivity corridors and Priority Habitats used by ferruginous hawk, such as shrub-  
13 steppe and grassland.

14 **Q.** Do you agree that piecemeal siting of projects makes it easier to identify and mitigate  
15 impacts?

16 **A.** No. In my professional experience, permitting larger scale projects allows a more  
17 comprehensive study of the resources, impacts, and application of avoidance,  
18 minimization, and mitigation measures than a piecemeal of separate projects in the  
19 same geographic area. This is particularly true for the Horse Heaven Project, which  
20 has undergone wildlife and habitat studies for multiple years prior to submittal of the  
21 ASC, and studies continue even as this Project has entered the permitting process.  
22 The piecemeal approach fractures the pre- and post-construction data collection  
23 process and resulting analyses, may separate permitting authorities that may have  
24 different regulatory standards/statutes, and can result in a patchwork of mitigation  
25 measures that are less biologically effective or meaningful.



1 **IV. Habitat Fragmentation**

2 **Q.** Mr. Nuetzmann argues that it is difficult to predict cumulative impacts. Do you  
3 agree?

4 **A.** No, not necessarily. Impacts to habitat types and the intensity of the impacts  
5 (temporary, permanent, modified) are not particularly difficult to predict since they  
6 follow the maximum built scenarios based on construction specifications. Areas  
7 identified within the micrositing corridor are the areas where impacts would  
8 potentially occur. There is no difficulty in those calculations for past, current, and  
9 reasonably foreseeable projects. A number of different studies have researched the  
10 cumulative impacts from renewable energy development in the Columbia Plateau  
11 Ecoregion (Johnson and Erickson 2008, 2010, 2011, Jansen 2023, Watson et al. 2021)  
12 and regionally (American Wind Wildlife Institute 2019, WEST 2021). Chapter 5 of  
13 the Project D-EIS addresses Cumulative Impacts. From this library of research,  
14 impacts to species, groups, and habitats have been studied. Again, it appears  
15 Nuetzmann is not very familiar with the body of wind and wildlife research and study  
16 that has occurred and bases his conclusions on opinion.

17 **Q.** Do you believe the methods and metrics Nuetzmann used to describe habitat  
18 fragmentation as a result from the construction and operation of the Project are  
19 appropriate?

20 **A.** No. Nuetzmann provides an overly generalized description of the basic concepts of  
21 habitat fragmentation (“habitat fragmentation may impact species differently,” Page  
22 4) that does not relate the ecological concepts of fragmentation to the biological field  
23 data, modeling, or landscape context at the Project. Ecology textbooks would define a  
24 landscape primarily composed of monocrop agriculture, with transportation and  
25 electrical distribution networks along nearly every section line, and isolated patches  
26 of native habitat relegated to drainages and steep slopes, where agriculture was not

1 possible, as highly fragmented and degraded habitat (Johnson and O’Neil 2001,  
2 Lindenmayer and Fischer 2006).

3 **V. Ferruginous Hawk**

4 **Q.** Do you believe the Project will cause the extirpation of the breeding population of  
5 ferruginous hawk in Washington?

6 **A.** No. When considered in isolation, I do not believe the Project will cause the  
7 extirpation of the breeding ferruginous hawk population in eastern Washington. Eight  
8 ferruginous hawk fatalities have been documented over 20 years of post-construction  
9 fatality monitoring at wind facilities throughout the hawk’s breeding range of the  
10 Columbia Plateau Ecoregion in eastern Oregon and Washington. Even low levels of  
11 wind-derived mortality are a concern for a species with low population numbers.  
12 However, what is more concerning to me, from a population perspective, is the  
13 management of resources at larger scales within their breeding (Columbia Plateau),  
14 summer (Intermountain West), and winter (California) ranges. The stressors to  
15 ferruginous hawk population viability are many and includes but not limited to the (1)  
16 progressive expansion of urban and exurban development (2) elimination of nesting  
17 and foraging habitat, (3) lack of federal and state funding to support regional  
18 conservation initiatives that would benefit ferruginous hawk, (4) continued  
19 conversion of over 80% of Washington’s native shrub-steppe nesting and foraging  
20 habitat to cultivate soft white wheat to produce cookies and desserts (Washington  
21 Wheat Commission 2023), (5) wide-spread use of rodenticides that introduces a  
22 trophic cascade of poisons into the ecosystem, (6) reduction in available prey base  
23 caused by habitat conversion, encroachment of non-native, exotic plant communities,  
24 and climate change, and (7) wanton shooting of all age classes by an uninformed  
25 public (Collins and Reynolds 2005, Hayes and Watson 2021). These are just some of  
26 the conservation headwinds this species faces at all spatial scales within the species’

1 range. Many of these stressors are already present in the Horse Heaven Hills. The  
2 construction of new multimillion dollar homes has expanded into the Horse Heaven  
3 Hills and built within 200–300 m of historical ferruginous hawk nests in the  
4 Clodfelter, Clodfelter West and Yakitat territories (Jansen 2022). Historical territories  
5 along Beck Road and Spirit Lane have also been lost to residential development.  
6 None of the territories mentioned have been occupied by ferruginous hawk during  
7 recent raptor nest surveys (Jansen 2022, Jansen *in press*, WDFW 2022). Many of the  
8 historical nests within these territories and throughout the Horse Heaven Hills are in  
9 poor condition or gone altogether, indicating no recent use by ferruginous hawk or  
10 other raptor species (Jansen 2022). Concluding that a single wind energy facility  
11 would tip the species toward an extinction vortex, is reductionist and does little  
12 service to address the myriad number of issues the species faces at the northwestern  
13 edge of its breeding range in North America. This overall human-caused expansion,  
14 including conversion of farmland and habitat for residential, and the ensuing stressors  
15 are far more important and concerning with respect to breeding populations than a  
16 single local wind energy project.

17 **Q.** Turning to aspects of the habitat mitigation plan (HMP), Nuetzmann offered several  
18 concerns that included how impacts are classified and the mitigation ratios that were  
19 used. What specific areas do you agree or disagree with?

20 **A.** On Page 6, Nuetzmann states concern that there is no mitigation for agriculture or  
21 disturbed land. Compensatory habitat mitigation ratios follow the WDFW Wind  
22 Power Guidelines which were developed with broad stakeholder involvement from  
23 various state, federal, NGO, and private organizations. Application of these  
24 guidelines are embedded into Washington Administrative Codes and have presided as  
25 the standard for mitigating impacts from renewable energy projects in Washington  
26 when they were first adopted in 2002 (Ling and Linehan 2003).

1 In the absence of state-recognized wildlife guidelines for utility scale solar  
2 energy (USSE) in Washington, biologists must rely on various federal (e.g., USFWS  
3 2012) and state guidelines and policies (WDFW 1999, 2009) as a baseline standard  
4 and adjust the standards based on input and consultation from WDFW area and  
5 habitat biologists. Nuetzmann may disagree with the classification within the fenced  
6 area classified as modified habitat; however, the classification was made in  
7 consultation with WDFW after multiple meetings and document sharing. Although  
8 not formal, WDFW maintains internal Standard Operating Procedures that help direct  
9 solar evaluations (Ritter, M., WDFW Renewable Energy Lead, pers comm.). Further,  
10 the concept of modified habitat has evolved with WDFW through solar permitting  
11 with county planning departments and has precedent with EFSEC Projects including  
12 Goose Prairie Solar, Yakima County. Thus, the personal opinions of Nuetzmann  
13 regarding impact classification lacks standing, relevance, and precedent.

14 **Q.** Are there any aspects to the details Nuetzmann discusses regarding the Population  
15 Viability Analysis (Jansen and Swenson 2022) you would like to clarify?

16 **A.** Yes. Nuetzmann mentions the baseline population growth rate several times without  
17 any other measure modeled in the analysis and believes he misinterprets the  
18 demographic vital rates as being static over a 30-year period. This is obviously an  
19 invalid assumption in wildlife populations. Indeed, a population growth rate less than  
20 one ( $\lambda < 1$ ) will result in a declining population trajectory as discussed by Hayes and  
21 Watson (2021) but that was not the point of the analysis, and I believe Nuetzmann  
22 selectively isolates this one aspect of the model to support his narrative without  
23 respect to the other elements associated in the analysis. The PVA was intended to  
24 offer sensitivities to certain stressors or conservation measures assuming a point in  
25 time and how the effects to certain vital rates can change the trajectory of a  
26 population. Additionally, the analysis does not incorporate the Oregon or Idaho

1 populations and viewed through the political boundaries of Washington. Immigration  
2 or emigration processes were not modeled. Animal populations do not recognize  
3 political boundaries and over emphasizing baseline conditions misses the whole point  
4 of the study. The analysis should not be viewed as a predictive tool or crystal ball,  
5 rather, the modeling exercise was intended to identify how demographic vital rates  
6 can affect an assumed population trajectory, and relatedly, how certain conservation  
7 measures may influence those vital rates.

8 **Q.** Continuing with the PVA, Nuetzmann goes into some length about the use of  
9 artificial nesting platforms to help provide nesting substrate and disparages them as  
10 an effective conservation tool. Do you believe Nuetzmann uses best available science  
11 and understands the rationale for considering this voluntary conservation measure?

12 **A.** No. It appears Nuetzmann is not familiar with the conservation tools WDFW or  
13 agencies/providences throughout the range of the ferruginous hawk use to benefit the  
14 species. From the 1980's to current, WDFW, Bureau of Land Management, and other  
15 organizations have installed ANPs through Washington to help supplement  
16 ferruginous hawk nesting habitat. In fact, as recent as 2019, WDFW, in coordination  
17 with WA Department of Transportation installed 29 ANPs throughout Washington,  
18 including seven (7) ANPs in Benton County, where the Project is located (Hayes and  
19 Watson 2021). WDFW states in the Wind Power Guidelines that installation of ANPs  
20 are a viable tool to help off-set impacts (WDFW (2009§3.0) and used to provide new  
21 or replacement nesting opportunities (Hayes and Watson 2021). The use of ANPs are  
22 a common and effective conservation tool used throughout the range of ferruginous  
23 hawk in the US and Canada (Tigner et al. 1996, Migaj et al. 2011). In a Wyoming  
24 study, Wallace et al. (2016) found higher daily nest survival rates at nests on  
25 anthropogenic structures than natural substrates and indicated artificial nest platforms  
26 are an effective tool to improve breeding success of ferruginous hawks and nesting on

1 anthropogenic structures does not constitute an ecological trap for this species. I  
2 contend if the installation of ANPs for ferruginous hawk conservation is viewed as an  
3 acceptable conservation tool and used by state agencies and conservation groups, then  
4 the same qualification should be applied to the Project.

5 Nuetzmann correctly states ANP occupancy data were based on nine studies  
6 but fails to recognize the scale of the dataset where occupancy was documented at  
7 1,155 platforms between 1976–2019 and represents the most comprehensive  
8 summary of ANP occupancy publicly available. The incomplete data account by  
9 Nuetzmann appears to infer the success of ANP occupancy by ferruginous hawk is  
10 based on a limited dataset and is largely unknown, which is not the case.

11 It is an important point to note that the ANP program would be a voluntary  
12 measure in addition to the compensatory habitat mitigation and other measures  
13 proposed, not in lieu of anything. The program would extend throughout the range of  
14 ferruginous hawk in Washington and not in proximity of the Project. I would contend  
15 that any potential to have a positive effect on a resource far outweighs the certainty of  
16 no positive effect, if not action is taken.

17 **Q.** Nuetzmann mentions how HMP mitigation selection Criteria 2 for the conservation  
18 easement (ASC; Appendix L §7.4.4) does not meet the nest occupancy criteria of the  
19 nearest nest.

20 **A.** This issue has already been addressed in Data Request 7 (§FEIS-Habitat-13)  
21 submitted to EFSEC March 22, 2023 where, modified language reads as follows:

22 *“...must be within the core use area or home range of a ferruginous hawk nest that is*  
23 *known to be active in the last three breeding seasons or is in a location with*  
24 *documented historical ferruginous hawk nesting activity or a historical nesting*  
25 *territory.”*

26

1 This nuanced change generalizes the temporal condition of three years and allows  
2 greater flexibility to apply mitigation in areas where a greater suite of factors (limited  
3 existing human presence, limited fragmentation) would be considered to increase the  
4 effectiveness of the mitigation.

5 **Q.** Nuetzmann mentions habitat mitigation should be directed to the restoration of  
6 agriculture to shrub-steppe. Was that mitigation approach considered for the Project?

7 **A.** No. WDFW habitat mitigation policy (1999) and hierarchy (WDFW (2009)  
8 prioritizes mitigation location and type in the following sequential order from  
9 preferred to least preferred.

- 10 ○ A. On-site, in-kind
- 11 ○ B. Off-site, in-kind
- 12 ○ C. On-site, out-of-kind
- 13 ○ D. Off-site, out-of-kind

14 The location and type of the conservation easement is the most preferred location and  
15 type according to WDFW (on-site, in-kind). Nuetzmann offers a second to least  
16 preferred type of mitigation. The number of ecological steps of succession, inputs  
17 (i.e., herbicides), and time needed to restore agriculture would be significantly higher  
18 than acquisition/conservation and enhancement of an existing grassland shrub-steppe  
19 matrix. As discussed in Data Request 7 (FEIS-Habitat-10), submitted to EFSEC  
20 March 22, 2023, interest in on-site, in-kind mitigation strategy was vocalized by  
21 WDFW during meetings in 2021 and 2022; hence the text being reflected here.  
22 Specifically, during a meeting with EFSEC and WDFW, held February 3, 2022, the  
23 mitigation ratios were agreed to. During that same meeting WDFW presented a map  
24 showing “landscape mitigation options proposed by WDFW” and the proposed  
25 easement location is within the area identified on that map. That meeting and that  
26 map highlighted the importance of on-site or near-site mitigation options. Once again,

1 it is clear Nuetzmann is not familiar with state policies, practice, and precedent and  
2 offers opinion on the matter of mitigation.

3 **Q.** Nuetzmann mentions the DEIS (Table 4.6.9-9, Page 4-199) states the Project would  
4 avoid siting components within 2 miles of PHS hawk nests but then says  
5 infrastructure would still be built in these areas. Is there a point that needs to be  
6 clarified?

7 **A.** Yes. Nuetzmann incompletely cites the mitigation measure. In the event components  
8 are located within 2 miles of hawk nests, a Project-specific ferruginous hawk  
9 mitigation plan would be developed. The DEIS mitigation measure goes on to  
10 describe the elements and structure of the plan in detail, which I will not reiterate  
11 here. The mitigation measure provided by EFSEC is clear that the plan would be  
12 developed in consultation with the Project’s Technical Advisory Committee (TAC)  
13 and approved by EFSEC.

14 **Q.** Nuetzmann suggests several times that turbines should be “shut off” or “deactivated”  
15 within the home range (10 km) of hawk nests (Pages 9–10) during the breeding and  
16 rearing period for the species. Is that method standard practice at operating wind  
17 facilities within eastern Washington?

18 **A.** No. I am not aware of any operational wind energy facility in Washington (or  
19 Oregon) that “shuts off or deactivates” wind turbines as a preemptive measure to  
20 minimize the likelihood of wind turbine collision for state-listed species. In my  
21 experience, modifications to wind turbine operation, whether it be curtailment or the  
22 adjustment of cut-in speeds, are typically applied when federally listed species are  
23 affected and typically triggered in response to fatality thresholds being surpassed as  
24 defined in an adaptive management strategy and developed under the purview of a  
25 Technical Advisory Committee, Habitat Conservation Plan, or other charter. Site-  
26 specific-data should inform site-specific management actions which is a central tenant



1 of the adaptive management framework (Williams and Brown 2002). Parameters  
2 (time-of-day, dates, locations, turbine operation) are tailored specifically for the  
3 characteristics of the Project and species of concern. The statements Nuetzmann  
4 provides regarding “shut off/deactivation” are outside any situations or conditions  
5 I’ve observed at wind turbine projects in the western US.

6 **Q.** Nuetzmann mentions that alteration of native habitat near core areas (3.2 km) and  
7 home ranges (10 km) are difficult to mitigate. Do you think this is an accurate  
8 statement?

9 **A.** No. Nuetzmann does not provide the information he used to form the basis for the  
10 statement. Habitat restoration/mitigation of temporary impacts includes reseeded  
11 areas with a native seed mix and noxious weed monitoring. The use of native seed  
12 mix to enhance or restore wildlife habitat is the cornerstone of the Natural Resource  
13 Conservation Service Conservation Reserve Program, WDFW State Acres for  
14 Wildlife Enhancement (SAFE) and other initiatives that have benefited ferruginous  
15 hawk populations. The same type of native seed mixes would be used to restore all  
16 temporary impacts at the Project. Permanent impacts would be mitigated through the  
17 compensatory habitat mitigation framework.

18 **Q.** Nuetzmann expresses concerns about the TAC and expresses concerns about the  
19 decision-making authority. Is there any information that needs to be clarified?

20 **A.** Yes. The Project Application materials, initial environmental review, WDFW (2009),  
21 Washington Revised Code 80.50 and Title 463 are clear the decision-making  
22 authority, and enforcement of conditions in the Site Certification Agreement are  
23 within the purview of the permitting authority. As such, the multi-stakeholder TAC  
24 membership functions as a post-construction advisory committee that reviews Project  
25 materials and recommends certain conditions to EFSEC through the adaptive  
26 management process. WDFW (2009 §3.0) is clear on the intent and spirit of the TAC.

1 The TAC process is a defined process that has occurred at many wind projects in  
2 Washington. The Wild Horse Facility in Kittitas County is a notable example with  
3 sensitive resources such as greater sage-grouse (*Centrocercus urophasianus*) and  
4 Rocky Mountain elk (*Cervus canadensis nelsoni*) where the TAC effectively worked  
5 to make recommendations that EFSEC integrated into their project conditions through  
6 the adaptive management process. A number of Project documents have been  
7 developed that clarify the intent and charter of the TAC with EFSEC and Counsel for  
8 the Environment. It does not appear Nuetzmann is familiar with standard wind energy  
9 permitting processes or project materials.

10 **Q.** Does your testimony rely on any literature to support your conclusions?

11 **A.** Yes. Please see below. All literature mentioned or cited below are in the ASC or  
12 supporting materials that are on the record.

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