

BEFORE THE STATE OF WASHINGTON
ENERGY FACILITY SITE EVALUATION COUNCIL

In the Matter of Application No. 2009-01

of

WHISTLING RIDGE ENERGY, L.L.C.

for

WHISTLING RIDGE ENERGY PROJECT

OPENING STATEMENT OF
INTERVENORS FRIENDS OF THE
COLUMBIA GORGE AND SAVE OUR
SCENIC AREA

I. Introduction

The proposed Whistling Ridge Energy Project (“WREP” or “the Project”) is easily the most controversial and problematic wind energy project this Council has ever reviewed. Indeed, the proposed site, in the heart of the Columbia River Gorge and surrounded by sensitive and unique scenic, natural, cultural, recreational, and socioeconomic resources, is one of the *worst* sites in all of Washington State to locate a wind energy project. The WREP would permanently harm internationally significant resources as well as local community interests, even while providing little to no benefit to the state or region. Simply put, this is the wrong site for an industrial-scale wind energy facility.

Consider for a moment what is at stake. The 50 proposed turbines, each more than 400 feet tall, would be sited immediately adjacent to the Columbia River Gorge National Scenic Area, designated by Congress as a National Scenic Area specifically for its scenic qualities. Many of the turbines would jut up over the Gorge horizon, with their bright, blinking lights and white, spinning blades with turning diameters the length of Boeing 747 Jumbo Jets, visible for miles in every direction, in what is currently a pastoral landscape visited by tourists from all over the world for its unique qualities. Constructing industrial wind turbines at this location would be akin to putting them at the edge of the Grand Canyon.

Although the scenic impacts of the Project are a huge issue, they are by no means the end of the story. The Project would permanently convert forested habitat into an industrial landscape, and is proposed within a designated Northern Spotted Owl Special Emphasis Area, where wildlife impacts would undoubtedly be greater than in the relatively treeless ecosystems of central and eastern Washington. The project is proposed within three miles of the Lewis and Clark National Historic Trail, the Oregon Pioneer National Historic Trail, the Historic Columbia River Highway, and the Ice Age Floods National Geological Trail, all important features of our national heritage. The Project threatens Native American cultural resources sacred to the Yakama Nation and its people. And the project is surrounded by federal and state public lands,

including the Gifford Pinchot National Forest and Washington State Department of Natural Resources lands, that are rich with natural and recreational resources.

In addition, the Project's impacts on socioeconomic resources would be far greater than other wind projects in less populated parts of the state. The proposed turbines would loom over Gorge communities in both Washington and Oregon, sited as close as 1700 feet to nearby homes, creating excessive noise and disrupting the tranquility and pastoral way of life enjoyed by Gorge residents. The Project would harm the emerging agritourism and commercial event industries in the adjacent Underwood community, as well as tourism within the National Scenic Area at large. And the Applicant proposes to haul massive turbine components and construction materials through the Underwood community for the better part of a year using hundreds of oversized trucks, apparently in the process blocking traffic in both directions along the heavily traveled Cook-Underwood Road. These and other adverse impacts would be accompanied by few local or regional socioeconomic benefits—especially if the Project's electricity were simply transmitted to California, as would likely be the case.

After considering the WREP's likely impacts on the unique and sensitive resources of the Columbia River Gorge, the Council's task will be to determine "whether [the proposed] energy facility at [this] particular site will produce a *net benefit* after balancing the legislative directive to provide abundant energy at a reasonable cost with the impact to the environment and the broad interests of the public." Order No. 843 at 23 (Nov. 16, 2009) (emphasis added). The evidence will show that this Project, at this site, does not meet that test. Because the tremendous harms of the Project would far outweigh any benefits, Intervenor Friends of the Columbia Gorge ("Friends") and Save our Scenic Area ("SOSA") respectfully request that the Council recommend denial of the Applicant's request for site certification.

II. The Columbia River Gorge is like no place on earth.

The Columbia River Gorge and its scenery, geology, recreational opportunities, natural resources, and history are truly an iconic part of our national heritage. Indeed, the Gorge is like no place on earth.

The Gorge is a spectacular river canyon 85 miles long and up to 4,000 feet deep. Created by volcanic eruptions and Ice Age floods over the course of millions of years, the Gorge is the only sea-level route through the Cascade Mountains. The cataclysmic floods also transformed flowing river tributaries into hanging waterfalls, creating the largest concentration of waterfalls in North America and some of the most awe-inspiring iconic landscapes in the country.

This wild and beautiful place has served as a human corridor for tens of thousands of years, was explored by Lewis and Clark, and was traversed by thousands of Oregon Trail pioneers. Today's visitors and inhabitants revel in the scenic beauty and recreational opportunities that abound in the Gorge. Known as the windsurfing capital of the United States, the Gorge is also an excellent place for hiking, biking, sailing, fishing, boating, camping, and of course, sightseeing. The Gorge contains hundreds of miles of hiking and bike trails through

locales as diverse as misty river canyons and arid grassland plateaus. The Gorge offers unfettered scenic and historic views, as well as unique recreational opportunities exploring the Gorge's many side-river canyons, ridgetops, and the Columbia River itself.

The Gorge is also host to a unique diversity of plant and animal life, including over 800 species of wildflowers, fifteen of which exist nowhere else on earth.

The Gorge has long been considered a special area, and has inspired many plans to protect the lands along the Columbia River. In 1915, the U.S. Forest Service ("USFS") established Eagle Creek as the first USFS Recreation Area in the nation. The following year, the Gorge was proposed as a National Park. Continuing development pressures led to the establishment of the National Scenic Area in 1986. The National Scenic Area Act is but one measure to protect an extraordinary national treasure, an area recognized for nationally significant aesthetic, biological, ecological, historic, and recreational values.

Additional designations call out the scenic, recreational, and cultural significance of the Gorge. These include the Lewis and Clark National Historic Trail, which includes the Columbia River, Washington State Route 14, Interstate 84, and numerous state parks within the Gorge. The Oregon Pioneer National Historic Trail also travels along the Columbia River through the Gorge.

The Historic Columbia River Highway, built between 1913 and 1922, was designed to make the natural wonders of the Gorge available to all people. The Historic Highway was designed to fit within the Gorge landscape, while inviting highway travelers to enjoy the best views of Gorge landscapes. In large part, this was achieved through the placement of curves, pullouts, and tunnels along the Historic Highway that focus the traveling public's attention on prominent landforms. The Historic Highway was the Nation's first scenic highway, and it has been designated as a National Historic Landmark and a National Recreation Trail. Both the federal government and the State of Oregon have adopted directives to restore lost segments of the Columbia River Highway for public enjoyment as a recreation trail. Similarly, the State of Washington has designated State Route 14 as a State Scenic Byway.

The Gorge also includes the Lewis and Clark National Historic Trail, which commemorates the historic 1804–1806 Lewis and Clark Expedition. Without a doubt, the Lewis and Clark Expedition is one of the most important events in the history of our country, and the Columbia River Gorge is a critical part of the route. The Lewis and Clark National Historic Trail was created to "identify, mark, and preserve for public inspiration and enjoyment the routes traveled by the Lewis and Clark Expedition." Lewis and Clark Trail Management Plan at 1. Many of the historic and cultural resources along the route have been altered or lost, and the Expedition itself left scant traces of its passing. This is why, as the National Park Service states, "[i]n a very real sense, many of the historic resources are the landmarks, vistas, flora, and fauna that make up the Trail's natural resources." *Id.* at 4, 13 (emphasis added).

The Columbia Gorge exists today as a rare balance between protected, natural landscapes on the one hand, and development that respects, and is subordinate to, these landscapes on the

other hand. The overall character of the region is highly scenic, ranging from wilderness to rural areas with quaint towns and spectacular vistas. The Gorge's incredible views, devoid of industrial development, are filled with spectacular geology and flora. And the Gorge has comfortable accommodations, dining, and other modern infrastructure within its designated urban areas. This carefully planned balance allows visitors to enjoy natural settings similar to national parks and wilderness areas, along with the benefits that civilization offers. This balance is a key economic driver supporting the many thousands of people and businesses in the Gorge.

In its Nov./Dec. 2009 issue, *National Geographic Traveler* ranked the Columbia Gorge region sixth internationally, and second in the nation, among "iconic destinations." The Gorge was ranked higher than all of the country's national parks that were surveyed, and higher than Tuscany, Italy; the Serengeti Plains; and Mount Kilimanjaro. A primary reason given by *National Geographic* for the Gorge's high ranking was the combined efforts of Washington, Oregon, and the federal government in doing "an incredible job of protecting the views." Another stated reason was the Gorge's "[g]reat potential for 'agritourism and geotourism.'"

As evidenced by the Gorge's many designations, protecting the iconic views of the Gorge is not the job of any one agency. In the present case, the Washington Energy Facility Site Evaluation Council is called upon to ensure the protection of the environment and our national heritage from the adverse impacts of proposed energy development. As demonstrated by comments from expert agencies and hundreds of concerned citizens, allowing the Whistling Ridge Energy Project to be constructed on the rim of the Gorge would harm the scenic, cultural, natural, and recreational heritage of the Columbia River Gorge and undercut decades of work by all levels of government.

III. The Council's statutory and regulatory mandates

Throughout this proceeding, the Applicant has argued that the Council should stick its head in the proverbial sand and ignore the unique national, historic, and recreational character of the resources surrounding the proposed WREP facility, including the Columbia River Gorge National Scenic Area itself. The Applicant has also argued repeatedly that the Council should either disregard any economic impacts and benefits associated with the facility as beyond the Council's jurisdiction or simply take the applicant's representations regarding the Project's purported benefits, without question, at face value. Nothing could be further from the truth. The Council must assess and protect the unique character of the lands and resources surrounding the proposed facility, and must ensure that the Project would provide abundant power, meet state and regional need, and result in positive impacts to the regional economy and power grid.

The Council must determine "whether [the proposed] energy facility at [this] particular site will produce a *net benefit* after balancing the legislative directive to provide abundant energy at a reasonable cost with the impact to the environment and the broad interests of the public." Order No. 843 at 23 (emphasis added). This inquiry is in part required by the Council's statutory mandate to "balance the increasing demands for energy facility location and operation in conjunction with the broad interests of the public." RCW 80.50.010. Among other factors,

decisions on proposed energy facilities must “preserve and protect the quality of the environment,” “enhance the public’s opportunity to enjoy the esthetic and recreational benefits of . . . air, water and land resources,” and “pursue beneficial changes in the environment.” RCW 80.50.010(2). Siting decisions must also be made with the goal of “provid[ing] abundant energy at reasonable cost.” RCW 80.50.010(3).

The Council’s rules describe the statutory provisions discussed above as “binding” standards that the agency must apply in its siting decisions:

Need for energy facilities — Legislative intent *binding*.

* * * In acting upon any application for certification, *the council action will be based on the policies and premises set forth in RCW 80.50.010* including, but not limited to:

- (1) Ensuring through available and reasonable methods that the location and operation of such facilities will produce minimal adverse effects on the environment, ecology of the land and its wildlife, and the ecology of state waters and their aquatic life.
- (2) Enhancing the public’s opportunity to enjoy the esthetic and recreational benefits of the air, water and land resources; and
- (3) Providing abundant power at reasonable cost.

WAC 463-14-020 (emphasis added); *see also* WAC 463-60-332, -342(5), -362(3), -535(4)(e) (requiring consideration of impacts on aesthetics, habitat, wildlife, and socioeconomic factors).

The Council has an “overriding policy . . . to avoid or mitigate adverse environmental impacts which may result from the council’s decisions.” WAC 463-47-110(1)(a). In complying with this policy, the Council must, among other considerations, preserve resources of national and historic significance:

The council shall *use all practicable means*, consistent with other essential considerations of state policy, to improve and coordinate plans, functions, programs, and resources to the end that the state and its citizens may:

- (i) Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
- (ii) Assure for all people of Washington safe, healthful, productive, and aesthetically and culturally pleasing surroundings;
- (iii) Attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;
- (iv) *Preserve important historic, cultural, and natural aspects of our national heritage;*
- (v) Maintain, wherever possible, an environment which supports diversity and variety of individual choice;

- (vi) Achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities; and
- (vii) Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

WAC 463-47-110(1)(b) (emphasis added).

The Council must also “ensure that presently unquantified environmental amenities and values will be given appropriate consideration in decision making along with economic and technical considerations.” WAC 463-47-110(1)(d). And the Council must “protect state or local governmental or community interests affected by the construction or operation of the energy facility.” WAC 463-64-020.

Under these and other authorities, the Council must ensure the protection of the Columbia River Gorge and the surrounding areas, the local communities, and these areas' special scenic, natural, cultural, historic, and recreational qualities.

As discussed above, the Council must balance the impacts of a proposed project, the public interest, and whether the project would provide abundant energy at a reasonable cost, in determining whether the project “will produce a net benefit.” Order No. 843 at 23. And while the Council no longer asks whether a particular facility would be profitable to its owner, the required balancing inquiry still involves an analysis of need. The Council must be assured, for example, “that the project produces public benefits such as promoting long term price stability,” and “the question whether consumers ‘need’ a plant *at a given location* is still asked considering the environmental costs of that facility at that location.” Order 768 at 25, n. 6 (May 24, 2002) (emphasis in original).

In short, the Applicant's attempt to avoid any consideration of the national and historic significance of the Project's surroundings, and to prevent any serious inquiry into the economic impacts and benefits of the project, is simply contrary to the applicable statutes and rules. Indeed, given the unique resources that will be impacted, these are the some of the most relevant and important issues in this adjudication.

IV. The Project would substantially harm scenic resources.

The Project poses unprecedented, substantial threats to scenic resources. The Applicant would place turbines with blades with turning diameters the length of Boeing 747 Jumbo Jets, complete with flashing aviation lights, on top of a prominent ridgeline in a highly sensitive scenic landscape. And as discussed above, the site is surrounded by significant scenic, historic, and recreational resources, all of which would be harmed by the Project. The adverse scenic impacts of this Project have been expressly recognized by the federal agencies charged with administering these resources, and is explained in detail by Intervenor's expert witness Dean Apostol, a licensed landscape architect with more than 31 years of experience in the public and private sector (a distinction and expert title no other party's witnesses can claim).

The proposed WREP facility would adversely affect views of the Gorge from the Historic Columbia River Highway, an indisputably important historic and cultural aspect of our national heritage. Located directly across the Columbia River from the proposed Project, the Mitchell Point Tunnel, known as the “Tunnel of Many Vistas,” included multiple windows that presented views of the Columbia River, Underwood Bluff, Dog Mountain, the Mouth of the Little White Salmon River, and the diverse array of vegetative and geologic textures on these landforms. Lost sections of the Tunnel are currently being restored and recreated through ongoing efforts of the Oregon Department of Transportation, the Oregon State Parks and Recreation Department, and Friends of the Historic Columbia River Highway.

East of Mitchell Point, the curve of the road in the Historic Highway presents spectacular views of the Columbia River, Underwood Bluff, and Dog Mountain, along with rural and pastoral land above Underwood Bluff, all within the same viewshed as the Project.

Other important parts of the Historic Highway include the segment between Starvation Creek and Viento State Park. This segment has spectacular views of the viewshed surrounding the Project, which includes Underwood Bluff, Chemawa Hill, and Underwood Mountain. This segment also has the added importance of being part of the Lewis and Clark Trail. As explained by the National Park Service, the historic resources of the Lewis and Clark Trail *are* the landmarks and vistas that would be marred by the WREP facility as currently designed, including the very site of the WREP facility. These views are undeniably important to our national heritage.

Indeed, the National Park Service, with ultimate expertise in evaluating impacts to the Trail, concluded that the WREP would adversely affect the Trail. As required under its statutory and regulatory criteria, EFSEC must employ all practicable means to avoid this impact. This includes eliminating, at a minimum, the most problematic portions of the WREP.

Even aside from these particular resources, the Columbia River Gorge itself is a national treasure and geologic wonder of great significance. The importance of the Columbia River Gorge to our national heritage cannot reasonably be disputed. And the U.S. Forest Service, the federal agency with ultimate expertise in evaluating impacts to the Columbia River Gorge, has concluded that the WREP would adversely affect important Gorge scenery.

Despite the Applicant’s repeated argument to the contrary, the identification of scenic lands and the evaluation of visual impacts are objective inquiries. For example, clear indicators of public preference, such as official recognition via state, local, and federal designations, can determine whether an area qualifies as scenic. In addition, landscapes, as well as changes to these landscapes, can be measured by evaluating the key elements of form, line, color, and texture.

In any event, the Columbia River Gorge and the area surrounding the Project site undeniably qualify as highly scenic land. As the U.S. Department of Agriculture has noted, the Columbia River Gorge is “one of America’s natural wonders known worldwide for its scenic beauty and variety and quality of its recreational opportunities.” And the lands surrounding the

Project site are visually complex and diverse, including dramatic mountain and gorge vistas, steep rocky cliffs, pastoral lands, and the Columbia River.

In measuring impacts to scenic resources, the degree of impact generally correlates to the degree of contrast between a new project or structure and the landscape's existing forms, lines, colors, and textures. Contrast is generally reduced when new objects or structures repeat the landscape's existing elements.

The introduction of very large industrial wind turbines into rural, semi-natural, or wild landscapes inherently results in high visual contrast. Turbine arrays introduce strong vertical lines and have a color and texture unlike anything that is found in most natural landscapes. They appear out of place in highly complex landscapes with substantial vertical relief and diverse vegetation patterns, such as the area surrounding this Project site. The contrast caused by large wind turbines is accentuated by their movement, lighting, and tendency to break the skyline, all of which attract attention and cause the eye to "hang up" as it scans the horizon. As the National Park Service has noted here, this is especially problematic in the Gorge because "[m]an-made structures, especially when movement of a structure acts as an additional point of focus, depreciate the scenic and historical qualities that originally warranted national protection."

Given the unique and sensitive vistas at issue, the question of what method to use to measure impacts to these vistas is extremely important. The Council has a duty to "ensure that *presently unquantified* environmental amenities and values will be given *appropriate consideration* in decision making along with economic and technical considerations." WAC 463-47-110(1)(d) (emphasis added). Importantly, not all methods of evaluating scenic impacts are equally sensitive to, or appropriate for evaluating, all types of visual impact.

The Applicant states that it used two methodologies for measuring visual impact, developed respectively by the U.S. Forest Service and the Federal Highway Administration ("FHWA"). However, the Applicant's analysis shows that it relied much more heavily on the FHWA method, which was designed only for assessing impacts from highway-related development. That method contains no process or method for assessing visual contrast presented by wind turbines, nor even other energy facilities such as power lines. Compared to the Forest Service's method, and the method designed by the Bureau of Land Management, the FHWA method is not as flexible and cannot be easily adapted to different types of projects.

For example, while the intended scope of the FHWA method is limited to highway development, the BLM method includes a programmatic EIS that specifically addresses visual impacts of wind turbines and guidelines for assessing and mitigating those impacts. Similarly, the Forest Service method includes separate handbooks for assessing and mitigating visual impacts from similar utilities such as microwave towers and transmission lines. Given the special problems associated with wind turbines near the highly sensitive Scenic Area, the Application fails to appropriately assess the impacts of the Project.

Even under the FHWA method, the Applicant's analysis is seriously flawed. Reflecting common sense, the FHWA's methodology handbook specifically states that "a first approach to establishing the visual quality of a project area is simply to check for designated scenic areas." Instead of acknowledging this, the Applicant attempts to reinvent the wheel by assigning visual qualities to the affected viewpoints based on its experts' own assessments. The public has already spoken clearly on this issue. The scenic quality of the Columbia Gorge has been ranked on par with national icons such as Yellowstone and Yosemite.

While the Applicant references the USFS and FHWA methods, it does not specify which elements of these methods were used and which ones the Applicant made up. For example, the Applicant inappropriately uses a comparative analysis to determine the quality of views, based in part on a scale of unexplained "averages." This contrasts with accepted methods of visual impact analysis that measure scenic quality by the intrinsic qualities of a landscape in terms of form, line, color, and texture. As a result, without grounding its analysis in objective techniques, the Applicant's analysis downplays the visual prominence of the series of landforms and water bodies that comprise the project area and surrounding landscape, and in turn downplays the Project's impacts.

The Applicant purported to use the USFS's system for assessing visual impacts, which applies in the Gifford Pinchot National Forest just to the northwest of the Project site, but arbitrarily refuses to consider the methodologies of the Scenic Area, located just to the south of the Project site. This approach makes no sense and reinforces the appearance that the Applicant has selectively chosen methodologies specifically to obscure the WREP's true impacts. The scenic resource inventories, visual quality objectives, and scenic assessment guidelines created for the National Scenic Area, located immediately adjacent to the Project site, are obvious sources of information that should be used to measure and understand the WREP's visual impact, even if they have no direct regulatory effect under the Scenic Area Act.

To provide a particularly egregious example, the Applicant has consciously chosen to ignore that several affected viewpoints within the National Scenic Area are designated as key viewing areas, which are de facto high viewer sensitivity areas. The Applicant ignores the KVA designations and invites the Council to instead substitute the personal assessments of the Applicant's witnesses regarding viewer sensitivity and view quality.

The Applicant also injects several other irrelevant factors into its analysis in an apparent effort to detract from the project's significant adverse scenic impacts. These include the Applicant's refusal to acknowledge high visual impact except in areas where the WREP is observable by "high numbers" of sensitive viewers, an erroneous assertion that high visual impacts can be generated only by substantial alterations to landscapes, and a novel but flawed way of measuring scenic impacts that would compare the ratio of visible portions of the WREP to the portions that would be hidden from view.

The Applicant's presentation of effects also suffers from several shortcomings. First, the presentation is incomplete, as the Applicant omitted several key viewing areas from analysis and

also failed to recognize that several KVAs are corridors rather than specific points. And while several of the KVA corridors pass within three miles of the project, analysis was performed only from locations further away. In addition, the Applicant used various visual techniques to hide or obscure the WREP's visual impacts, such as hiding ridgeline turbines against a white sky and choosing non-representative views, for example selecting views from within BPA rights of way or from behind industrial complexes. Viewers are unlikely to spend much time at such locations.

In the end, multiple viewpoints would be impacted more severely than the Applicant reported. As the evidence will show, the adverse scenic impacts of the Project would be high. The Project would degrade an area of national scenic, historic, and recreational importance, a fact the Applicant would like the Council to simply ignore.

V. The Project would substantially harm recreational resources.

In addition to harming the scenic resources of the Columbia River Gorge, the facility would harm recreational resources in the heart of one of the greatest recreational destinations in the world. Hikers, kayakers, kiteboarders, windsurfers, mountainbikers, birdwatchers, and wildflower enthusiasts come from all over the globe to recreate in the vicinity. The Project site is surrounded by recreational resources.

The nearby recreational resources include hiking trails and vantage points in the Gifford Pinchot National Forest and on nearby land owned by the Washington DNR. These include Nestor Peak, Little Buck Creek Trail, Grassy Knoll, Little Huckleberry Mountain, Cook Hill, Dog Mountain, and numerous other hiking trails and drive-up viewpoints. Hikers and other outdoor enthusiasts frequent these areas for their outstanding natural beauty and dramatic panoramic views of Mt. Hood and Washington's southern Cascades. The WREP facility would dominate the foreground and background as viewed from these public vantage points.

In addition to the Lewis and Clark Trail and the Historic Columbia River Highway, both scenic and historic resources of national significance, the proposed site is also surrounded to the south by the Ice Age Floods National Historic Trail, Spring Creek Hatchery State Park, the Columbia River, the Mitchell Point Trail, Indian Head, and hiking along the Lower White Salmon River near the confluence with the Columbia. Multiple river access sites used by a variety of users, including fishermen, sailors, kayakers, etc., lie in direct view of the WREP site.

Scenery is a central part of outdoor recreation in these areas. Imagine hiking several thousand feet to your favorite alpine area or panoramic point, or sailing the Columbia River for its unique and picturesque scenery, only to have your view dominated, or even blocked, by Boeing-sized industrial wind turbines. That is exactly what would occur if this Project were built.

VI. The Project would substantially harm wildlife resources.

Not only are the WREP's likely visual impacts unprecedented among the facilities the Council has reviewed to date, so too are its likely impacts on the surrounding ecology and avian

and bat populations. This is the only project reviewed by the Council to be sited in mountainous and forested habitat, where impacts are likely to be greater than in open shrub-steppe land. (Indeed, citing the likelihood of greater impacts in forested areas, neighboring Klickitat County consciously excluded forested areas when it zoned for future energy development.) Finally, this is the only project to be sited within an area designated to protect the federally listed Northern spotted owl, a critically imperiled species that could be further harmed by the Project.

Despite these factors, the Applicant predicts the WREP would have little to no impact on avian populations, even while similar predictions for other wind facilities in Washington, made by the Applicant's same consultants, have proven false. The Applicant relies on several statistical models for predicting avian fatality that have never been proven to be reliable. And it has spent grossly insufficient time studying the area. In short, the Applicant has not provided the accurate, detailed, and searching analysis that the unique characteristics of this project deserve.

Here, the Council has the opportunity to hear from Dr. K. Shawn Smallwood, a nationally recognized ecologist and expert on the effects of industrial wind facilities on wildlife and habitat. Dr. Smallwood has studied the effects of wind facilities on avian and other wildlife populations for more than a decade and has authored numerous, peer-reviewed articles on how to avoid, minimize, and reduce bird collisions with wind turbines. He is the author of more than 300 professional publications and has consulted for dozens of government agencies, environmental organizations, law firms, and wind energy developers.

Dr. Smallwood's testimony shows that the WREP facility would likely have serious negative effects on local and transient avian and bat populations, that the Applicant has relied on spurious methodologies for predicting wildlife impacts, and that the Applicant has put in grossly insufficient hours to generate an accurate inventory of affected wildlife. The Applicant has also relied on wildly exaggerated population estimates for its cumulative impacts analysis and offers little by way of mitigation. In short, the Applicant has not provided the accurate, detailed, and searching analysis that the unique characteristics of this project deserve.

First, the empirical bases for the applicant's analyses can simply not be relied upon. These include the Applicant's regression analysis, which predicts fatality rates at the WREP facility from fatality and utilization rates (*i.e.*, mean bird use as observed per survey plot per 20-minute survey) at other facilities; the Applicant's exposure index, whereby it attempts to predict expected fatality, *inter alia*, from observations of birds in actual flight within the "zone of risk"; and comparison of raptor nest density to nesting densities at other wind facilities. Using these methodologies, the Applicant's consultants have consistently generated grossly inaccurate predictions of avian mortality when helping to site other wind facilities in the region. As well, their unreliability in this matter is likely compounded by serious shortcomings in their data collection methodologies and highly favorable, and misleading, choice of comparison to other wind facilities despite the WREP's unique surroundings.

The Applicant's consultants make the unlikely prediction that the WREP would kill no raptors. This has not proven true of any of the 28 wind facilities in Washington, Oregon, or California that have been monitored for more than one year. And based on available mortality

information from those 28 sites, the WREP would likely kill at least 30 raptors, 406 birds (including raptors), and 95 bats each year. This does not even account for the unique habitat surrounding the WREP, nor for searcher error when looking for carcasses in this forested habitat.

Further, the analysis utilized only a portion of the available data sets. When more data is included, the Applicant's methodology could support the exact opposite of its zero-raptor death prediction: namely, that the WREP facility would kill more raptors than any other wind project in Washington or Oregon. In any event, the Applicant's methodologies have consistently led to grossly inaccurate predictions in the past, and should not be relied upon here in this unique matter.

The methodologies used by the Applicant to gather data were often inconsistent with current protocols, including those contained in WDFW's Wind Power Guidelines and those prescribed by the U.S. Fish and Wildlife Service Turbine Guidelines Advisory Committee.

The reliability of the Applicant's predictions rest not only on its choice of statistical methodologies, but also on the sufficiency of effort to survey avian use at the proposed site. This is because the Applicant's prediction is premised on the reliability of low observation rates, in turn indicating a correspondingly low number of expected fatalities. However, the Applicant has put in a grossly insufficient number of survey hours (only 87) to adequately inform decision-makers about the likely impacts that the WREP project might have.

The Applicant failed to observe the WDFW Wind Power Guidelines' requirement of a full year of observation. Instead, it has cobbled together its analysis from surveys at different years, where each year is represented by a different season. The Applicant views this as a strength, explaining that it accounts for "some hypothetical variation among years." This reasoning, however, is fallacious. Inter-annual variation is real, but so is inter-seasonal variation. Because each year is represented by a different season, no conclusions about inter-annual variation can be made in a scientifically credible manner. Nor can these data points be used to make conclusions about seasonal variation over any given year, as the Applicant may have inadvertently surveyed the lowest representative seasons between years.

Survey veracity is also affected by the time of day at which surveys are performed, the volume of airspace allegedly surveyed (*i.e.*, the significance of observed number birds as an indicator of total population depends on the observer's optical ability to see birds throughout that space), and the abundance of physical features, such as trees and hills, that inhibit one's ability to see the entirety of the air-space allegedly surveyed. Here, the Applicant's surveys were diurnal, and so are unlikely to account for nocturnal species. The volume of airspace surveyed in each instance was far too great to make accurate observations. And, in placing equal weight on observations of high use elsewhere, but low use at the WREP site, the Applicant did not account for the vertical topography and heavy forest which would inhibit any observer's ability to scan the entirety of the allegedly large volume of air space that each study represents.

Other empirical evidence that the Applicant relied upon include the so-called exposure index and nesting density. The exposure index attempts to predict avian collision from, among others, the number of birds actually observed flying at a height where they could be struck by a turbine blade. In short, this method has remained largely untested and, after analyzing data from the Wild Horse and Big Horn wind facilities, virtually no correlation can be found between exposure index and avian mortality.

In some places, the fatality rates of bats have far exceeded those of birds. Bats tend to forage around turbine blades, and significant numbers of fatalities are caused by the sudden drop in air pressure when bats pass near a turbine's rotor plane. The Applicant's consultants completely ignored this cause of death, focusing solely on mortality from actual collision. Moreover, the Applicant's consultants predicted low likelihood that one species, Keen's myotis, would be impacted due to the fact that little is known about this species. This is entirely inconsistent with the precautionary principle in risk assessment, which should be applied in any environmental analysis.

The Applicant concludes that the WREP would not impact Northern spotted owls. This was based on an assumption that because spotted owls have not been observed in the project site in the last six to eight years, they will not use that area in the future. As the Applicant's consultant acknowledges, however, Northern spotted owls have been reported near the project site in recent years. The six- to eight-year absence correlates with the duration of a single Spotted Owl generation, between which populations may shift back and forth between areas.

The Applicant's consultants state "the level of mortality [caused by collision with turbine blades] is not anticipated to be sufficient to negatively affect the population viability of any single species." This conclusion was made, however, without any population viability analyses, defensible risk assessments, or any method that could be considered standard protocol.

The Applicant's consultants averaged fatality rates from existing wind farms in the region and multiplied the average rate against a regional buildout capacity of 6,700 MW. They then compared their predicted annual fatalities to their estimates of regional population size, relying on a population estimator based on breeding bird survey results from the 1990s. Those surveys do not, however, provide a proper basis for extrapolating total population. They are associated with a relatively large standard error, which the Applicant's consultants did not account for, and, more significantly, they were performed in substantial part along roadways and near power lines where birds tend to congregate. As a result, the Applicant's extrapolation has resulted in an absurdly inflated estimate of the regional population of several species, out of proportion with the rest of the country. These include Golden eagle, Swainson's hawk, and American kestrel.

The Applicant's consultants also relied on estimated fatality rates that were far too low for the wind facilities examined. Adjusting for factors such as carcass removal rates—an indicator of avian fatality that the Applicant's consultants have routinely misapplied—actual fatality rates were likely up to 178% of the numbers the Applicant used. As a result, total fatality among avian populations across the Columbia plateau is likely 6.4 times greater for raptors, and

2.6 times greater for all birds, than the Applicant predicts. The Applicant also did not account for differences in maximum survey distances from the observer nor obstructions caused by topography and trees between the surveys and its prediction simply cannot be relied upon.

Given the unique mountainous and forested lands surrounding the WREP facility, the Applicant's analysis was too cursory to make any reliable predictions about likely impacts to avian and bat populations that use the site. The Applicant's consultants have consistently made grossly inaccurate predictions with respect to other wind energy facilities. And the Applicant relies on grossly inaccurate population estimates and inadequate mitigation measures. Unless and until these shortcomings are rectified, site certification should be denied.

VII. The Project would fail to provide abundant electricity at reasonable cost to meet regional need, would not be in the public interest, and would provide very little economic benefit.

As described above, the proposed Project would create substantial and unprecedented adverse impacts to the unique resources of the internationally recognized Columbia River Gorge. On the other side of the required balancing equation, the Council must determine whether the Project would provide abundant electricity at reasonable cost or provide other economic benefits. The Council must also determine whether the Project is in the public interest.

The evidence will demonstrate that this Project would not create abundant electricity, and in fact is not needed to meet Pacific Northwest power needs. Indeed, the proposal would exacerbate the serious existing problems of balancing energy and environmental considerations presented by the substantial amount of wind power already online and planned in the region.

In addition, this project is likely to not be used in Washington, or even in the Pacific Northwest, but rather is likely to be sold to California. Indeed, the Applicant has been unwilling to provide any binding assurances that the electricity would be used locally.

The evidence will also show that the project would not be in the public interest, and would provide only limited socioeconomic benefits that are far outweighed by the Project's adverse socioeconomic impacts.

The Council is fortunate to have a nationally recognized energy expert to advise it on these power and economic issues. Dr. Robert Michaels is a Professor of Economics at California State University at Fullerton who has provided testimony in this hearing. He has substantial experience in addressing energy issues across the United States in a variety of forums, including testimony before regulatory agencies and Congress.

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A. The WREP would produce only a small amount of energy, and would have no capacity to expand.

The WREP proposal would produce only a small amount of energy, with a nameplate rating of 75 MW. This is the amount of power that would be produced when the wind is blowing at significant speed. Most of the time, however, the project would either not produce power, or would produce far less than the 75 MW nameplate rating. Even by the Applicant's most optimistic projections, which Friends and SOSA dispute, the Project would, on average, produce at 32% of its nameplate rating, which equals 24 MW.

Though Friends and SOSA have repeatedly tried to discover the basic wind regime at this site in order to help evaluate whether the Project would produce abundant, reliable electricity, the Applicant has refused to provide this information. But it is apparent that in the larger scheme of current Pacific Northwest wind power capacity, this Project's output would be insignificant. Currently, all wind energy projects operating, under construction, or permitted in Washington and Oregon have a combined nameplate capacity of 9069 MW. Thus, this Project's 75 MW capacity would equal less than one percent of the current wind fleet—0.827%, to be exact. And given the rapid, ongoing increase of wind energy projects in these two states, this percentage would be even smaller by the time the Project would come online.

In addition, there would be little to no opportunity to expand the Project by constructing additional turbines at or adjacent to this site. The site is sandwiched between DNR-owned property, where DNR has declined to consider expansion because of the potential natural resource impacts, and the National Scenic Area, where industrial wind turbines are expressly prohibited.

Nor is the Project site a particularly suitable location for wind turbines. Publicly available information, reviewed under standard wind valuation methods, shows that the WREP site is at best a marginal site. Indeed, the turbines at the southern end of the Project, which would create the most disruptive visual impacts, are also located at the weakest part of the site for wind power production.

B. This Project would do little to meet state or regional power needs on a dependable basis.

As noted above, wind turbines operate only when the wind is blowing. Accordingly, wind power is of little to no value to meet energy needs on a dependable basis. Wind power varies dramatically by the day, and even by the hour and fraction of an hour. Wind power is also a problematic means of meeting commercial, industrial, and residential needs because Northwest winds tend to be calmest during the times when energy use is the highest, *i.e.*, during winter cold snaps and summer hot spells. It is not uncommon for wind resources to stay at or close to zero output for several days at a time during the winter and summer.

Indeed, output from wind resources varies significantly from year to year. For example, less wind power was produced in 2009–10 than in 2008–09, though there were significantly more built turbines.

The variable nature of wind resources creates serious impacts to the transmission grid when the wind stops blowing and other sources must be dispatched to make up the shortfall. And when wind energy production dramatically increases, it can cause immediate needs to shut down other resources on the grid. Both of these situations will be discussed below.

C. The Pacific Northwest is developing power far in excess of its needs.

The Pacific Northwest has experienced a virtual explosion of wind energy projects within the past five years, going from about 275 MW of wind generation capacity to more than 3000 MW. These new projects are being developed because of substantial subsidies provided by the federal government (including cash payments up to 30% of the project cost) and renewable portfolio standards (“RPS”) adopted in several states, especially those in California.

However, it turns out that during the time that all these new wind projects have been developed at such a rapid pace, increases in demand for electricity have been minimal. As will be discussed below, this is due in significant part to concerted efforts to achieve increases in energy efficiency and otherwise reduce consumption.

Currently in Washington and Oregon, there is a combined 9069 MW of wind energy capacity already developed and/or permitted. By comparison, the average load in the Pacific Northwest is only 22,000 MW. This amount of wind energy production is sufficient to meet both Washington and Oregon RPS for the next ten years or more, not even counting other projects yet to be proposed and developed. In fact, the BPA has stated that “[g]enerating capacity is being developed in the Northwest far in advance of regional power need.”

D. Energy needs in the Pacific Northwest involve baseload energy, not variable products like this Project.

Power planning in this region has been guided for the past 25 years by the Pacific Northwest Electric Power Planning and Conservation Act of 1980. That act created the Northwest Power and Conservation Council (“NWPPCC”), which was charged with preparing plans to ensure an adequate, economical, and reliable electric power supply for the Pacific Northwest.

In 2010, the NWPPCC released its sixth five-year plan for the Pacific Northwest. The 2010 plan indicates that firm load in the Northwest will rise from about 22,500 MW in 2011 to 25,161 in 2020; this estimate is reduced from prior estimates. (BPA defines “firm load” as “The load that is served, on a guaranteed basis, 100 percent of the time, and that BPA or another supplier has a contractual obligation to serve.”) By 2030, firm load is expected to increase by 7000 average MW. The 2010 Plan anticipates that most of that load growth will be met by energy

efficiency and conservation measures, such that “the need for additional generation will be quite small compared to past experience.” Sixth Northwest Power Plan at 3-2.

The one possible area in which Pacific Northwest electric energy anticipated demand may be deficient will be in the area of firm load required during the summer season, because of increased air conditioning use. In addition, with the large amount of wind resources already online and coming online, there is “likely to be an increased need for resources that provide reliable energy to meet high load conditions” *Id.* Of course, additional sources such as the wind energy from this Project are inherently *unreliable*, because just when summer hot spells occur with escalating electric demands, winds frequently drop to nothing.

Over the next planning period, given the large volume of existing and permitted wind energy facilities in the region, the principal needs will be for baseload, reliable energy—not undependable sources like this Project.

E. The output of most new wind projects built in the Pacific Northwest is headed to California, not to regional utilities.

While the Applicant touts the Project as designed for sales of electricity to Pacific Northwest utilities to serve regional needs, it is likely that the Project’s power would not be used in the Northwest at all.

Though Washington and Oregon have substantial RPS standards, California’s are much higher, requiring that its utilities have 33% renewable power. California has a huge market for renewable energy, given its larger residential and industrial power base. Thus, California utilities are either purchasing power from Pacific Northwest wind energy projects, or outright purchasing the projects—including several projects in Klickitat County, just to the east of this Project.

Indeed, BPA has stated that “demand from California will be the single largest driver of wind energy growth on our system in the coming years.” Much of the reason that California utilities are buying and developing wind resources in Washington State is that it is easier and faster to get projects online in Washington than in California. It is accordingly likely that any power from the Project would be purchased by California utilities.

F. Only so much wind energy can be added to the transmission grid.

As mentioned above, wind resources are dependent on variable climatic conditions and are thus inherently unreliable to meet baseload power needs. Utilities and transmission providers must thus be prepared, literally at a moment’s notice, to either increase or decrease other electricity generation when the wind stops or increases.

Going back to 2005, when there was only about 275 MW of wind online in the Northwest, the problems of ramping up or ramping down other generation when the wind stops or starts was a minor concern, given the large amount of hydroelectric resources at BPA’s

disposal. Today, other resources must be turned on when wind generation stops, or must be sharply reduced when wind generation increases. These resources must be ready in a matter of minutes. The explosion of wind energy since 2005 has created serious problems of integrating wind energy into the system.

As noted in Exhibit 30.14, in the summer of 2010, high wind, combined with high runoff in the Columbia River hydro system, created a serious situation for BPA. In fact, so much wind power was added to the system that it created the odd phenomenon of “lack-of-market spill,” in which water in the Columbia River hydropower system was “spilled rather than directed through hydro turbines.” At the time, there were negative prices for power, meaning that BPA might have had to pay utilities to take power. That condition was alleviated when BPA simply gave power away for free.

These problems exist currently, but wind generation capacity is rapidly increasing. BPA has stated, based on 2800 MW in its system at the time, that “[w]ith another doubling of the wind on the BPA system, BPA will exceed the ability of its hydro assets to manage the total variability and uncertainty of the wind fleet.” Exhibit 30.09. Currently, there are 9069 MW of wind energy projects operating, under construction, and/or permitted in Oregon and Washington. This is more than triple the number applicable at the time of BPA’s projections.

Indeed, with slow growth of demand, finding a place in the grid for wind generation poses problems. During low load periods in the spring and early summer, BPA has a minimum load of only 4000 MW, which, in BPA’s own words, “places an absolute limit on the amount of wind energy BPA can absorb within the hour.” BPA has already announced that it may simply shut down wind projects when too much wind energy comes online.

This raises the very real question whether additional wind energy, especially from a problematic and environmentally harmful project such as WREP, is necessary.

G. Fossil fuel plants will likely be necessary to support additional wind resources.

With the sheer volume of wind power projects already built or scheduled to be built in the region (9069 MW capacity), and the inability of available resources to balance the ups and downs of wind generation, it is becoming clear that wind generation developers may have to come up with their own alternative generation for balancing. Ironically, it is likely that new fossil fuel generation would be required to balance wind generation, creating the very greenhouse gases that renewable energy is designed to replace. Further, providing backup or balancing to wind energy would add even more costs to already expensive wind energy facilities.

H. Local economic benefits of the Project are limited.

The Applicant claims that the Project would result in substantial economic benefits. The evidence will show that these purported benefits are wildly exaggerated.

Economic activity from the Project centers around the purchase and installation of the huge wind turbines. The wind turbines are large and complex pieces of industrial equipment, but none are made locally. Indeed, most wind turbines are not even made in the United States. It is true that a number of construction workers would be needed to install these expensive pieces of equipment, but even the Applicant admits that up to 70% of them would come from the Portland Metro area, and thus may not even be Washington residents. Most of these workers would commute from their homes, so any money spent in the local communities would be very limited.

On the other hand, on a long-term basis, there would be very little employment. The applicant indicates less than ten workers would be needed to monitor and operate the turbines on site. It is impossible to predict where such individuals might live; most could live in Hood River or Portland. Nor does the Applicant specify whether these workers would be full- or part-time.

In fact, data from the Washington State Department of Commerce indicates that there are far more jobs in energy efficiency work as compared to energy generation. This work includes remodeling and new construction, employing and re-employing significant numbers of local workers to produce gains in energy efficiency and energy conservation.

VIII. The Project is inconsistent with Skamania County’s land use rules and regulations.

The proposed Project is inconsistent with Skamania County’s land use rules and regulations. For starters, commercial wind energy development is not an allowed use at the Project site. Indeed, in 2008 the County Planning Commission recommended amending the County zoning map, Comprehensive Plan, and County Code specifically to authorize wind energy facilities up to 500 feet tall at the Project site and other sites. But that effort stalled when the County realized it would first have to prepare an environmental impact statement. Thus, the code was never amended, nor was the site ever zoned, to allow this type of use. And the Skamania County Hearing Examiner held in February 2009 that the County’s “2007 Comprehensive Plan [which is still in effect today] does not contemplate the type of [wind] energy facilities” proposed by the Planning Commission in 2008. Decision at 8. That decision is final and was never appealed.

In addition, throughout the pendency of this application for site certification, a Skamania County-imposed moratorium has prohibited forest practice conversions. Here, the Project would permanently convert the site from forest use to industrial use in violation of this moratorium.

The Project would also be inconsistent with a number of specific provisions in the Skamania County Code and Comprehensive Plan. These points were stated in detail at the Council’s prior land use hearing and will also be addressed in future briefing.

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IX. Conclusion: The application for site certification should be denied.

The proposed WREP facility would cause significant adverse impacts to scenic and recreational resources, including but not limited to the Columbia River Gorge National Scenic Area, the Lewis and Clark National Historic Trail, and the Historic Columbia River Highway, all of which are important natural and historic aspects of our national heritage. And within the Project site, the proposed turbines with the most severe scenic impacts are also the turbine sites with the lowest capacity for producing reliable wind energy.

The WREP would cause significant adverse impacts on wildlife and habitat. Unlike any other project reviewed by this Council, the WREP would permanently convert forested habitat to industrial development, all within a designated Spotted Owl Special Emphasis Area. Many of the potential impacts on wildlife have not been adequately assessed. The Applicant failed to adequately survey the site for birds and other wildlife. And its analysis relies on spurious, untested methodologies and grossly inaccurate estimates of regional avian populations.

By all appearances, the site does not have a robust enough wind resource to deliver the benefits that the Applicant promises. Given the intermittent nature of wind energy, the region's slowing need for this type of power, and the serious problems associated with the reliability and integration of wind energy into the grid, any public benefits of this Project are minimal and greatly overestimated by the Applicant. Even with massive subsidies from the federal government to fund the Project, the Applicant's optimistic projection of an average 24 MW of energy production would be a drop in the bucket in relation to the thousands of megawatts of wind energy capacity already built in the Pacific Northwest and coming online soon.

The Columbia River Gorge is federally recognized as an important resource for society to protect for future generations. This industrial-scale wind energy project significantly threatens the Gorge and its delicate resources. This Council should not allow iconic parts of our national heritage to be sacrificed for the benefit of a single landowner.

Intervenors Friends and SOSA respectfully submit that the citizens of the State of Washington simply do not need this facility at this location. It makes little sense to construct a wind project here, even while other sites with far fewer resource impacts and conflicts are already available and being utilized to meet any regional energy needs. It should be Washington State's legacy to avoid the negative impacts of this proposed Project and to ensure that the public interest is upheld. The application for site certification for this Project should be denied.

Dated this 29th day of December, 2010.

REEVES, KAHN & HENNESSY

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DECLARATION OF SERVICE

I hereby certify that on the date written below, I caused delivery of the foregoing OPENING STATEMENT OF INTERVENORS FRIENDS OF THE COLUMBIA GORGE AND SAVE OUR SCENIC AREA to EFSEC as PDF and Word-compatible copies via e-mail.

I further certify that I caused delivery of an electronic PDF copy by electronic mail to each of the persons listed on EFSEC's official service list for the proceeding dated December 29, 2010 and posted on EFSEC's web site.

Dated: This 29th day of December, 2010.

/s/ Nathan J. Baker

Nathan J. Baker

Friends of the Columbia Gorge, Inc.