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6 **BEFORE THE STATE OF WASHINGTON**  
7 **ENERGY FACILITY SITE EVALUATION COUNCIL**

8 In the Matter of Application No. 2009-01

9 WHISTLING RIDGE ENERGY LLC,

10 WHISTLING RIDGE ENERGY  
11 PROJECT

COUNSEL FOR THE  
ENVIRONMENT'S CLOSING  
BRIEF

12 **I. INTRODUCTION**

13 Wind power is a clean alternative to burning fossil fuels to generate electricity. The  
14 development of wind power and other alternative fuel technologies, to the extent they  
15 supplant the use of fossil fuels, benefits the environment and the public. These benefits,  
16 however, are not free from environmental impacts, particularly with regard to wildlife and  
17 aesthetics.

18 In this case, concerns regarding these impacts are heightened by the unique nature of  
19 this project. If authorized, the Whistling Ridge Energy Project (WREP) will be the first of its  
20 kind constructed within a coniferous forest in the Western United States. This project also  
21 will be the first wind power project developed in such close proximity to a national scenic  
22 area. In reviewing this project, it is important that EFSEC has the information to understand  
23 these impacts and considers the appropriate mitigation. As a consequence, if this project is  
24 approved, it is imperative that these impacts be fully understood and meaningfully mitigated.

25 Counsel for the Environment here (CFE) has not taken a position regarding whether  
26 WREP should be authorized and continues to stand by this position. Nonetheless, should

1 EFSEC recommend that the project be constructed, CFE, for the reasons set forth below, asks  
2 that the Council condition any such approval upon institution of appropriate mitigation  
3 measures such as those described in this brief.

## 4 II. IMPACTS TO WILDLIFE

### 5 A. Birds

6 As mentioned earlier, this project, if permitted, will be the first of its kind sited in a  
7 coniferous forest habitat within the Western United States. Ex. 31.00 (Direct Testimony of  
8 Don McIvor) at 3, line 25 – 4, line 5. While the project site is not pristine habitat, having been  
9 managed as a commercial forest for approximately a century, the project will impact a wide  
10 variety of bird and bat species. Ex. 6 at 7, lines 9-10. Ex. 31.00 at 3, lines 2-14. Indeed,  
11 approximately 90 different bird species have been documented on the site and several species  
12 are of special Federal and/or State concern. 1/6/11 TR<sup>1</sup> at 346; Ex. 31.00 at 7, line 18-10,  
13 line 9.

14 Of these 90 species, approximately 62 species (72 percent) are forest associated birds,  
15 *i.e.*, birds most likely to be found in forested habitats. *Id.* at 828, line 25 – 829, line 1.  
16 Consequently, there is a likelihood that, if constructed, this project will be the first exposure  
17 many of these forest dwelling species of birds (and bats) will have to a commercial wind power  
18 project. Ex. 31.00 at 9, lines 4-21; 10, lines 1-6; 1/6/11 TR at 830, lines 10-23. The Applicant  
19 has attempted to predict the wildlife impacts by conducting wildlife surveys on the project site  
20 and comparing this data to mortality rates found at other operating wind power projects. None  
21 of the operating projects used for comparison, however, are located in a similar habitat. Ex.  
22 31.00 at 4, lines 1-4; 1/6/11 TR at 627, lines 1-7. Accordingly, exactly how a commercial  
23 wind power project will actually impact birds (or bats) within this habitat is not certain.

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<sup>1</sup> “TR” refers to the transcripts from the administrative hearing.

1           **Sensitive Bird Species**

2           Many of sensitive species<sup>2</sup> found at the site are forest dependent and have not  
3 encountered commercial wind power projects, like WREP. The Northern Goshawk is a forest  
4 raptor that is listed as a Washington state candidate species and a Federal species of concern.  
5 Ex. 31.00 at 8, lines 23-24. Because of its habitat association, this species has little experience  
6 in proximity to wind turbines in western forests, making mortality risk hard to predict. *Id.* at 9,  
7 lines 6-14.

8           The Olive-sided Flycatcher is another federal species of concern occurring at the site.  
9 Ex. 31.00 at 9, lines 15-16. Like the Northern Goshawk, the Olive-sided Flycatcher is a forest-  
10 dependent species, which has no experience with wind energy facilities located in its habitat.  
11 All 21 of the birds recorded at the site during the 2006 surveys were within the rotor-swept  
12 area (this metric was not recorded during the 2009 surveys), suggesting that this species is at  
13 some unquantified risk of collision with moving rotor blades if the proposed project is  
14 constructed. *Id.* at 9, lines 15-21.

15           The Pileated Woodpecker, a Washington state candidate species, is another forest-  
16 dependent species, like the Northern Goshawk and the Olive-sided Flycatcher. Ex. 31.00 at 9,  
17 lines 24-25. Because no other wind turbine farms have been constructed in western forests, we  
18 lack any comparative data for evaluating how this species may or may not be at risk in the  
19 presence of a wind energy facility. *Id.* at 10, lines 1-5.

20           The Northern Spotted Owl (NSO), a federally and state listed endangered species, has  
21 been documented in close proximity to the site, though not on the site itself. Ex. 31.00 at 7,  
22 lines 19-20. The northern-most portion of the project site overlaps an NSO circle (Moss Creek  
23 Circle), and a second NSO circle (Mill Creek) is proximate to the project. *Id.* at 7, lines 20-23.  
24 After several years of surveys for Northern Spotted Owls, the applicant's wildlife expert  
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26           <sup>2</sup> "Sensitive species" refers to species that have been identified as being at some degree of risk by state  
or federal agencies.

1 reported finding a single male (supported by subsequent investigation) Northern Spotted Owl  
2 within the Mill Creek Circle in Spring 2010. *Id.* at 7, lines 22-25. This discovery is disclosed  
3 in the DEIS, but the Amended Application for Site Certification predates the detection. *Id.* at  
4 7, lines 25-26.

5 The 1.8-mile diameter NSO circles are intended to approximate the breeding range of a  
6 pair of Northern Spotted Owls, with the intention that these areas will be managed to conserve  
7 the owl's habitat into the future. Ex. 31.00 at 8, lines 2-5. About 2 acres of habitat in the Moss  
8 Creek Circle would be impacted by the project as proposed, but in informal consultation with  
9 the Bonneville Power Administration, the United States Fish and Wildlife Service made a  
10 determination that this loss of habitat would be insignificant to the spotted owl (based on the  
11 conclusion that adequate habitat would remain even with the loss of the 2 acres). *Id.* at 8, lines  
12 5-8. The location and nature of the owl (as a single male) located in spring of 2010 led the  
13 Service to concur that the project is not likely to adversely affect the Northern Spotted Owl.  
14 *Id.* at 8, lines 4-11. In any event, two acres on the project site that might have provided  
15 adequate Northern Spotted Owl habitat were recently logged and, therefore, are currently of  
16 little value to the Northern Spotted Owl, which lives primarily in old growth forest. Ex. 5.04 at  
17 3; 1/7/11 TR at 955, lines 20-25.

18 A number of sensitive species that are not forest dependent have also been documented  
19 at the site. Although data regarding the interaction of these species is available from other  
20 wind turbine projects, there is no information regarding how these species would interact with  
21 turbines in a Western coniferous forest habitat. These species include both the Bald Eagle and  
22 the Golden Eagle, which are managed under the Bald and Golden Eagle Protection Act as  
23 administered by the US Fish and Wildlife Service. Ex. 31.00 at 8, lines 14-17. Because of the  
24 project site's proximity to the Columbia River, Bald Eagles would reasonably be expected to  
25 wander through the site, probably infrequently at current population levels, particularly during  
26 the winter. *Id.* at 8, lines 17-19. The Golden Eagle is a raptor of more open country, but again,

1 given proximity to its preferred habitat and the fact that it could use the surrounding  
2 mountainous terrain for migration, it too should be expected in at least low numbers at the site.  
3 *Id.* at 8, lines 19-21. The occasional presence of these species would place individuals at some,  
4 albeit probably low, risk of collision with rotors. *Id.* at 8, lines 21-22.

5 The Vaux's Swift is another Washington state candidate species found on the site. Ex.  
6 31.00 at 9, lines 24-25. The Vaux's Swift is not forest dependent, but it is at risk based on its  
7 migration through the project area in the fall. *Id.* at 9, lines 24-26.

8 The Western Bluebird is a "state monitor" species, and it has also been recorded at the  
9 site and within the rotor swept zone. Ex. 31.00 at 10, lines 6-7. Individuals would therefore  
10 be at some risk of mortality from collisions with turbines. *Id.* at 10, lines 7-8.

#### 11 Relative Abundance

12 During the hearing, it became apparent that Applicant's experts did not gather relative  
13 abundance data regarding sensitive wildlife species found at the site. 1/6/11 TR at 832, lines  
14 21-23. Relative abundance data is important because it places data collected on the site in  
15 context with concentrations of particular species found in similar off-site habitat. 1/6/11 TR  
16 832, lines 16-20. In his analysis, Applicant's expert determined the risk posed to a particular  
17 species by comparing the concentrations of different species identified at the site. 1/6/11 TR  
18 707, lines 22-25. This analysis is problematic when it comes to a sensitive species because a  
19 sensitive species' concentration on a particular site compared to more common species is  
20 almost always going to be small by virtue of the fact that it is a sensitive species. As CFE's  
21 expert Don McIvor explained,

22 . . . I guess I would describe it as a logic problem with one of the premises  
23 presented in the bird analysis, which is that if a bird is rare it's of less concern  
24 because it's less likely to encounter a rotor. And the problem that I have with that  
25 is that if . . . you have a small population, just a few birds, a single mortality event  
26 can disproportionately affect the small population. So in the case of the Northern  
Goshawk[,] they don't occur in high densities anywhere within their range,  
wherever you find them they're very low density. Only a few were seen at this  
site. But one would expect probably at most one or two breeding pairs in the  
vicinity. . . .

1 Well, if you have four birds and one gets killed you've lost [25] percent of  
2 your local population. Now I know the focus is and the concern is overall  
3 population, but there's still potentially a local impact.

3 1/6/11 TR at 832, line 24 – 833, line 12.

4 **B. Bats**

5 The project's impact on bat species is also of concern. Bats are a vitally important part  
6 of our ecosystems, providing an irreplaceable ecological service via the insects that they  
7 consume and in some regions of the country, the flowers they pollinate. Ex. 31.00 at 10, lines  
8 11-13. That first ecological service is not only important to our personal comfort, as a lot of  
9 those insects are mosquitoes, but bats also reduce the abundance of insects that impact our  
10 agricultural crops. *Id.* at 10, lines 13-15.

11 Like a lot of wildlife, bats are suffering from habitat loss and habitat degradation. Ex.  
12 31.00 at 10, line 17. Bats are also at risk because they have a low reproductive rate, making it  
13 hard for populations to recover from mortality events. *Id.* at 10, lines 23-25.

14 With regard to wind energy facilities, bats have some unique characteristics. Ex. 31.00  
15 at 11, lines 1-2. Most fatalities at wind sites are among migratory, tree-roosting species. *Id.* at  
16 11, line 2. Recently, barotrauma has been identified as a causal mechanism in some bat deaths  
17 at wind facilities. *Id.* at 11, lines 3-4. This appears to occur when bats cross the low-pressure  
18 vortex trailing behind the tips of moving rotors. *Id.* at 11, lines 4-5.

19 As discussed earlier, no wind energy sites have been developed in Western coniferous  
20 forest habitat. Ex. 31.00 at 11, line 13; Ex. 6 at 10, lines 15-18. Other wind power projects in  
21 Washington are located in significantly different types of habitat and data gathered from these  
22 sites cannot be used to extrapolate potential impacts of the proposed project site. *Id.* at 11,  
23 lines 13-16. This is especially a concern in light of the disproportionate impact wind energy  
24 facilities are believed to have on forest dependent species, like tree bats. Ex. 31.00 at 11, lines  
25 16-17.

1 Another concern relates to the fact that, with the exception of the Hoary Bat, the bats  
2 using the site have not been identified by species. Ex 31.00 at 11, lines 8-9. Accordingly,  
3 potential impacts on specific species of bats are impossible to assess. Any stated affect on  
4 populations, which are unknown, is purely conjectural. *Id.* at 11, lines 9-10.

#### 5 **Bat Species of Concern**

6 What is known is that two bat species of special concern, Keen's Myotis and  
7 Townsend's Big-eared Bats, could occur at the site. Ex. 31.00 at 12, lines 23-24; 1/6/11 TR at  
8 681, lines 2-6. Both are both State Candidate species, and Townsend's Big-eared Bat is a  
9 Federal Species of Concern. Ex. 31.00. at 12, lines 24-25. Because the surveys conducted at  
10 the site were unable to identify the bats by species (with the exception of the Hoary Bat), the  
11 presence of these two species at the site can neither be confirmed nor denied. *Id.* at 12, line 25  
12 – 13, line 2.

13 The Keen's Myotis is of particular concern because it breeds and is generally  
14 associated with Western forests. 1/6/11 TR at 681, lines 17-25. Because no wind power  
15 projects have previously been constructed in this type of habitat, if this project is approved, it  
16 will be the first project of its kind within the Keen's Myotis breeding range. 1/6/11 TR at 821,  
17 lines 13-15.

#### 18 **Pre-construction Bat Surveys of Limited Use**

19 Applicant has collected bat acoustical data at the project site over a three year period.  
20 Ex. 6.00, line 17. Unfortunately, the data collected during the first two years is of little value  
21 for purposes of predicting bat mortality at the site. The first year's Anabat data is questionable  
22 because the Anabat equipment worked less than 25 percent of the time and the breeding season  
23 for bats was missed. *Id.* at 11, lines 20-21. A conservative analysis should not include that  
24 data because of these shortcomings. *Id.* at 11, lines 21-23.

25 In 2008, Applicant collected data exclusively from ground level Anabat detectors. *Id.*  
26 at 11, line 25 – 12 at line 5. Recent studies have established that data recorded from Anabat

1 detectors located at rotor height have a much stronger correlation to bat mortality rates, than  
2 Anabat data collected at ground level. Ex. 6.00 at 9, line 21 – 10, line 12. Accordingly, this  
3 second year of data is also questionable for purposes of predicting bat mortality. In 2009,  
4 Applicant collected data from both ground level and rotor height Anabat detectors. *Id.*

5 Although the correlation between bat fatality and data collected from ground level  
6 Anabat detectors is weak, the ground level data collected at the site does provide a means of  
7 comparing this project to other wind power projects. Ex. 31.00 at 11, lines 24-25. In its bat  
8 survey reports, the Applicant provided comparable data (*i.e.*, data gathered from ground level  
9 Anabat detectors) from five other wind energy projects. *Id.* at 11 lines 25-26. When the  
10 relationship between bat activity and mortality is graphed for these sites and for WREP using  
11 ground level Anabat data, the data suggests that estimated bat mortality at Whistling Ridge  
12 could be as low as 8 bats/turbine/year (2009 data) and as high as 97 bats/turbine/year (2008  
13 data). Ex. 31.00 at 12, lines 1-4; Ex. 31.02. This latter figure is more than twice the highest  
14 measured mortality rate from representative facilities. *Id.*

15 In 2009, the Applicant's consultant also measured bat activity data at elevated sites in  
16 the rotor-swept zone. Ex. 31.01 at 12, lines 6-12. This technique is believed to be a better  
17 indicator of bat activity in the zone of risk. *Id.* The fact that relatively little activity (4.6  
18 passes/night) was recorded is encouraging. However, because only a single year of elevated  
19 data for the full season of bat use was collected, there is no way to determine if the 2009 data  
20 accurately reflect annual variation in bat use at the site. *Id.* The low-elevation data collected  
21 in 2008 and 2009, for example, varied by a factor of almost 12. Based on data collected to date  
22 it is impossible to say which number represents an accurate portrayal of mortality at the site, or  
23 the size or composition of the bat community. *Id.*

#### 24 **C. Wildlife Mitigation**

25 As discussed above, there are many unknowns regarding the impacts WREP will have  
26 on bird and bat species if it is constructed. Under these circumstances, it is advisable to

1 proceed with caution and to impose conditions that ensure that adverse impacts are recognized  
2 and avoided or minimized, as may be appropriate under the circumstances.

3 At the hearing, Applicant's expert testified that the following mitigation measures,  
4 proposed by CFE's expert witness, Don McIvor, were generally recognized and acceptable in  
5 the industry See Ex. 6.04r at 49, lines 17-22; Ex. 31.00 at 15, lines 7-16, line 12. Accordingly,  
6 CFE would ask that, if the project is approved, EFSEC include them as conditions in the site  
7 certification agreement.

- 8 • Applicant should be required to comply with 2009 WDFW Wind Power Guidelines  
9 (Ex. 6.09) and the 2010 USFWS Wind Power Guideline Recommendations (Ex.6.12c),  
10 including the development and application of the Best Management Practices (BMPs)  
11 identified in both sets of guidelines. Ex. 31.00 at 15, lines 4-6. See Ex. 6.09 at 5-6  
12 (WDFW Guideline BMPs) & Ex 6.12c at 44-46 (USFWS BMPs).
- 13 • A technical advisory committee (TAC) to address wildlife mitigation efforts during  
14 project operation should be required. Ex. 31.00 at 15, lines 9-10. See Ex. 6.09 at 6-7  
15 (WDFW Guidelines describing TAC membership and its duties). Membership in the  
16 TAC should be comprised of stakeholders, including representatives from WDFW,  
17 local government, and non-governmental organizations, like intervenor Seattle  
18 Audubon, that have expertise in wildlife conservation and management issues. *Id.*  
19 Similar to the TACs for other EFSEC approved wind power projects, members of the  
20 TAC should be independent from the developer and should be subject to approval by  
21 EFSEC. EFSEC should have final authority to impose any mitigation measures  
22 proposed by the TAC.
- 23 • Post-construction extended mortality studies should be conducted for birds and bats to  
24 develop a better understanding of which species are in the area (in the case of bats) and  
25 which species (birds and bats) are at risk. Ex. 31.01 at 15, lines 11-16. These studies  
26 should be conducted for a minimum of two years and the TAC should have the option

1 of extending them beyond two years if warranted. *Id.* Results of such studies should  
2 be carefully monitored by the TAC, and operational procedures adjusted to minimize  
3 bat and bird mortality. *Id.*

- 4 • As set forth in the WDFW and USFWS Guidelines, adaptive management strategies  
5 should be developed and applied by the Applicant and the TAC to minimize impacts on  
6 sensitive species. Ex. 31.01 at 16, lines 9-11. *See* Ex. 6.09 at 6-7 and Ex. 6.12 at 11.
- 7 • Any reports or studies on wildlife impacts or the efficacy of wildlife mitigation  
8 measures, including the results of the mortality studies, should be publicly  
9 disseminated, so that lessons learned can be applied on a wider scale. Ex. 31.00 at 15,  
10 lines 17-19. Making this information publicly available will also assist with the  
11 development of future cumulative impacts studies.
- 12 • Low-impact lighting techniques should be used for buildings and any other facilities  
13 constructed at the site. Ex. 31.00 at 16, lines 1-8. Federal Aviation Administration  
14 (FAA) lighting requirements for the wind towers themselves are reasonably consistent  
15 with migratory bird conservation. *Id.* Lighting for maintenance buildings and other  
16 project infrastructure should be minimal. *Id.* Where necessary, low-wattage, shielded  
17 and down-cast lighting should be used. *Id.* Lights that attract and concentrate night-  
18 flying insects could likewise attract bats to the area, increasing their strike risk, and,  
19 therefore, should not be used. *Id.*

### 20 **The Mitigation Parcel**

21 The 2009 WDFW Guidelines encourage wind power developers to comprehensively  
22 mitigate both permanent and temporary habitat loss through the creation of a mitigation parcel  
23 or through the payment of a mitigation fee. Given the project's actual and potential wildlife  
24 impacts, creation of a mitigation parcel (or the payment of a mitigation fee) to offset permanent  
25 and temporary habitat losses is appropriate. Ex. 31.00 at 15, lines 7-8.

1 In an effort to satisfy the WDFW Guidelines and thereby fully mitigate all permanent  
2 and temporary habitat impacts associated with the project, Applicant has offered to place  
3 approximately 100 acres of Oregon White Oak forest into a conservation easement for the life  
4 of the project. Ex. 1.03r. While, on its face, this proposal appears to satisfy the criteria set  
5 forth in the WDFW Guidelines,<sup>3</sup> the habitat differs significantly from the habitat found at the  
6 project site and many of the species of state and federal concern found at the site are *not* found  
7 in Oregon White Oak forest.<sup>4</sup> Given that this project will be the first of its kind sited in  
8 Western coniferous forest and that the proposed mitigation parcel does not provide habitat for  
9 many of the forest dependent species identified on the project site, CFE has concerns as to  
10 whether a mitigation parcel composed of habitat different from that found at the project site is  
11 appropriate, at least at this time.<sup>5</sup>

12 The fact that the parcel will not be integrated into a broader conservancy plan is also of  
13 concern. That the protected habitat improve in function and value over time is one of the  
14 underlying principles governing the selection of mitigation parcels in the WDFW Guidelines.  
15 See Ex. 6.09r at 10 (“The mitigation parcel must be protected from degradation, including  
16 development, for the life of the project **to improve habitat function and value over time**”)  
17 (“The mitigation parcel should be at some risk of development or habitat degradation **and the**  
18 **mitigation results in net habitat benefit**”) (emphasis added). WDFW, which has specific  
19 expertise in habitat conservation, will not be managing the parcel. Applicant did not inquire

20 <sup>3</sup> The 2009 WDFW Guidelines do not require that the project and the mitigation parcel share the same  
21 type of habitat, provided the mitigation parcel’s habitat is deemed to have a higher habitat value. See Ex. 1.09 at  
22 9. Oregon White Oak woodlands are a WDFW Priority Habitat. See *Id.* at 21.

23 <sup>4</sup> The mitigation parcel does not provide habitat for several forest dependent species of concern  
24 identified at or near the project site, including the Northern Goshawk, the Olive-sided Flycatcher, the Northern  
25 Spotted Owl, the Pileated Woodpecker. 1/7/11 TR at 993, line 9 – 994, line 7. Compare Ex. 1.03r at 4 (list of  
26 WDFW Priority Species found in Oregon White Oak woodlands) and Ex. 31.00 at 7, line 18 – 10, line 8 (species  
of concern identified at project site). Keen’s Myotis and Townsend’s Big eared Bat also do not appear on Mr.  
Spadaro’s list of species of concern that may possibly be present on the site. *Id.*

<sup>5</sup> In the future, when the interrelationship between wind turbines and wildlife in the Western forest  
habitat are better understood, securing a mitigation parcel that protects a different, higher value habitat may be  
advisable, and even preferable. At this point, however, given the many unknowns regarding the project’s wildlife  
impacts, it would be prudent to require that the mitigation parcel preserve like-kind habitat.

1 whether DNR was interested. 1/7/11 TR at 988, line 4-5. Neither of the two land conservancy  
2 groups that were approached expressed interest in managing the land. 1/7/11 TR at 985, line  
3 22- 986, line 4; 987, lines 13-16. While Klickitat County has tentatively agreed to manage the  
4 property, the County's commitment letter contains no indication that the County has any plans  
5 to integrate the parcel into a larger, comprehensive habitat program to be managed specifically  
6 for habitat mitigation. Ex. 1.05r. Moreover, while the land is adjacent to a forty acre parcel of  
7 Department of Natural Resources (DNR) land, the record does not contain any evidence or  
8 testimony regarding how DNR is currently managing the adjacent parcel or whether DNR's  
9 future plans are consistent with the Applicant's habitat mitigation goals. See Ex. 1.13c  
10 (internal WDFW email observing that 100 acre parcel plus the adjacent 40 acre DNR parcel, as  
11 well as "other SDS land upstream" would make a "decent conservation area.")

12 CFE is also concerned that none of the wildlife experts who appeared at the hearing had  
13 visited the site or developed an opinion regarding whether its conservancy would serve as  
14 comprehensive mitigation for the loss of habitat resulting from the project.<sup>6</sup> See 1/6/11 TR at  
15 694, lines 4-17; 773, line 1; 819, lines 10-11; 826, lines 8-10. Applicant's representative,  
16 Jason Spadaro, did provide a description of the mitigation parcel that included some biological  
17 information with his testimony. See Ex. 1.03r. On cross-examination, however, Mr. Spadaro  
18 admitted that he was not a wildlife or habitat biologist. 1/7/11 TR at 957, line 6-7; 971, line  
19 16. He also acknowledged that the list of sensitive species associated with the mitigation  
20 parcel listed in his written description of the parcel did not include many forest dependent  
21 species of concern identified at the project site. 1/7/11 TR at 993, line 9 – 994, line 7. Mr.

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23  
24 <sup>6</sup> The record suggests that Applicant first raised the issue of creating a mitigation parcel with WDFW on  
25 July 14, 2010, see Ex. 1.03r, and that WDFW supplied its initial approval of the proposed mitigation parcel on  
26 November 24, 2010, see Ex. 1.04r. Applicant did not indicate that it intended to pursue off-site mitigation in the  
Amended Application for Site Certification (see AASC at §§ 3.4.1.3 & 3.4.33). Nor is off-site mitigation for  
wildlife impacts discussed in the Draft Environmental Impact Statement (see DEIS at §3.4.3). As a consequence,  
the Applicant's proposal has not been the subject of public review and comment in either the EFSEC site  
certification or SEPA proceedings. This lack of public input is another reason for close scrutiny of the proposed  
parcel.

1 Spadaro also confirmed that the Applicant had not retained a wildlife expert to make an  
2 assessment of the mitigation parcel. 1/7/11 TR at 989, lines 4-7.

3 Applicant did offer two letters from the WDFW indicating that the parcel met the 2009  
4 WDFW Guidelines. Exs. 1.04r, 1.20r. These letters, however, do not address whether  
5 conditions at the mitigation site are such that the parcel will improve in habitat function and  
6 value over time, which, as mentioned earlier, is one of the principles underlying WDFW  
7 guidance regarding the selection of mitigation parcels. *Id.* See Ex. 6.09c at 10. Nor do these  
8 letters recognize the unprecedented nature of the project's location in Western coniferous  
9 forest or the fact that many forest dependent species found at the project site are not present on  
10 the mitigation parcel.

11 With these issues in mind, CFE urges EFSEC to take a critical look at the proposed  
12 mitigation parcel and independently determine whether it appropriately mitigates all permanent  
13 and temporary habitat losses resulting from the project, under the unique circumstances of this  
14 case. If EFSEC finds the proposed mitigation parcel lacking, it should enter into negotiations  
15 with the Applicant on this issue.<sup>7</sup> If the parties are unable to reach agreement on a mitigation  
16 parcel, then a habitat mitigation fee agreement, consistent with the standards set forth in  
17 WDFW Guidelines, should be negotiated. See Ex. 6.09c at 12-13.

18 In addition to the mitigation measures discussed above, the following additional  
19 mitigation measures should be imposed as conditions in the site certification agreement, if the  
20 project is approved.

21 **Minimize Wildlife Impacts During Micro-siting**

22 The Applicant is seeking authorization to place turbines in pre-designated corridors,  
23 with the exact placement of each turbine to be determined during the "micro-siting" process.  
24 Adjusting the location of specific turbines (or eliminating them all together) is a recognized  
25 means of avoiding or minimizing adverse wildlife impacts. Indeed, the USFWS Wind Power

26 <sup>7</sup> The WDFW Guidelines provide that any mitigation package should be negotiated in consultation with WDFW and "the permitting authority," which in this case is EFSEC. 6.09r at 8, 9.

1 Guideline Recommendations suggest wind power developers follow the following Best  
2 Management Practice:

3       Locate turbines to avoid separating bird and bat species of concern from their  
4       daily roosting, feeding, or nesting sites if documented that the turbine's presence  
5       poses a risk to species.

6 Ex. 6.12c at 45.

7       Bat survey data from the site indicates there is a high concentration of bat activity in the  
8       vicinity of the wetland located on the project site. Applicant's expert testified that bats would  
9       most likely find areas of old growth timber most attractive for roosting and would have to  
10      travel from these forested areas to access the wetland. 1/6/11 TR at 688, lines 10-20.  
11      Applicant's expert further testified that he was not sure where bats using the wetland might be  
12      traveling from. *Id.* 1/6/11 TR at 689, line 2. Given this uncertainty (as well as uncertainty  
13      relating to the what species of bats actually use the site), the avoidance or minimization of  
14      wildlife impacts should be a consideration when finalizing the location of individual turbines  
15      and, accordingly, micro-siting should be conducted in consultation with WDFW and the  
16      Applicant's wildlife expert to ensure adverse wildlife impacts are avoided or minimized.

17                **Relative Abundance Survey**

18       As a condition of approval, CFE would ask that Applicant be required to gather relative  
19      abundance data regarding species subject to state or federal concern found at the site prior to  
20      commencing construction of the project. This information should be available during the  
21      micro-siting of the turbines and should be used by the TAC for purposes of evaluating impacts  
22      and the efficacy of mitigation measures, and to determine whether additional mitigation  
23      measures should be implemented.

24                **BMPS and Management Strategies to Address Bald and Golden Eagles and Bats.**

25       Bald and Golden Eagles have been documented at the site and are subject to federal  
26      protection. Accordingly, before the project is operational, Applicant and the TAC, in  
27      consultation with WDFW and USFWS, should be required to develop appropriate Best

1 Management Practices (BMPs) and management strategies to avoid Bald and Golden Eagle  
2 strikes. Ex. 31.00 at 15, lines 20-25. These BMPs should include prompt and appropriate  
3 notification and response protocols (and, if deemed necessary, include shutting down  
4 problematic turbines) in the event a strike occurs. *Id.*

5 At the hearing, Applicant's expert cited to recent scientific studies indicating that bat  
6 mortality can be reduced at wind power plants by increasing the turbines' "cut in" speed, i.e.,  
7 the wind speed at which the rotors will start turning. Ex. 6.04r at 39, lines 5-16; 1/6/11 TR at  
8 661, line 17 – 662, line. Should the project be permitted, this technique should be identified as  
9 a possible management strategy that the TAC may employ should adverse impacts on bats be  
10 higher than anticipated.

### 11 III. MITIGATION FOR VISUAL IMPACTS

12 The Columbia River Gorge is nationally recognized for its natural beauty. While large  
13 numbers of wind turbines are located at the eastern mouth of the gorge, WREP will be the  
14 first wind power project located to the north shoulder of the gorge. Photographic simulations  
15 prepared by the Applicant document that many turbines will be plainly visible from many key  
16 viewing areas of both scenic and historic importance. Although the Applicant's and the  
17 Intervenor's experts disagree upon the degree to which the project, if constructed, will impact  
18 the visual environment, all parties agree that there will be negative impacts and that these  
19 negative impacts will persist through the life of the project.

20 Revised Code of Washington (RCW) 80.50.080 directs the CFE to "represent the  
21 public and its interest in protecting the quality of the environment." The definition for the  
22 term "environment" is found in RCW 80.50.010, which sets forth the purposes underlying the  
23 creation of the EFSEC and, in doing so, specifically identifies "esthetics" as an element of the  
24 environment.

25 It is the intent to seek courses of action that will balance the increasing demands  
26 for energy facility location and operation in conjunction with the broad interests  
of the public. Such action will be based on these premises:

...

1 (2) To preserve and protect the quality of the environment; *to enhance the*  
2 *public's opportunity to enjoy the esthetic and recreational benefits of the air,*  
3 *water and land resources*; to promote air cleanliness; and to pursue beneficial  
4 changes in the environment. (Emphasis added).

5 The State Environmental Protection Act (SEPA), RCW Chapter 43.21C, also specifically  
6 references aesthetics as one of the environmental values to be protected:

7 (2) In order to carry out the policy set forth in this chapter, it is the continuing  
8 responsibility of the state of Washington and all agencies of the state to use all  
9 practicable means, consistent with other essential considerations of state policy, to  
10 improve and coordinate plans, functions, programs, and resources to the end that  
11 the state and its citizens may:

12 ... (b) Assure for all people of Washington safe, healthful, productive, and  
13 *aesthetically and culturally pleasing surroundings*[:]

14 RCW 43.21C.020 (emphasis added). Regulations governing SEPA and EFSEC proceedings  
15 also identify and define “scenic resources” and “aesthetics” as elements of the environment  
16 subject to analysis in an environmental impact statement. WAC 197-11-444(1)(e)(v) and  
17 (2)(b)(iv); WAC 197-11-740; WAC 463-60-342(5). *See Polygon Corp. v. Seattle*, 90 Wn.2d  
18 59, 69-70, 578 P.2d 1309 (1978) (aesthetic impacts properly considered in SEPA analysis of  
19 condominium project). In short, review of a project’s aesthetic impacts is mandated by the  
20 SEPA and the laws governing EFSEC proceedings. As such, the project’s visual impacts are  
21 an issue of state-wide concern that is subject to consideration during the site certification  
22 proceedings.

23 Exclusion language in the Columbia River Gorge National Scenic Area legislation  
24 prohibits the Act from being the basis for establishing protective perimeters or buffer zones  
25 around the scenic area.<sup>8</sup> The fact remains, however, that the project site is located within and  
26 will have impact upon a highly scenic landscape – a landscape with aesthetic values that were

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24 <sup>8</sup> 16 U.S.C. § 544o(a)(10) provides:

25 Nothing in [this Act] shall . . . establish protective perimeters or buffer zones around the scenic  
26 area or each special management area. The fact that activities or use inconsistent with the  
management directives for the scenic area or special management areas can be seen or heard from  
these areas shall not, of itself, preclude such activities or uses up to the boundaries of the scenic  
area or special management areas.

1 recognized long before the scenic area came into existence. *See* Exs. 8.17c; 8.18c; 21.07;  
2 21.19c. While the CRGNSA's exclusion language limits the scope of that Act, it does not  
3 negate the State's interest in either avoiding or mitigating negative impacts the project will  
4 have upon a view shed that is recognized as an aesthetic and historic treasure. Accordingly,  
5 should EFSEC approve the project, CFE would urge EFSEC to adopt the following conditions.

6 **Elimination of Turbine String A1-A7**

7 Turbine string A1-A7<sup>9</sup> is located on a high ridge overlooking the Columbia Gorge and  
8 will be the most visibly prominent portion of the project. The visual prominence of this string  
9 as viewed from the Columbia River Gorge National Scenic Area and the Lewis and Clark  
10 National Historic Trail has prompted the US Forest Service,<sup>10</sup> the National Park Service<sup>11</sup> and  
11

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12 <sup>9</sup> As originally proposed, turbines string A1-A7 was comprised of seven turbines. At the hearing,  
13 however, the Applicant announced its intention to reduce the maximum number of turbines from 50 to 38 and  
14 agreed to reduce the maximum number of turbines in this string from seven to five. 1/3/11 TR at 73, line 20 – 74,  
15 line17. Despite the reduction in the number of turbines, Applicant further continues to assert that the northern  
16 and southern starting points for the project must remain in tact, even if the number of turbines was reduced below  
17 38. *Id.* at lines 18-24.

18 <sup>10</sup> Daniel Harkenrider, an Area Manager for the United State Forest Service, included comments  
19 recommending that all turbine locations visible from CRGSA Key Viewing Areas should be eliminated from the  
20 project. *See* Ex. 21.02.

21 <sup>11</sup> Rory D. Westberg, the Chief Integrated Resources Stewardship for the Lewis and Clark National  
22 Historical Trail, offered the following comments from the National Park Service regarding the project's impacts  
23 on the Lewis and Clark Historic Trail, the Oregon Pioneer National Historic Trail, and the CRGSA:

24 On page 4.2-66, a footnote in the Application states, "Additionally, for reasons related to  
25 commercial viability and engineering feasibility, the project is proposed as an integrated whole,  
26 not a series of separate components where parts of the whole may be removed due to subjective,  
perceived, visual effects." The [National Park Service] disagrees with this characterization of  
visual effects, as the statement appears to suggest that because assessment of visual resources can  
be a fluid process, it lacks any objectivity or reliability, and is therefore less meritorious when  
weighed against the concreteness of engineering feasibility and the economics of commercial  
viability. Impacts to views are not purely subjective and are not merely "perceived," but can be  
agreed upon and [are] very real. **We believe it is clear, even at this early stage, that visual  
impacts to the CGNSA and the national historic trails will degrade the core scenic and  
historic landscape values of these resources. We strongly recommend at minimum removing  
turbine corridor A1-A7 from further project consideration.** This would help reduce the  
impact to visual resources within the CGNSA and along the national historic trails. The visual  
resources in this region - Columbia River Gorge National Scenic Area and Lewis and Clark NHT  
- are important resources that should be protected. (Emphasis added).

Ex. 21.04.

1 the Department of the Interior<sup>12</sup> to call for this string's elimination.<sup>13</sup> Applicant contends that  
2 the economic viability of its project depends upon the construction of this string of turbines.  
3 *See, e.g.*, 1/3/11 TR at 74, lines 21-24. CFE, however, is unaware of any evidence or  
4 testimony in the record that the links the project's economic viability to constructing turbines  
5 in that particular corridor.<sup>14</sup> Accordingly, approval of the project should be made contingent  
6 upon elimination of this turbine string.

7 **Avoiding or Minimizing Aesthetic Impacts During Micro-siting.**

8 The micro-siting process involves an evaluation of the project site with the project  
9 meteorologist, the equipment supplier and the developer to determine the types of equipment  
10 that best fit the site and the optimum location for installing that equipment for purposes of  
11 generating power. 1/3/11 TR at 146, line 14 – 147, line 8. At the hearing, the Applicant  
12 endorsed the concept that micro-siting is an appropriate means of protecting or minimizing  
13 impacts to “sensitive resources.” 1/3/11 TR at 148, lines 3-7.

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15 <sup>12</sup> Preston A. Sleeper, the Regional Environmental Officer with the United State Department of the  
16 Interior, Office of the Secretary, submitted the following comments regarding Turbine string A1-A7:

17 Turbine string A1-A7 would be highly visible from numerous locations along the [Lewis and  
18 Clark National Historic] trail due to its placement on a ridgeline close to the Columbia River  
19 Gorge. The [National Park Service] recommends removing or relocating these seven turbines, if  
feasible. This would significantly reduce the impact to visual resources along the historic trail.  
The visual resources in this region – Columbia River Gorge National Scenic Area and Lewis and  
Clark [National Historic Trail] – are important resources that should be protected.

20 Ex. 21.05.

21 <sup>13</sup> In a second letter commenting the DEIS, Daniel T. Harkenrider, an Area Manager with the U.S. Forest  
22 Service offered these comments regarding the project's adverse scenic impacts. United States Department of  
23 Agriculture letter, dated August 23, 2010.

24 I would ask that you consider potential scenic effects throughout project design and  
implementation. Considerations such as turbine placement, color and size through project design  
and implementation will help to ensure scenic quality, as viewed from within the CFGNSA, will  
be maintained and/or scenic modifications minimized.

25 Ex. 21.03

26 <sup>14</sup> Should the project be approved with turbine string A1-A7 in place, EFSEC should give consideration  
to the creation of an off-site mitigation parcel, similar to the off-site mitigation parcel for wildlife habitat impacts  
discussed above. If the parties are unable identify a mutually acceptable mitigation parcel, a mitigation fee to be  
used to conserve and protect visual resources within the Columbia River Gorge would be appropriate.

1 As discussed earlier in the wildlife mitigation section, eliminating turbines or adjusting  
2 their final locations within the project site are both means by which adverse visual impacts  
3 can be avoided or minimized. Turbines towers can be eliminated by increasing the generating  
4 capacity of each turbine so that fewer turbines are necessary to provide the same amount of  
5 nameplate capacity.<sup>15</sup> Visual impacts can also be avoided or minimized by placing turbines  
6 in locations where they are shielded from key view points and by relocating turbines away  
7 from highly visible ridge lines. See Ex. 21.00 at 30, lines 3-8; Ex. 25.00 at 7, lines 17-19;  
8 1/11/11 TR at 1388, lines 9-23 & 1391, lines 16-23. Accordingly, if the project is permitted,  
9 the minimization of visual impacts should be a factor given significant weight during final  
10 design and micro-siting processes.

11 To this end, Applicant should be encouraged increase their generating nameplate  
12 capacity above 2.0 megawatts so that the number of towers can be further reduced. Applicant  
13 should also be required to include a landscape architect or other qualified professional to  
14 analyze visual impacts on its micro-siting team and to consult with representatives from the  
15 Gorge Commission, the National Historic Trail program and other stakeholder groups, during  
16 the micro-siting process.

### 17 **Radar Activated Lighting**

18 EFSEC should require Applicant to investigate whether it is technically and  
19 economically feasible to install radar activated aircraft lighting as a means of minimizing  
20 adverse visual impacts on the night sky. 1/11/11 TR at 1390, line 7 – 1391, line 11. Such a  
21 system would activate the FAA required lighting mounted on the turbines only when aircraft  
22 are in the project's vicinity. Without this system, the lights will remain visible throughout the  
23 night, regardless of whether the turbines posed a threat to aircraft.

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<sup>15</sup> Applicant's decision to reduce the maximum number of towers on the site from 50 to 38 by increasing the generating capacity of the turbines is just such an example.

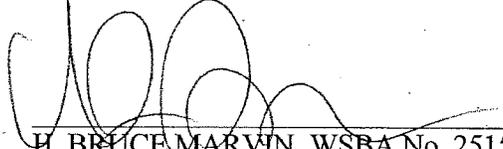
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**IV. CONCLUSION**

CFE does not take a position regarding whether the Whistling Ridge Wind Energy Project should be permitted. If EFSEC recommends approval of WREP's application, however, CFE respectfully requests that the Council condition its recommendation upon implementation of the mitigation measures set forth above.

Dated this 18th day of March, 2011.

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