Oregon
Kate Brown, Governor

OREGON DEPARTMENT OF ENERGY

550 Capitol St. NE
Salem, OR 97301
Phone: 503-378-4040
Toll Free: 1-800-221-8035
FAX: 503-373-7806
www.oregon.gov/energy

To: Oregon Energy Facility Siting Council
From: Chase McVeigh-Walker, Senior Siting Analyst
Date: June 7, 2019
Agenda Item C (Information Item)
Subject: Montague Wind Power Facility – Council Review of Draft Proposed Order on Request for Amendment 4 for the June, 27 Council Meeting
Attachments: Attachment 1: Comments Received on the Draft Proposed Order

Background

The Oregon Energy Facility Siting Council (EFSC or Council) issued a site certificate for the Montague Wind Power Facility (facility) on September 10, 2010, which originally authorized the construction and operation of a wind-energy generation facility that would include up to 269 wind turbines. Council has previously authorized three site certificate amendments. The certificate holder is Montague Wind Power Facility LLC, a wholly owned subsidiary of Avangrid Renewables.

The facility is located entirely within Gilliam County, and within a site boundary of approximately 33,717 acres. The facility, based on final design (referred to as Phase 1) is currently under construction, and includes a wind generation facility with up to 56 wind turbines, and is expected to generate approximately 202 megawatts.

Montague submitted a complete Request for Amendment 4 (amendment request or RFA4) to the Montague Wind Power Facility site certificate on January 15, 2019. On March 25, 2019, the certificate holder submitted an amended RFA4, which was found to be complete on April 4, 2019. The amendment request (also referred to as "Phase 2") seeks Council's authorization to expand the site boundary by approximately 13,339 acres, allowing flexibility to install any combination of wind, solar, and battery storage energy components described in the RFA4. The certificate holder proposes three design scenarios (referred to as Scenario A, B, and C). Scenarios A and B represent a maximum and minimum disturbance layout, respectively, that includes wind turbines and battery storage; Scenario C represents a disturbance layout for a solar photovoltaic array that would occupy a maximum footprint of up to 1,189 acres and battery storage.

On April 5, 2019, the Oregon Department of Energy issued its Draft Proposed Order and public notice of a public comment period beginning on that same day and lasting through the conclusion of the public hearing held on May 16, 2019 for a total of 41 days.

At the May 16-17, 2019, EFSC meeting in Condon, Oregon, and in accordance with Council rules on a request for amendment under the "Type A" review process, Council conducted a public hearing on the DPO. Following the DPO public hearing, Council, considering requests from

members of the public as well as the certificate holder, elected to extend the public comment period for the DPO. Council extended the comment for both the certificate holder and the public by an additional week (until May 23), and extended the written record for an additional week (until May 30) to allow the certificate holder time to respond to any additional comments on the record.

The Department received two public comments prior to the May 23rd deadlines and the certificate holder's response prior to the May 30th deadline.

Comment Index			
Date Received	**Last Name**	**First Name**	**Entity**
Previously provided in the May 2 Staff Report and included in Attachment 1			
4/9/2019	Cherry	Steve	Oregon Department of Fish and Wildlife (ODFW)
5/2/2019	Buck	Craig	Public
5/2/2019	Fitzner	Elaine	Public
Previously provided in the May 14 Staff Report and included in Attachment 1			
5/13/2019	Wales	Barbara	Public
5/13/2019	Wisdom	Michael	Public
5/13/2019	Wisdom	Elias	Public
Previously provided during the May 16/17 EFSC Meeting and included in Attachment 1			
5/14/2019	Hutchinson	Matt	Certificate Holder
5/16/2019	Albrich	Elaine	Certificate Holder*
5/16/2019	Walsh	Brian	
5/16/2019	Hutchinson	Matt	
5/16/2019	Gilbert	Irene	Public
5/16/2019	Olsen	Eudora	Public
5/16/2019	Weedman	Erin	Public
5/16/2019	Macnab	Dennis	Public
5/16/2019	Shaffer	Steve	Public
5/16/2019	Colby	Michelle	Gilliam County Planning Department
5/16/2019	Little	Chuck	Public
5/16/2019	McGuire	Rodney	Public
5/16/2019	Kronner	Karen	Public
	Gritski	Bob	
5/16/2019	Rhodes	Paul & Shirly	Public
5/16/2019	Skeahan	Brian	Public
Comments received during the public comment period extension concluding on Mar 23rd			
5/23/2019	Irby	Myra	Public
5/23/2019	Weedman	Erin	Public
Responses received from the certificate holder prior to the written response period concluding on May 30, 2019			
5/30/2019	Albrich	Elaine	Certificate Holder

*Materials include both comments on the DPO by the Certificate Holders and responses to other comments by the certificate holder

Process Steps

Department staff is currently conducting a review of the comments and responses received on the record of the Draft Proposed Order and will provide its evaluation of them to Council members by June 14, 2019.

On June 27, 2019, Department staff will present comments and responses received on the record of the Draft Proposed Order and its evaluation of them to Council, and Council will review the DPO, consider all comments and responses received on the record, and provide comments to the Department regarding the DPO.

After Council's review of the DPO and consideration of comments and responses, the Department will issue its proposed order, addressing all public comments and responses received on the record and within Council jurisdiction as well as taking into consideration any comments by Council members.

Attachment 1: Comments and Responses Received on the record of the Draft Proposed Order

MCVEIGH-WALKER Chase * ODOE

From: Steve Cherry <Steve.P.Cherry@state.or.us>
Sent: Friday, April 12, 2019 11:46 AM
To: MCVEIGH-WALKER Chase * ODOE
Cc: REIF Sarah J
Subject: RE: Montague Wind Power Facility: Notice of Complete Request for Amendment 4 of the Site Certificate, Draft Proposed Order – May 16, 2019 Comment Deadline
Attachments: ODFW Memo Montague_RFA4_ DPO.pdf

Chase,
Please find attached ODFW's comments on the RFA4 and DPO. Please let me know if you have any questions or need anything else from ODFW. Thanks

Steve

From: MCVEIGH-WALKER Chase * ODOE <Chase.McVeigh-Walker@oregon.gov>
Sent: Tuesday, April 9, 2019 4:17 PM
Subject: Montague Wind Power Facility: Notice of Complete Request for Amendment 4 of the Site Certificate, Draft Proposed Order – May 16, 2019 Comment Deadline

Good afternoon,

On January 15, 2019, the Oregon Energy Facility Siting Council (Council) and the Oregon Department of Energy (Department) received a complete Request for Amendment 4 of the Montague Wind Power Facility (RFA4). The Montague Wind Power Facility is an approved wind energy facility located in Gilliam County (referred to as "Phase 1") – See locational map in the attached noticed. On April 5, 2019, the Department issued its Draft Proposed Order presenting recommended findings of fact related to Council standards at OAR Chapter 345 Divisions 22-24.

Summary of the Amendment Request
RFA4 seeks Council approval for authorization to add an additional 13,339 acres to the site boundary, seeks approval for the construction and operation of new facility components (referred to as "Phase 2") including a solar photovoltaic array and battery storage, as well as turbine modifications (increasing maximum blade tip height from 486 feet to 597.1 feet), and flexibility to install any combination of wind and solar energy facility components as long as the total maximum output of Phase 2 would not exceed 202 megawatts (MW).

Attachments
Public Notice on Request for Comments on the Complete RFA4 and Draft Proposed Order is attached for your reference.

RFA4, draft proposed order and public notice are available on the Department's project website at:
https://www.oregon.gov/energy/facilities-safety/facilities/Pages/MWP.aspx

Comment Deadline
Written comments on RFA4 and the draft proposed order must be received by the Department **by the close of the May 16, 2019 public hearing,** and must be submitted in writing by mail, email, hand-delivery or fax per below:

Chase McVeigh-Walker, Siting Analyst
Oregon Department of Energy
550 Capitol Street NE, 1st Floor
Salem, OR 97301

Email: Montague.AMD4@Oregon.gov
Fax: 503-373-7806

Written or oral comments may be provided at the public hearing. The Council will not accept comments on RFA4 or the Draft Proposed Order after the close of the record of the Draft Proposed Order public hearing.

Thank you, and please do not hesitate to contact me with any questions.
Sincerely,

Chase McVeigh-Walker

Chase McVeigh-Walker Siting Analyst
Oregon Department of Energy
550 Capitol Street N.E., 1st Floor
Salem, OR 97301
P: 503-934-1582
C: 971-600-5323
Oregon.gov/energy

Leading Oregon to a safe, clean, and sustainable energy future.

MEMORANDUM

TO: Chase McVeigh- Walker
Oregon Department of Energy

FROM: Steve Cherry, District Wildlife Biologist
Oregon Department of Fish and Wildlife
PO Box 363 Heppner, OR 97836
(541) 676-5230
Steve.p.cherry@state.or.us

DATE: April 12, 2019

RE: Oregon Department of Fish and Wildlife (ODFW) Comments on the Request for Amendment 4 and the Draft Proposed Order for the Montague Wind Power Facility

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GENERAL COMMENTS: ODFW appreciates the Applicant working to address all of the previous comments on this proposed Amendment. ODFW is currently working with the Applicant and ODOE on the finalization of the Revegetation, Wildlife Habitat Mitigation, and Wildlife Monitoring and Mitigation Plans. ODFW does not have any further comments on the RFA4 or the Draft Proposed Order.

2301 N Creek Drive
Mt Pleasant, SC 29466

CHARLESTON SC 294

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Chase McVeigh
Oregon Department of Energy
551 Capitol Street NE, 1st Floor
Salem, OR 97301

97301-252951

Craig Buck
2301 North Creek Drive
Mount Pleasant, SC 29466

May 1, 2019

Mr. Chase McVeigh
Oregon Department of Energy
551 Capitol Street NE, 1st Floor
Salem, Oregon 97301

Dear Mr. McVeigh:

I am writing this as a comment regarding the proposed Montague 2 Wind Power Project in Gilliam County, Oregon. In years past I have spent time hunting, hiking and spending time enjoying the scenic and historic Gilliam County Oregon gems that are situated along Upper and Middle Rock Creek Roads that parallel Rock Creek. I have concerns for potential wind turbine visual and noise impacts.

I am addressing the "Scenic Aesthetic Values", Historic Resources and "Noise" OARs and Gilliam County standards for the same. I studied the Exhibits R, S & X and associated OARs: 345-022-0080 scenic resources and 345-022-0090 historic resources and related OARs and Gilliam County Land Use Plans. I understand that the application is an amendment to an approved project. I am not opposed to the Montague 2 and prefer all solar instead of wind turbines.

Upon leaving the Arlington area and driving through farming area and wind turbines, it's a relief to drop down into the Rock Creek canyon into the classic John Day environment of cliffs, flowing water, grassy hillsides, farming and wildlife. Of particular interest to me is the Olex area where the historic pioneer Olex cemetery is situated. I have reviewed parts of the project amendment documents online and have not found anything about the development's potential indirect impacts to the canyon and cemetery. Just text about Fourmile Canyon, etc., and other places that are miles and miles away from the turbines but no discussion on beautiful local canyons with proposed turbines within a mile or less that are likely to be visible from the public Rock Creek Rd. I understand there is an analysis area up to 10 miles but how could more local valuable places be forgotten in all the process regulations? People travelling this part of the county and the Rock Creek road enjoy the landscape and the much-needed escape from the flat extensive wheatfields with turbines, whether they are visiting tourists or locals.

Assuming all the OARs are addressed but the County has not specifically requested that the Department of Energy provide for special analysis to be given to their scenic and historic resources close to the site, I am requesting that the decision-makers pause and require further analysis and consultation with the local residents and anyone else such as impacted property owners that live elsewhere. In addition, I disagree with "Rock Creek" waterbodies being considered of no importance for recreational value and thus was not addressed further. Rock Creek and the surrounding landscape is a recreational type opportunity, surrounded by all private land (thus limited to the public) and is

important to those wanting to get away from the public. Hunting leases bring $ to landowners which spend their money locally and in Oregon.

It is the primarily the historic cemetery that deserves attention when addressing impacts. *The cemetery and historic setting around it should be given the same recognition and analysis as the "built environments properties" in the site. Just because it doesn't have a special designation with a national database or other official recognition does not mean it's to be ignored.* The County is obligated to address historic resources and potential significant or important impacts even if they are indirect (visual, lights and operating noise) in the site. In addition, common sense should apply if no specific rule addresses things sufficiently.

There is approximately 116+ years of history represented in the canyon and at the cemetery. Enjoying this is a recreational experience. The history is all documented at the museum in Condon but the living museum is along and just off the country roads. All I can find in the amendment about scenic areas and history is the possible visual impacts to residents of Olex, no recognition about the important historic cemetery. The County only has three buildings on the National Register of Historical Places but it has 125 historical sites identified–all of those deserve special attention when addressing direct or indirect adverse impacts, whether "significant" adverse impact or not.

It's a true wonder and that the setting is still mostly the same today and is a unique resource and contribution to the history this region is known for. The days of the Oregon Trail and the pioneer people that settled here after their long hard cross-country journey as far back as the 1800's come to mind as they meander through the cemetery and nearby. What a peaceful setting where one can get away from the reminders of modern society (as seen elsewhere to the north in the county). This part of live history alongside farming and ranching activities should not be impacted and should be respected forever.

The amazing thing about the setting of the cemetery is that the landscape and surrounding view shed has not changed much since the late 1800's. We all need quiet places with beautiful landscapes to reflect on the past, nourish our souls and for meditating as we say thanks to those who came before us.

The other thing this area is known for is its remoteness and dark skies. When hiking on properties in the Rock Creek area some of the owners would take me out to "the back 40" and say "Do you hear that?". Of course I would say "No, I don't hear anything." In fact I could only hear me – my soft breathing as I took it all in. A place with no intrusive human activity noise! How rare! The night sky is always so fantastic, no light pollution except to the north. *This kind of place is rare to find in today's world. This should be considered a real treasure to Oregon and the county and the whole country* and should not have busy industrial in-your-face fast-spinning turbines in its setting. The International Dark Sky Association now has recently started an Oregon Chapter because Oregon has such a special resource for astronomers and others.

We do not have dark skies where I live, Oregonians are so lucky. Once it is gone, it is gone forever. Increase in development and turbines with two lights each is a permanent significant impact. You cannot offset for that permanent loss or the lost current and future opportunity to experience silence, darkness and open historic vistas. Two lights on every turbine (assuming the big ones), would add too much distraction. I will note that the historic value of the cemetery especially the historic setting itself will be degraded by the sight of turning turbines and their red or other blinking lights. When going up the short two track road as you approach the cemetery, according to the application (scenario A, maybe B too) there will likely be spinning turbine blades, standing towers and blinking red lights right in your face as you approach the cemetery gate. A nearby visual simulation taken at the old elementary school with the historic school sign in the photo indicates what is likely to be seen (scenario A) also from the nearby cemetery. What a shame to allow this intrusion of a historical setting that still retains the same characteristics as the mid to late 1800's. 1866 is the earliest known burial at the cemetery! It all looks like a western movie setting to me and deserves attention and setbacks.

The historical area that has miraculously been preserved in the Rock Creek area should have complete respect and also receive protection from direct visual degradation. *Set the turbines back further, put elsewhere in the site or just use solar.* The permit should specify this condition. Gilliam County has hundreds of thousands of acres of land on which to place turbines and avoid valuable public resources, whether formally designated or not. Put turbines in farm fields that are away from special areas. Again, once you erase history from the countryside you will never get it back. We should all be proud that the ones that came before us and the present-day folks had the vision to preserve, enhance and protect these resources.

To me, the potentially indirect effects of the project to these historical sites has not been adequately addressed in the application especially in regard to local plans which I have reviewed online. In particular, Gilliam County natural resources (inclusive of history) plans. While I truly appreciate the exhaustive 1,330+ pages of information prepared by the developer and the 362 pages Draft Proposed Order pages prepared by the and Dept. of Energy (I have not time to study much of either in detail), an outstanding item is resolving sufficient setbacks that will enable continuation of a living history site with farming and ranching and residences where people are maintaining historic buildings. This should be addressed in condition 48 or another applicable condition.

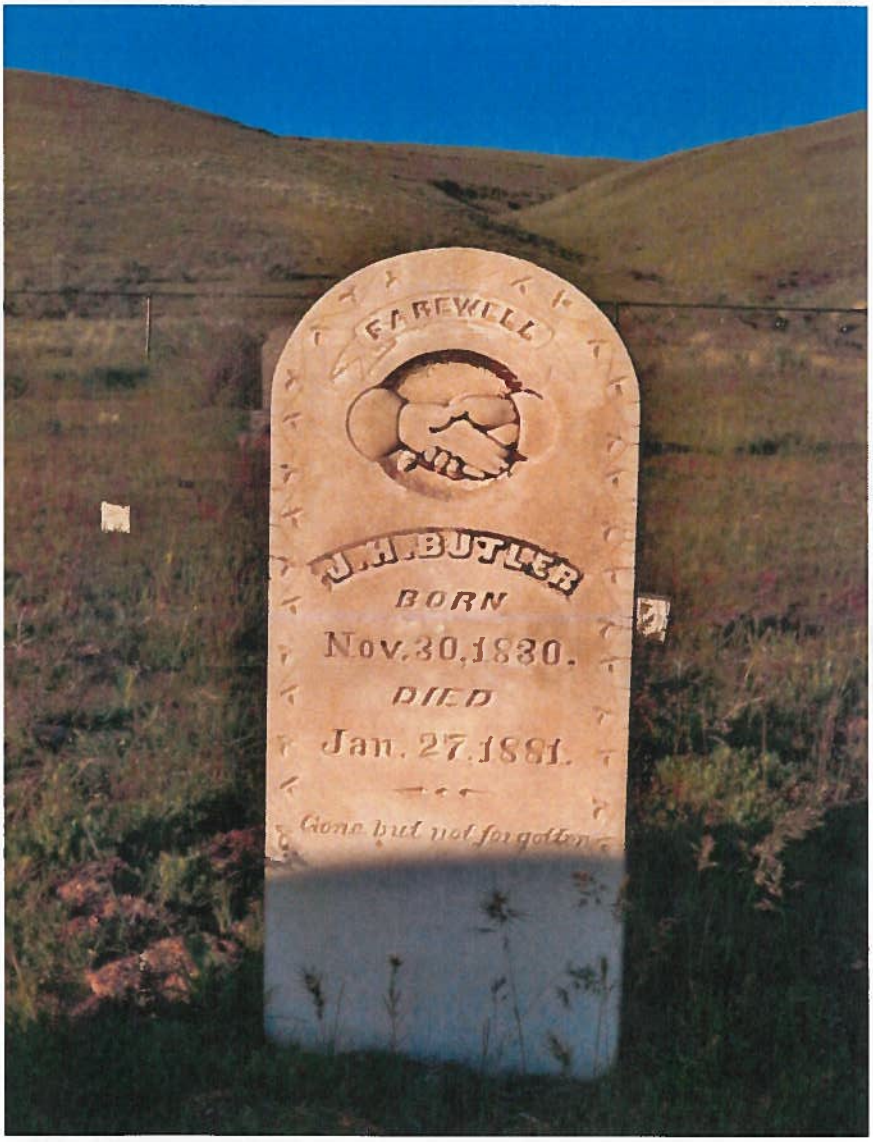
My travel buddies and I are not against wind turbine development if it is permitted appropriate to the location. Montague 2 turbines should be set back from historic areas so as not to be seen or heard from Rock Creek. I support solar energy. I can easily spend my tourist $ elsewhere, in some other state, and I am not alone when I say that. The beauty of Gilliam County will become more and more valuable over time, increasing tourism and providing a source of living history instead of just a museum (that's about all we have back east). Please don't make our mistakes, we should have saved more special sites from indirect impacts as we grew rapidly.

One of the stone grave markers reads: "Gone but not Forgotten". We have the duty, the obligation and responsibility to respect those who came before us and retain the quiet and peaceful pioneer setting in which they rest in peace and so we can pray and meditate in peace.

Thank you for the opportunity to comment.

Craig Buck

cc: Gilliam County Planning Department
Oregon State Historical Preservation Office



Elaine Fitzner
19947 W. CDA LKSHR
CDA, ID 83814

PHOENIX AZ 852
04 MAY 2019 PM 1

Chase McVeigh
C/O Oregon Dept. of Energy
551 Capitol St. NE 1st Floor
Salem, OR

97301-252951

Elaine Fitzner
19947 West Coeur d'Alene LK SHR
Coeur d'Alene, Idaho 83814

April 28, 2019

Chase McVeigh
Oregon Department of Energy
551 Capitol Street NE 1st Floor
Salem, Oregon 97301

Dear Mr. McVeigh:

I am writing to address my concerns over the Montague 2 Wind Project located in Gilliam County, Oregon. A few of the turbines will adversely affect the historical significance of the town of Olex and permanently alter the view shed from the Rock Creek corridor as well as the Olex pioneer cemetery located less than a half mile from the site boundary. It is my understanding that potential impacts to historic sites were analyzed in the amendment 4 application exhibit S but I can't find anything on these subjects nor do I have time to read all the amendment text. I did see the Oregon National Historic Trail addressed in one of the exhibits but not the pioneer cemetery.

As a long-term resident of the Pacific Northwest, I often traverse back roads looking for landscapes that support historic communities and the natural world/wildlife. My interest in the settlement of the Pacific Northwest has led me to many several small communities in Eastern Oregon. One suggested driving tour (Gilliam County Historical Society) traverses Rock Creek and the former town of Olex. The nationally important pioneer cemetery that occurs in Olex is on the list of historic cemeteries in Oregon (see Oregon.gov parks and recreation, Oregon Heritage, Oregon Commission on historic cemeteries). There are headstones dating to the mid 1800's. Many of the graves are from residents of eastern states who headed west near the end of the vast migration across the U.S. on the Oregon Trail. Residents of the surrounding area and people from across the country visit the cemetery to enjoy the solitude, pray, and decorate the graves of their ancestors. The old school house, Crum Mill, beautifully maintained historic residences, all in a traditional farming/ranching setting with native grasslands on slopes still occur at and near the Olex Townsite. Local historians say that people who went to school at the schoolhouse still visit the area today and reunions are held. The same peaceful valley can be seen in photos taken in the late 1800's. The presence of turbines, lights, and associated human activities, on the ridgeline above Rock Creek will permanently alter the historic ambience of this small community, deter visitors and directly impact those who use the outdoor church—the cemetery. It is my understanding that these type of energy developments follow required setbacks to homes and that churches, schools and libraries are considered noise sensitive properties. A cemetery should also be a noise sensitive property. It is time that Oregonians ask for equal protection to cemeteries, whether pioneer or more recent. Even though the valley,

corridor and historic buildings and cemetery will be directly avoided, there could still be impacts (visual and noise). The ultimate goal is that no turbines be visible in the historic area or viewable from the cemetery and a peaceful experience is still possible.

Nature enthusiasts and those wanting to escape an industrialized or commercialized world—even people from other countries—seek out places like Gilliam County to spend time enjoying the open space and habitats. Recreational users often spend time in nearby towns benefiting the economy. Turbines, perhaps almost 600 feet tall, lining the ridgeline above Rock Creek, will negatively impact many people who prefer an open vista with historic and turn-of-the century features and characteristics. In addition, they will take their tourist dollars to another county.

I support renewable energy and I am grateful to those who take on such challenges, but some adjustments are needed. There are solutions. Energy can still be generated while insuring protection of the serenity of Rock Creek–place wind turbines further away from the Rock Creek Corridor. Another option (scenario C) is to utilize a more benign energy development – the proposed solar array. It will be less detrimental to wildlife species, than the turbines, and ensure a less constricted view shed throughout historic Olex.

With our crazy lives, often fraught with stress, it is wonderful to escape to places like Rock Creek in Gilliam County. I encourage Avangrid Renewables to preserve the historical ambience and at the same time greatly reduce direct impacts to birds and bats but still generate the same amount of renewable energy.

Sincerely,

Elaine Fitzner

Cc: Gilliam County Planning Dept. and Gilliam County Court

Cc: State Historic Preservation Office

10 May 2019

To: Chase McVeigh-Walker, Siting Analyst
Oregon Department of Energy
and the
Energy Facility Siting Council Members
551 Capitol Street NE 1st Floor
Salem, Oregon 97301

From: Barbara Wales
64340 Mount Emily Road
La Grande, OR 9850

Dear Mr. McVeigh,

This is a letter of public record that I hereby submit to you and the Oregon Department of Energy on the proposed Montague 2 Wind Power Project in Gilliam County. I know the area well and have been exploring eastern Oregon backcountry for decades. I have reviewed the legal documents on this proposed project, and the request #4 for an amendment and I have serious legal, social, economic, and aesthetic concerns about some portions of the wind turbine proposed layouts. I am specifically concerned about the historic resources, scenic aesthetic values, and noise regulations (OARs) that are not being adequately addressed with the proposed wind turbines that will be placed directly above the Upper and Middle Rock Creek drainage.

Turbines will be placed in plain and prominent view, directly above the drainage, completely eliminating the historic and unique view shed encompassing the historic Olex town site, the original elementary schoolhouse, and historic pioneer Olex cemetery and all surrounding properties. All landowners and users of this drainage and surrounding areas could be permanently affected by the prominent, striking placement of these turbines. This part of the proposal appears to be incomplete or in direct conflict with OAR 345-022-0080 regarding analyzing and addressing impacts to and protection scenic resources, and OAR 345-022-0090 regarding analyzing and addressing impacts to and protection of historic resources and as also found in related Gilliam County Land Use Plans. I am also concerned about chronic background noise that will permanently alter the quality of life in this area and the continued risk to birds and bats that get killed by the in the Columbia Basin area every year. For example, using data from ten plus years ago, an estimated 15,276 birds (98 species) birds are likely being killed every year (see RFA-4 Exhibit P). Although the Council previously reviewed that information and the expanded area has bene studied and avoidance/minimization measures proposed, it is time that us Oregonians get smart and use an alternative to the traditional source of our alternative energy. I support solar which will greatly reduce visual and noise issues and bird and bat kills.

As far as I can tell this part of the proposed amended wind turbine project has undergone little public review or input but is already at a "Hearing" stage with no more comments accepted after May 16.

As a citizen of Oregon and traditional user of the Olex town site and surrounding landscapes, I can tell you that having wind turbines as an alien array of extremely tall objects, in direct attack of the view shed from all points of view from the adjacent Upper and Middle Rock Creek drainage, as well as from surrounding ridgetops, is among the most negative and repulsive aesthetic and social effects that is possible for rural Gilliam County. This dramatic reduction in the quality of the view shed includes the continuously blinking, red lights throughout the dark hours of each day and in the dark foggy days of winter. Currently the view shed has some of the most dramatic nighttime skies of anywhere in the continental U.S. Oregon has started a chapter of the International Dark Skies Association and will be proposing communities consider designating the area as Dark Sky Reserves. People travel the world to experience these and spend a considerable amount of money locally. Lighting minimization is being proposed for the amendment facilities but scattered blinking lights are extremely distracting to enjoyment of the evening experience.

Have these many negative effects been adequately documented and shared with the public for their input? From my examination of the documents of public record, they clearly have not. Have the local landowners near the Olex town site been asked, via formal social and economic surveys, for their input on the current amendment and proposed scenarios? To the best of my knowledge, thus far they have not. This places the Department of Energy and the Gilliam County responsible officials/departments in legal jeopardy.

The Olex area is one of those special areas that remains free of this intrusive landscape change that will permanently alter the lives, lifestyles, and quality of life experiences in this area. Before this project is approved, I urge the Oregon Department of Energy and Gilliam County Land Planning to conduct social and economic surveys of landowners and all users of the Upper and Middle Rock Creek drainage and Olex Town site area. Surveys should formally collect data on the preferences

Failing that (and I believe that your agency and Gilliam County will proceed with this proposal, without the benefit of social and economic surveys), I recommend that there be a condition that requires pulling back or putting somewhere else all proposed wind turbines from the ridgetop that would currently have any portion of turbines in view from the Upper Rock Creek road and drainage, and in view from the Olex unincorporated community and historic Town site and in view from all properties along this portion of the Rock Creek drainage. This plateau/dryland farming area would be more appropriate for solar power development. This is one of the last remaining areas in Gilliam County that is free of wind turbines as a prominent landscape eyesore, and this part of Gilliam County remains a special place of historic, aesthetic, social, and economic values that will be substantially and permanently diminished with placement of turbines within view

from the bottom of this drainage. Something does NOT need to have a significant adverse impact in order for us a smart humans to put our thinking caps on and avoid and minimize to the greatest extent possible.

I am a supporter of alternative energy but its time we all pause and ask ourselves what our vision is for the near future and the future generations who will by then have an ever grater disconnect with the history of Oregon. Preserve some areas for recreation, meditation, hunting, exploring, etc. in a landscape free from the modern industrialized world.

Thank you for considering my comments and recommendation to maintain the integrity of this area. I look forward to the modification of this proposal to pullback turbines from the ridgetop above Upper and Middle Rock Creek to a distance from which they cannot be viewed from the drainage and important features below.

Sincerely,

Barbara C. Wales

Barbara Wales

9 May 2019

Chase McVeigh-Walker
Oregon Department of Energy and the Oregon Energy Facility Siting Council Members
551 Capitol Street NE 1st Floor
Salem, Oregon 97301
Montague.AMD4@Oregon.gov

Dear Mr. McVeigh-Walker,

This letter is in regard to the Montague 2 Wind Power Project in Gilliam County. I am specifically responding to the request for public comments on the complete request for Amendment 4, with a public comment period that ends on May 16, 2019. Please consider my letter as part of public input on this proposed amendment.

I am intimately familiar with the area in which this solar and wind turbine project is proposed. I routinely spend time, year-round, in the Olex area along Upper and Middle Rock Creek, near the historic cemetery and historic school site. I can tell you that it is a special place to both the property owners in this area and the many visitors to Gilliam County.

The portion of the proposal that would build out wind turbines in direct view from the Upper and Middle Rock Creek drainage, Olex Townsite, and surrounding properties, has me gravely concerned (Amendment 4). This part of the wind turbine proposal will profoundly alter the landscape, eliminating its incredibly special qualities. There are few areas in Gilliam County that remain out of view of wind turbines. Olex Townsite is one of them, and it is a special place that is enjoyed by visitors across the U.S., whether recreating, visiting family, seeing the cemetery and/or remembering their relatives buried there, birdwatching, watching farming activities, seeing historic features like old basalt fences, etc. It also is a special place for local landowners, and most of them have not been directly contacted to gain their input on the proposal to build turbines along the ridgeline directly in view from their properties. Olex townsite includes the state historic cemetery, which dates back to times of initial European settlement of Gilliam County, and which is visited by many who seek a better understanding of our past or pray and meditate. The prospect of this townsite and cemetery being under the imposing array of turbines above them is not a compatible land use and is disrespectful not only to the people today but also to those in the future as well as those whose hard work during the pioneer days gave us what we so treasure today . Care needs to be taken to identify areas like the Olex townsite, cemetery, and associated Upper and Middle Rock Creek drainage, that remain intact as they exist today, and that are protected through appropriate land use planning to be maintained and enjoyed for their inherent, existing conditions and values.

I strongly recommend that wind turbines not be constructed in areas where any portion of a turbine can be viewed from the Upper and Middle Rock Creek drainage or associated

properties near Olex townsite. I further recommend that solar panels be used in place of wind turbines in any areas where there would be visual impact from the wind turbines; this solution would still provide sufficient megawatts of additional clean energy production, but without the highly negative aesthetic, social, and economic effects on landowners and visitors to the beautiful area surrounding Olex townsite. It would also almost eliminate bird and bat kills which is quickly becoming unsustainable, even if there are no population impacts documented so far. Why wait for it to occur, prevention is the best approach.

I have been reviewing technical papers on raptor telemetry for possible upcoming publication. I noted some of the birds (one adult red-tailed hawk and one adult golden eagle, local breeding birds) that were studied 2011-2015 were in the general Gilliam County area, specifically along Rock Creek south of the proposed boundary expansion. The information was provided to the Oregon Dept. of Fish and Wildlife and the Washington Dept. of Fish and Wildlife in 2017. It indicates use along the Rock Creek and side-canyons as well as along Baseline Rd. and nearby farm fields. By setting back from known use areas, and areas that have just minimal use, we can all rest assured we are minimizing potential risk to our native birds.

Finally, whether its required or not, I recommend that formal social and economic surveys of landowners along the Upper and Middle Rock Creek drainage be taken to document their attitudes and willingness to accept the presence of wind turbines within view of their properties, whether it's a home or just land, and to better understand the economic effects of wind turbine developments on adjacent landowners. None of this would be necessary if the solar arrays are used instead of turbines.

Thank you for considering my recommendations to minimize or alleviate the highly negative effects of the proposed turbines that will be placed within the view shed of Upper and Middle Rock Creek in and near the Olex town site. I look forward to learning about how the proposed project will be modified in response to my recommendations and similar recommendations by other stakeholders and landowners.

Sincerely,

Michael Wisdom
64340 Mount Emily Road
La Grande, OR 97850

MCVEIGH-WALKER Chase * ODOE

From: Wisdom, Eli <wisd2742@pacificu.edu>
Sent: Monday, May 13, 2019 8:41 PM
To: Montague AMD4 * ODOE
Subject: Letter for Public Comment Regarding RFA4
Attachments: E_Wisdom_Olex_Wind_Power_Letter.pdf

Please see the attached PDF.

Thank you.

May 13, 2019

To: Chase McVeigh-Walker
Oregon Department of Energy
551 Capitol Street NE 1st Floor
Salem, Oregon 97301

From: Elias Wisdom
64340 Mount Emily Road
La Grande, OR 9850
ewisdom@pacificu.edu

Dear Mr. McVeigh:

I am writing to address my concerns over the Montague 2 Wind Project located in Gilliam County, Oregon. I am specifically responding to the request for public comments on the complete request for Amendment 4, with a public comment period that ends on May 16, 2019. Please consider my letter as part of official public input on this proposed amendment.

As an Oregonian and lifetime resident, I consider it paramount that the historic and beautiful landscapes that make Oregon treasured and rich with wildlife, be preserved and maintained whenever possible. The recent proposition which would build wind turbines in direct view from the Upper and Middle Rock Creek drainage, Olex Townsite, and many of the surrounding properties, will have a dramatic and negative impact on the unique attributes that contribute to the exclusivity of this landscape. Modifications to this proposal that will reduce these impacts do exist and need to be considered before the current proposal is solidified.

The area in which wind turbines will potentially constructed is in direct site of a nationally historic cemetery located in Olex. The gravesite is one of Oregon's oldest, and contains the remains from some of the first to make their way West on the Oregon Trail. This cemetery is often visited by relatives and tourists for mourning, meditation, and appreciation of the contribution and storied past that these headstones represent. Having large wind turbines in direct site of this cemetery is not only visually unappealing, it is disrespectful to the individuals whose remains are buried and the many who visit in remembrance.

Beyond the dramatic impact on the historic nature of this area, the wind turbine expansion plan will have significant ecological impacts. Wind turbines can have substantial impacts on many bird and bat species, many of which are native to Oregon. The winged animals that are treasured in our state are routinely killed by large wind turbines, and it is widely accepted among research scientists that wind turbines do, and will continue, to damage the many bird and bat populations within Oregon. Not only do the turbines physically harm birds and bats, but the anthropogenic noise created by these turbines has dramatic impact on their (and many other four-legged animal's) ability to communicate amongst each other. In doing so, these turbines will cause severe impacts to an animal's ability to breed, avoid predators, and hunt for food, all of which have deleterious population impacts. The negative impacts on the richness and diversity of fauna in this area will be felt at all levels of the food chain and also contribute to the loss of recreational activities that make this area a popular destination for outdoorsmen.

Many of the historic, quiet, and beautiful landscapes that make Oregon exceptional are quickly being lost to increasing development. The proposition that this letter refers to needs to be carefully examined from every angle, as well as thoroughly communicated and discussed with current residents, which, from my understanding, has not occurred. From my own research and discussions with professionals, it is my understanding that the installment of solar panels in place of wind turbines can generate sufficient power. This modification to the proposition will dramatically reduce the environmental impact on this area, and retain the many aesthetic and breathtaking views that make this area one-of-a-kind. I strongly urge the discussion of solar panels in place of wind turbines, and for every possible attempt to be made to reduce the adverse effects on this area of Gillam County.

I am highly in favor of generating renewable energy, although I believe that these endeavors can take place alongside preservation of the historic and ecological attributes of the environment. Alterations to the Montague 2 Wind Project expansion should be seriously considered.

Thank you for considering my comments and recommendations. I look forward to hearing about the modifications and alterations to this expansion plan that will take wind turbines out of view from Upper and Middle Creek road, and the drainage below.

Sincerely,

Elias Wisdom

PLEASE RETURN THIS FORM TO THE COUNCIL ASSISTANT
*See reverse for tips on giving testimony

ENERGY FACILITY SITING COUNCIL (EFSC)
ORAL & WRITTEN TESTIMONY FORM
May 16, 2019 – Condon, Oregon
MONTAGUE WIND POWER FACILITY
PUBLIC HEARING ON THE DRAFT PROPOSED ORDER

*Name: Elaine Albrich

*Address: Davis Wright Tremaine – 1300 SW 5th Ave, Portland OR 97201

*I represent (if applicable) Avangrid Renewables / Montague

Print your name OR your organization/business name.

☐ Send me future notifications about this project via email. My email address is: _____

☒ I wish to address the Energy Facility Siting Council and/or

☐ I wish to submit the following written testimony:

As the proponent

* Required

If additional space is needed, please use back of form.

PLEASE RETURN THIS FORM TO THE COUNCIL ASSISTANT
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ENERGY FACILITY SITING COUNCIL (EFSC)
ORAL & WRITTEN TESTIMONY FORM
May 16, 2019 – Condon, Oregon
MONTAGUE WIND POWER FACILITY
PUBLIC HEARING ON THE DRAFT PROPOSED ORDER

*Name: Brian Walsh

*Address: Avangrid Renewables 1125 NW Couch Portland, OR 97209

*I represent (if applicable) Certificate Holder - Montague
Print your name OR your organization/business name.

☐ Send me future notifications about this project via email. My email address is: _____

☑ I wish to address the Energy Facility Siting Council and/or

☐ I wish to submit the following written testimony:

As the proponent

* Required

If additional space is needed, please use back of form.

PLEASE RETURN THIS FORM TO THE COUNCIL ASSISTANT
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ENERGY FACILITY SITING COUNCIL (EFSC)
ORAL & WRITTEN TESTIMONY FORM
May 16, 2019 – Condon, Oregon
MONTAGUE WIND POWER FACILITY
PUBLIC HEARING ON THE DRAFT PROPOSED ORDER

*Name: Matt Hutchinson

*Address: Avangrid Renewables 1125 NW Couch St Portland, OR 97209

*I represent (if applicable) Certificate holder - Montague

Print your name OR your organization/business name.

☐ Send me future notifications about this project via email. My email address is: _____

☒ I wish to address the Energy Facility Siting Council and/or

☐ I wish to submit the following written testimony:

As the proponent

* Required

If additional space is needed, please use back of form.

Matt Hutchinson
Sr. Permit Manager – West Region

May 14, 2019

VIA EMAIL

Chase McVeigh-Walker
Oregon Department of Energy
550 Capitol St. NE, 1st Floor
Salem, OR 97301

Re: Certificate Holder Comments on Draft Proposed Order for Amendment Request #4

Dear Chase:

This letter provides comments by Montague Wind Power Facility, LLC ("Montague") on the Draft Proposed Order ("DPO") on Request for Amendment 4 of the Site Certificate for the Montague Wind Power Facility, dated April 5, 2019. Montague requests the Oregon Department of Energy ("ODOE") consider its comments and revise the DPO for the reasons outlined below. A redline copy of the DPO is attached to this letter and provides Montague's requested language changes. Montague will provide its response to public comments received on the DPO and prior to the public hearing in a separate written submittal.

A. Specific Comments and Proposed Revisions

Micrositing v. Site Boundary
Clarify language to reflect that area within site boundary but outside the micrositing corridor has not yet been evaluated for construction.

Turbine Hub Height Restriction, Recommended Amended Condition 27
Montague requests that the hub height restriction be removed because the maximum blade tip height restriction (i.e. 198 m) effectively limits the size of turbines that could be used at the facility. Hub heights can vary slightly between turbine types but remain within the maximum blade tip height restriction. Differences in turbine noise are not strongly associated with hub height; therefore, the analysis presented in Exhibit X of RFA4 is adequate to justify removing the hub height restriction. Further, Condition 107 requires submittal of noise modeling prior to construction to demonstrate that the selected turbine can comply with the Oregon DEQ's noise standards.

Hauling of Batteries and Battery Waste, Condition 116 and Condition 55
Clarify that Condition 55 already requires compliance with federal hazardous material regulations and revise Recommended Condition 116 to track Condition 55 language and impose an obligation to use a licensed hauler and comply with federal regulations and manufacturer recommendations when transporting hazardous battery material.

Third-Party Permits, Recommended Amended Condition 29

Montague recently provided confirmation under Condition 29 for Phase 1 construction and has coordinated directly with Gilliam County as needed to provide additional information regarding third party permits and approvals. Montague proposes to revise Condition 29 to include Gilliam County as a recipient of third-party permit confirmations that Montague provides ODOE. However, Montague maintains that the new language imposing additional reporting and recording keeping requirements specifically for Phase 2 is not justified based on the evidence in the record. There is no evidence related to the Phase 1 construction or RFA4 that would warrant imposing additional burden on the certificate holder to provide more documentation to ODOE. Montague understands that ODOE believes addition documentation is better assurance of compliance, but Montague maintains that ODOE has the enforcement authority it needs under OAR 345, div 26 to require proof of compliance or documentation if an issue arises during construction or operation of the facility.

Building Code, Recommended Amended Condition 53

Clarifying the current structural code is for each phase of the facility.

DOGAMI, Recommended Amended Condition 52

The DPO findings reason that new amended condition language is needed to specify a timeframe for ODOE and DOGAMI review and comment, and update the reference to "current" DOGAMI guidelines rather than referencing a specific guidance document. Montague proposes to modify existing Condition 52 to incorporate these two changes. Montague proposes to strike the remainder of the new language as it is duplicative (repeats what is already included in the DOGAMI guidance) and unnecessarily breaks out each phase of the facility to impose additional condition requirements on Phase 2. The existing condition language should track to the extent possible the approved condition language unless there is evidence in the record, or a change in regulation, that warrants more burdensome conditions. Neither exist in this case. Finally, Montague requests a 60-day period to submit its investigation rather than 90 days.

Battery Inspections, Recommended Condition 118

Montague agrees that the batteries should be inspected, like other facility components, to monitor for leaks and spills. Montague, however, maintains that this inspection obligation would be covered under an existing condition rather than adopting a new condition. Nonetheless, Montague accepts Recommended Condition 118(a) with revisions to clarify that summaries of the inspections will be provided to ODOE upon request.

Montague objects to the requirement in Condition 118(b) and proposes to strike this language. The authority to impose the obligation set forth in Recommended Condition 118(b) is not reasonably related to the Soil Protection Standard, OAR 345-022-0022 and must be struck. See page 34, lines 4-14. There also is no evidence in the record to indicate that such a condition is even necessary to protect against spills specifically from the battery. Later, under the Public Services Standard, the DPO justifies Recommended Condition 118(b) to "reduce any potential impact on fire service providers." An insurance policy would not provide for emergency response services and would do nothing to help fire service providers.

Topsoil Management Plan, Recommended Amended Condition 80(ii)(a)

A topsoil management plan is only require by OAR 660-033-0130(38)(f)(B) for the solar portion of the facility. The proposed revision to Recommended Amended Condition 80(ii)(a) clarifies this requirement.

SPCC, Findings and Recommended Amended Condition 80(ii)(b)

The Spill Prevention, Containment, and Contingency (SPCC) plans are self-certified per 40 CFR 112.7, DEQ does not "approve" the plan. A revision is proposed to reflect the actual process for SPCC plans. In addition, Montague proposes to strike the new requirement to submit a "Spill Prevention and Management [Plan]" if a SPCC plan is not required. The SPCC regulations require owners or operators of certain above ground oil storage facilities to prepare and comply with written, site-specific, spill prevention plans (40 CFR Part 112). The trigger for an SPCC plan is aboveground facilities (i.e. nacelles, transformers) with a total above ground oil storage capacity of more than 1,320 gallons. There is no evidence in the record to support a requirement for an "operational Spill Prevention and Management [Plan]" if the requirement for an SPCC is not triggered. The DPO states that batteries will use leak-proof modules and "even if a spill of material with the battery storage system were to occur, it is unlikely that spill material would reach native soil." For these reasons, Montague requests that this language be struck.

Panel Washing, Recommended Amended Condition 80(ii)(c)

Recommended Amended Condition 80(ii)(c) is a new condition section but it is unnecessary because the same obligation is required under Condition 87(ii), also new language. For implementation purposes, Montague requests that duplicative condition language be deleted.

Financial Assurance, Recommended Amended Condition 32(ii)(b)(iii)

The DPO presents no evidence supporting a higher administration cost (e.g. 20 percent) for solar and battery components. In fact, the decommissioning of the solar and battery components will likely require less administrative burden given that the solar micrositing area is on a single landowner in a contiguous area, does not require the use of specialized equipment (e.g., cranes like with wind), and has less quantity of materials for disposal. The proposed revision would have the administration costs at 10 percent, the same as what is required for Phase 1.

Land Use Categories and Battery Storage System

Certificate holder requested approval to construct the battery storage system under any of the design scenarios, including Scenario C which is a solar-only build-out (no wind). The battery storage system is a related or supporting facility, whether the facility has wind, wind/solar, or solar power generation. Therefore, certificate holder proposes revised findings to clarify that the battery storage facility can be constructed and operated as an accessory component to either the wind or the solar power generation.

Land Use Goal 3

Montague proposes additional language for the Goal 3 analysis to note for the record that the Goal 3 exception is for the portion of the proposed amended site boundary that will be occupied with solar facility components whether it be a final layout with wind/solar/battery storage, or only solar or solar/battery storage, meaning that if only solar is constructed, the Phase 2 collector substation and the battery storage system would be considered accessory to the solar power generation and therefore also be included in the Goal 3 exception area. This would increase the Goal 3 exception acreage by approximately 1.5 percent, which is di minimus and would not result in potential adverse impacts that were not already considered under the Goal 3 analysis.

The DPO finds that some reasons Montague presented in RFA4 did not amount to reasons to justify the requested Goal 3 exception. Montague supplements its prior analysis and provides a new reason justifying a Goal 3 exception. The following analysis proposes findings and Attachment B provides supplemental evidence to support the proposed findings:

Greenhouse Gas (GHG) Reductions

Replacing wheat crop farmland with the proposed solar facility can positively impact total annual GHG emissions, by eliminating direct and indirect emissions from farming activities and by replacing grid fossil fuel energy with renewable solar energy. The amount of avoided GHG emissions can vary given a particular site's crop output per land area, accepted agricultural practices like fertilization, required transportation to final point of use, and the local utility grid emissions factor. For the proposed solar development at the Montague Wind Power Facility, the amount of avoid emissions could range from approximately 19,100 metric tons of CO2 equivalent to approximately 7,000,000 metric tons of CO2 equivalent over the life of the project.

Dryland wheat farming for 1,189 acres over 40 years is estimated to release about 19,100 metric tons CO2 equivalent from direct emissions such as fertilization, machinery fuel use, and on-farm transportation; and indirect emissions from atmospheric deposition, nitrogen leaching, and other indirect farm inputs (such as manufacturing, storage, and other off-farm transportation contributions). Therefore, removing the 1,189 acre solar array site from cultivation would avoid the release of about 19,100 metric tons CO2 equivalent.

When accounting for grid emissions offsets, an important factor to consider is the electric utility to which the solar PV energy will be delivered. The large range in potential GHG reduction is due to the varying compositions of grid power delivered by utilities considered in the assessment. For example, if the new renewable energy were to take the place of grid power from a utility such as PacifiCorp, the proposed solar array would have a greater impact on regional fossil fuel and GHG reduction. This is because PacifiCorp currently sources a higher amount of its power from non-renewable energy sources like fossil fuels, evidenced by its higher reported grid emissions factor.

Therefore, the proposed 1,189 acre solar array can reduce the impact from annual GHG emissions by avoiding emissions of 19,100 metric tons to 7,000,000 metric tons of CO2 equivalent. The avoidance of approximately 19,100 metric tons of CO2 equivalent is a conservative estimate based on taking the proposed solar array site out of cultivation. If the solar energy is delivered to a utility with a high grid emissions factor (such as PacifiCorp) or a user that would otherwise be on such a utility's system, the new renewable energy contribution can directly offset a greater amount of fossil fuels and up to 7,000,000 metric tons of CO2 equivalent. When released to the atmosphere, GHG emissions include gases such as carbon dioxide, methane, and nitrous oxide. By replacing fossil fuel combustion with a new renewable energy source and reducing GHG emissions by up to 7,000,000 metric tons in 40 years, the solar array could offset the per-capita GHG contribution of approximately 18,300 Oregonians over the lifetime of the project.

<u>ODFW Policy References</u>

Montague suggests that references to Oregon Department of Fish and Wildlife ("ODFW") "policies" in Section III.H of the DPO be revised to clarify the difference between the Fish and Habitat Mitigation Policy, per OAR 635 Div 415, and ODFW's interpretations of this policy. As interpretations of habitat types and impacts can vary by region, project, and over time and these interpretations do not necessarily represent the agency' state wide "policy."

Wildlife and Habitat, WGS Category 2 Buffer

Category 2 WGS setbacks were not raised in an RAI or in any agency or public comment received on RFA4. Oregon Department of Fish and Wildlife (ODFW), itself, did not comment on the record of RFA4 regarding its position on WGS buffers. Montague objects to ODOE staff placing evidence into the record from another proceeding, upon its own volition, and proposing findings to require a new setback requirement without Montague having an opportunity to review the underlying science forming the basis of ODFW's position on another project. Further, Montague has concerns about ODFW's new interpretation of its habitat mitigation policy and that it may not take into account underlying habitat, topographical features, and soil composition.

Previous WGS survey protocols were reviewed and approved by ODFW Oregon for both Montague Phase 1 and Phase 2, as follows:

- Montague 2017 Washington Ground Squirrel Surveys and Habitat Mapping for Montague Wind Power Facility—Phase 1 and Phase 2. The surveys and habitat mapping followed the survey protocol sent to ODFW by Forrest Parsons on February 17, 2017, discussed on March 14, 2017, and approved by email from Steve Cherry on April 3, 2017. The protocols where approved for surveys within 1,000 feet of where permanent facilities would be located and where construction disturbances could occur for the proposed Montague Wind Power Facility in Gilliam County, Oregon. The survey corridor does not include unsuitable WGS habitat (e.g. paved roads and plowed wheat fields).

- Montague 2018 Washington Ground Squirrel Surveys and Habitat Mapping for Montague Wind Power Facility—Phase 1. The surveys and habitat mapping followed the survey protocol sent to ODFW by Forrest Parsons on April 25, 2018 and approved on the same day by email from Steve Cherry. The survey protocols were approved as described above.

Previous WGS survey reports were reviewed without comment by ODFW for both Montague Phase 1 and Phase 2, as follows:

- Montague 2017 Washington Ground Squirrel Surveys and Habitat Mapping for Montague Wind Power Facility—Phase 1. Reviewed and approved in consultation with ODFW and documentation of compliance with Condition 31, 94, and 95(e) provided in an email from Sarah Esterson on August 23, 2017.

- Montague 2017 Washington Ground Squirrel Surveys and Habitat Mapping for Montague Wind Power Facility—Phase 2. This report was included with RFA 4 as Attachment P-2b to Exhibit P. As described below, the report was reviewed without comment as demonstrated in ODFW's comment letter on Exhibits P and Q to RFA 4.

- Montague 2018 Washington Ground Squirrel Surveys and Habitat Mapping for Montague Wind Power Facility—Phase 1. Reviewed without comment from ODFW as provided in an email to Forrest Parsons from Steve Cherry on October 9, 2018.

In addition, the certificate holder has responded to over 110 RAIs in seven rounds of RAI requests and to 22 comments in seven agency comment letters. The proposed revision of the Category 2 WGS habitat buffer was not addressed as a concern in any of these RAIs. Specifically, on February 23, 2018, the ODFW provided eight comments in a letter to ODOE that focused on Exhibits P and Q of RFA 4. ODFW's

comments did not address or request a change to Montague's analysis regarding WGS and did not propose a change to the documentation of Category 2 habitat with regard to WGS.

The DPO specifies that "ODFW guidelines do not specifically identify distance parameters for the Category 2 habitat classification." The same sentence then states that, "ODFW has clarified that Category 2 WGS habitat include any suitable habitat within 1,500-meters of an active WGS burrow." This finding is inconsistent and is based on evidence taken from another project record. The DPO footnote cites to an email from Sarah Esterson on April 29, 2019 to the certificate holder that identifies Comment 1 in ODFW's April 6, 2018 comment letter on Request for Amendment 1 of the Carty Generating Station (an unrelated project), to represent a general position on habitat categorization that the ODFW intends to apply to all projects. In response to questions, ODOE then provided the certificate holder with four studies that ODFW used on an unrelated project to support the position that Category 2 WGS habitat include any suitable habitat within 1,500-meters of an active WGS burrow. The certificate holder has reviewed these studies and finds that the results are inconclusive as described below:

- Carson, 1980. The study reports that 239 meters was the highest mean distance WGS moved (page 14).

- Delevan, 2004. The study reports that maximum measured dispersal was 761 meters (page 16).

- Klien, 2005. The study reports a median dispersal rate of 880 meters. The study as states "The distribution of dispersal distances tends to be highly skewed by a few long-distance dispersers (e.g., Olson and Van Home 1998, Wiggett and Boag 1989, Byrom and Krebs 1999). It may be particularly important to document long distance dispersal events because they can be motivated by different evolutionary pressures than local dispersal (Muller-Landau et al. 2003) and have different effects on population demography and distribution (Caswell et al. 2003) (page 11).

- Delevan, 2008. The study states "Sherman and Shellman Sherman (2005, 2006) also documented dispersal distances of up to 1,300 m in juvenile males during their mark–recapture studies. They noted that short– range male dispersal (<400 m) occurs, but long–range (>700–1,700 m) male dispersal is very rare, and possibly non–existent (Sherman and Shellman Sherman 2006).

Overall, the studies report dispersal distances significantly less than 1,500 meters and are inconclusive in supporting a position that Category 2 WGS habitat include any suitable habitat within 1,500-meters of an active WGS burrow.

For the reasons described above, Montague does not accept a 1,500 meter buffer from WGS burrows as meeting the definition of Category 2 habitat and proposes that ODOE use the certificate holder's documentation of Category 2 habitat as provided in Exhibit P to RFA 4.

<u>Habitat Impact and Mitigation Calculations, Recommended Amended Condition 93(c)</u>

Montague requests that the condition allow 90 days (instead of 30) to provide the "trued-up" habitat impact and mitigation calculations, which is the same time period allowed by Condition 45 to submit "as-builts" following completion of construction. Further, Montague requests that Table 6 in the DPO and Section III in the Habitat Mitigation Plan be revised to delete the reference to "rounding up to the nearest whole acre." Montague believes with the increase in the mitigation ratio for temporary impacts that this rounding is unnecessary, as impacts as are fully mitigated.

Wildlife and Habitat, Rock Creek Wind Turbine Setback, Recommended Condition 119
The DPO contains a new condition (Condition 119) for the wind turbine setback from Rock Creek. Montague proposes to delete Condition 119 and incorporate the setback requirement into existing Condition 42 that specifies all required setbacks for the facility as new subpart (m).

Cultural Resources, Recommended Amended Condition 50

Montague agrees to cultural monitoring during excavation deeper than 12 inches with revisions to the condition language regarding the hiring process for the monitor. Construction of the solar facility includes placement of piles that are driven 4 to 8 feet below ground. Montague believes this construction activity does not requiring cultural monitoring because it does not expose deeply buried soil. Montague proposed revised findings to specify that for the purposes of Condition 50, ground disturbance does not include pile driving for solar panel installation.

Noise, Recommended Amended Condition 107
The DPO proposes to revise Condition 107 to impose a post-construction noise monitoring without providing adequate findings of fact or pointing to substantial evidence in the record that would support imposing such a significant burden on certificate holder. Existing Condition 107 already requires the certificate holder to confirm that the final facility design meets the DEQ noise regulations prior to construction. Existing Condition 108, in turn, requires certificate holder to maintain a complaint response system to address noise complaints and notify ODOE. ODOE, upon receipt of notice, has ability under Condition 108 to require post-construction noise monitoring to verify that the facility is in compliance with the DEQ noise regulations.

Attachment A to this letter provides additional technical analysis on the noise study submitted in RFA4 and the findings presented in the DPO. The provided noise analysis and follow-up RAI responses demonstrated that under any of the design scenarios, the proposed Phase 2 facility can comply with the DEQ noise regulations. The fact that the proposed Phase 2 facility may be close to the DEQ noise threshold at some noise sensitive properties, does not justify imposing the post construction monitoring required by Recommended Amended Condition 107(ii)(b). Field studies are not trivial and require coordination and approval from multiple parties. It can require coordination with grid operators to facilitate cycling the equipment on and off as ramping up a 200- to 400-megawatt power project and subsequently ramping it down can present scheduling concerns for the grid. Landowners require coordination to provide access to their property, and potentially alter their daily activities (for example, dogs, or use of air conditioning or heat pumps can influence the sound readings). Lastly, the weather must cooperate during the timeframe that these multiple parties have scheduled for the test. There is no need to conduct such a complex field study to demonstrate that no problem is present.

For these reasons, revisions to the DPO are warranted as Montague has provided substantial evidence into the record to demonstrate that the facility can or will comply with the DEQ noise regulations, with the existing conditions that ensure pre-construction (Condition 107) and post-construction (Condition 108) compliance. Montague proposes minor revisions to Condition 107 to account for the solar and battery components (see redline italics).

B. Conclusion

Montague appreciates ODOE's consideration of its comments and proposed revisions to the DPO conditions. Montague maintains that the requested revisions are supported by the record, consistent

with the agency comments and consultation to date, and improves consistency of the conditional language for the Facility phases. As mentioned in the introduction, Montague will provide a separate written response to public comments on the DPO.

Thank you for your consideration.

Sincerely,

Matt Hutchinson

Enclosures

cc: Sarah Esterson
Brian Walsh
Paul Hicks
Elaine Albrich

Montague Wind Power Facility
Solar PV Installation Farmland Replacement

Greenhouse Gas Emissions Study

May 09, 2019

Delivered by:
Distributed Energy Services
Andy Solberg | Sarah Dorminy

JACOBS®

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Potential Total Greenhouse Gas Emissions Avoided

Replacing wheat crop farmland with a large-scale solar installation can positively impact total annual greenhouse gas (GHG) emissions associated with that site, by eliminating direct and indirect emissions from crop production and by replacing grid fossil fuel energy with renewable solar PV energy. Factors impacting the potential avoidance of GHG emissions for a particular site include the local utility grid emissions factor, crop output per land area, and local agricultural practices like fertilization, and required transportation to final point of use. Below, the total GHG emissions avoided by replacing wheat crop with a solar PV installation in Condon, Oregon are presented, assuming the new renewable energy replaces traditional grid power from one of the utilities considered below.

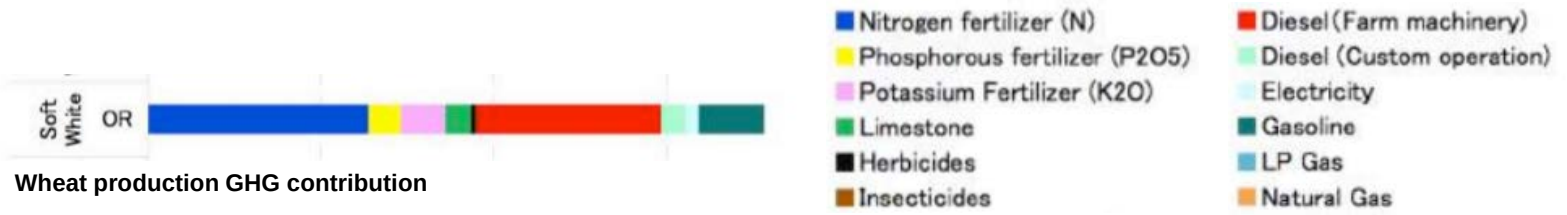
			Condon, Oregon		
	Farm description		1,189 acres of soft white wheat dryland farming		
	kg wheat produced/acre farmland/yr		1424		
	40-year **direct** farming emissions avoided	kg CO2e (metric tons)	12,053,668 (12,053)		
	40-year **indirect** farming emissions avoided	kg CO2e (metric tons)	7,095,901 (7,096)		
	40-year total farming emissions avoided	kg CO2e (metric tons)	**19,096,261 (19,096)**		
	Local electric utility		Columbia Basin Cooperative	Portland General Electric (PGE)	Pacific Power (PacifiCorp)
	Local utility grid emissions factor	kg CO2e/kWh or metric tons/MWh	0.009	0.395	0.653
	First year solar PV production (202 MW capacity)	MWh	287,402		
	40-year grid emissions offset by solar PV	kg CO2e (metric tons)	95,966,228 (95,966)	4,211,851,126 (4,211,851)	6,962,883,001 (6,962,883)
	Total 40-year emissions avoided	kg CO2e (metric tons)	**115,062,489 (115,062)**	**4,230,947,387 (4,230,947)**	**6,981,979,261 (6,981,979)**
	Emissions avoided per unit of farmland replaced	metric tons CO2e avoided/acre	96	3,558	5,872

The total 40-year GHG emissions avoided for the 1,189 acre farmland in Condon, Oregon ranges from approximately 115,000 metric tons CO2 equivalent to approximately 7,000,000 metric tons CO2 equivalent. The large range in potential GHG reduction is due to the varying compositions of grid power delivered by the utilities listed above. Columbia Basin Cooperative already sources a high percentage of its energy from renewable or clean sources, and therefore has a grid emissions factor much lower than the national average. Replacing grid power from this utility would offset a smaller amount of fossil fuel energy than the other sources considered. However, if the new renewable energy were to take the place of grid power from a utility such as PacifiCorp, the project would have a greater impact on global fossil fuel and GHG reduction. This is because PacifiCorp currently sources a higher amount of its power from non-renewable energy sources like fossil fuels, evidenced by its higher reported grid emissions factor.

References – Wheat farmland GHG emissions

- Oregon produces mostly soft white wheat using dryland farming
- Direct farming emissions – crop residue, fertilization, machinery fuel use, on-farm transportation, other on-farm fuel use
- Indirect/induced farming emissions – atmospheric deposition, nitrogen leaching, farm inputs (manufacturing, storage, transportation), off-farm transportation

			Condon, Oregon
	kg wheat produced/acre farmland		1424
	Direct farming emissions	kg CO2e/acre	253
	Indirect farming emissions	kg CO2e/acre	148
	Total farming emissions	kg CO2e/acre	**402**



Wheat production GHG contribution analysis

Transportation GHG contribution analysis

Reference:

Gleason O'Donnell, Brendan (2008): Life Cycle Assessment of American Wheat: Analysis of Regional Variations in Production and Transportation, University of Washington

http://depts.washington.edu/sctlctr/sites/default/files/research_student_thesis/ODonnellBThesis.pdf

References – Wheat farmland GHG emissions

	Module	Module Activity	CO_2	CH_4	N_2O	%
Direct emissions	Crop Production Emissions Module	Crop Residues			X	18%
		Nitrogen Fertilizers			X	6%
	Energy Use Emissions Sub-Module	Machinery Fuel Use	X	X	X	25%
	On-Farm Transportation & Stationary Combustion Emissions Module	On-Farm Transportation	X	X	X	5%
		Other On-Farm Fuel Use	X	X	X	
	Sub-total Direct GHG Emissions		X	X	X	
Indirect emissions	Indirect Emissions Module	Atmospheric Deposition			X	4%
		Nitrogen Leaching			X	
	Total Direct & Indirect Production-Related Emissions		X	X	X	
Induced emissions	Farm Inputs	Manufacturing, Transportation and Storage	X	X	X	30%
	Off-farm Transportation		X	X	X	12%
	Total Agricultural GHG Emissions		X	X	X	100%

Methane (CH4) global warming potential of **21 times CO2.

Nitrous oxide (N2O) global warming potential of **310 times CO2.

Reference:

Kulshreshtha, Surendra N., Dyer, Jim, Mcconkey, B.G., (2011): Dryland crop production and greenhouse gas emissions in Canada: A regional comparison, WIT Transactions on Ecology and the Environment

https://www.researchgate.net/publication/260751659

Assumptions – Solar PV installation GHG emissions offset

Site area:	1,189 acres	Provided
Solar PV capacity:	202 MW	Provided
Location:	Condon, OR	NSRDB weather data for Condon State Airport-Pauling Field
Module type:	Standard, 15% efficiency	Assumption
Array type:	Fixed open rack	Assumption
Tilt, Azimuth:	30°, 180°	Assumption
Total system losses:	14.08%	Assumption
Degradation factor:	0.8%	Assumption
First-year energy production:	287,402 MWh	Oregon - Calculated with SAM model
Local grid emissions factor:	0.009 kg CO2/kWh	2017 Reported for Columbia Basin Cooperative utility
	0.395 kg CO2/kWh	2017 Reported for Portland General Electric (PGE)
	0.653 kg CO2/kWh	2017 Reported for Pacific Power (PacifiCorp)

Reference:

Greenhouse Gas Emissions from Electricity Use 2010-2017, State of Oregon Department of Environmental Quality

https://www.oregon.gov/deq/aq/programs/Pages/GHG-Emissions.aspx

MEMORANDUM

Montague Wind Power Facility: Comments on Condition 107 and Corona Effect in Draft Proposed Order

PREPARED FOR:	Matthew Hutchinson/Avangrid Renewables, LLC
PREPARED BY:	Mark Bastasch, P.E., INCE/CH2M
DATE:	May 8, 2019

This memorandum summarizes CH2M comments on the noise analysis in the Draft Proposed Order (DPO) for *Request for Amendment No. 4 to the Site Certificate for the Montague Wind Power Facility* (RFA 4). The Oregon Department of Energy (ODOE; Department) issued the DPO on April 5, 2019. The comments presented in this memorandum focus on proposed revisions to Condition 107 and DPO discussion regarding the corona effect.

Existing Condition 107 in Site Certificate

Existing Condition 107 in the *Site Certificate for the Montague Wind Power Facility* (Energy Facility Siting Council, July 2017) states the following:

107: Before beginning construction, the certificate holder shall provide to the Department:

(a) Information that identifies the final design locations of all turbines to be built at the facility.

(b) The maximum sound power level for the substation transformers and the maximum sound power level and octave band data for the turbines selected for the facility based on manufacturers' warranties or confirmed by other means acceptable to the Department.

(c) The results of noise analysis of the facility to be built according to the final design performed in a manner consistent with the requirements of OAR 340-035-0035 (1)(b)(B)(iii)(IV) and (VI) demonstrating to the satisfaction of the Department that the total noise generated by the facility (including the noise from turbines and substation transformers) would meet the ambient degradation test and maximum allowable test at the appropriate measurement point for all potentially-affected noise sensitive properties.

(d) For each noise-sensitive property where the certificate holder relies on a noise waiver to demonstrate compliance in accordance with OAR 340-035-0035 (1)(b)(B)(iii)(III), a copy of the a legally effective easement or real covenant pursuant to which the owner of the property authorizes the certificate holder's operation of the facility to increase ambient statistical noise levels L10 and L50 by more than 10 dBA at the appropriate measurement point. The legally-effective easement or real covenant must: include a legal description of the burdened property (the noise sensitive property); be recorded in the real property records of the county; expressly benefit the certificate holder; expressly run with the land and bind all future owners, lessees or holders of any interest in the

burdened property; and not be subject to revocation without the certificate holder's written approval.

Proposed Condition 107 Revisions in DPO

The Facility has satisfied the requirements of Condition 107 for Phase 1 and ODOE issued a formal approval to Montague Wind Power Facility, LLC (Montague) on July 25, 2018. As proposed in the DPO, Condition 107 would be revised as follows (strikeout and underline are as presented in the DPO):

107 The certificate holder shall provide to the Department ~~Before beginning construction, the certificate holder shall provide to the Department~~:

i. Prior to Phase 1 construction:
   a. Information that identifies the final design locations of (all turbines, to be built at the facility…
ii. For Phase 2 of the facility:
   a. Prior to construction, a noise analysis that includes the following Information:

      Final design locations of all Phase 1 and Phase 2 noise generating facility components (all wind turbines; substation transformers; inverters and transformers associated with the photovoltaic solar array; and inverters and cooling systems associated with battery storage system).

      The maximum sound power level for the Phase 2 substation transformers; inverters and transformers associated with the photovoltaic solar array; inverters and cooling systems associated with battery storage system; and the maximum sound power level and octave band data for the Phase 2 wind turbines selected for the facility based on manufacturers' warranties or confirmed by other means acceptable to the Department.

      The results of noise analysis of Phase 1 and Phase 2 components according to the final design performed in a manner consistent with the requirements of OAR 340-035-0035(1)(b)(B)(iii) (IV) and (VI) demonstrating to the satisfaction of the Department that the total noise generated by the facility (including the noise from wind turbines, substation transformers, inverters and transformers associated with the photovoltaic solar array; inverters and cooling systems associated with battery storage system) would meet the ambient degradation test and maximum allowable test at the appropriate measurement point for all potentially-affected noise sensitive properties.

      For each noise-sensitive property where the certificate holder relies on a noise waiver to demonstrate compliance in accordance with OAR 340-035-0035(1)(b)(B)(iii)(III), a copy of the a legally effective easement or real covenant pursuant to which the owner of the property authorizes the certificate holder's operation of the facility to increase ambient statistical noise levels L10 and L50 by more than 10 dBA at the appropriate measurement point. The legally-effective easement or real covenant must: include a legal description of the burdened property (the noise-sensitive property); be recorded in the real property records of the county; expressly benefit the certificate holder; expressly run with the land and bind all future owners, lessees or holders of any interest in the burdened property; and not be subject to revocation without the certificate holder's written approval.

b. During operation, if the results of the pre-construction final noise analysis submitted per Condition 107(ii) identify that modeled noise levels are predicted to be within 1 dBA of the ambient degradation standard (10 dBA) for noise sensitive properties where noise waivers were not obtained, or within 1 dBA of the maximum allowable noise standard (50 dBA) for any noise sensitive property, the certificate holder shall monitor and record actual statistical noise levels at these noise sensitive properties to verify that Phase 2 facility components are operating in compliance with the noise control regulation. The monitoring plan must be reviewed and approved by the Department prior to implementation.

If, during monitoring, the ambient degradation standard (10 dBA) or maximum allowable noise standard (50 dBA) are exceeded at any noise sensitive property, the certificate holder shall submit to the Department its mitigation proposal demonstrating the measures to be utilized to lower noise levels and achieve compliance with the applicable noise standard. The mitigation proposal shall be reviewed and approved by the Department.
[Final Order on ASC; AMD4]

Comments Regarding Condition 107

Condition 107(i)(a)

First a minor clarification: it is presumed that the ellipses concluding the DPO's proposed Condition 107(i)(a) indicate that (b), (c), and (d) from the existing Condition 107 are included with no changes. As noted above, Montague has submitted and received approval of Condition 107 for Phase 1. The DPO's proposed Condition 107(ii)(a) mirrors the existing Condition 107 language with the necessary changes to ensure all noise-generating equipment from Phase 1 and Phase 2 is included in the Condition 107 preconstruction filing.

Condition 107(ii)(b)

Condition 107(ii)(b) represents a new requirement to monitor sound levels; however, the existing Condition 108 already addresses operational sound monitoring as follows:

> *108 During operation of the facility, the certificate holder shall maintain a complaint response system to address noise complaints. The certificate holder shall promptly notify the Department of any complaints received regarding facility noise and of any actions taken by the certificate holder to address those complaints. In response to a complaint from the owner of a noise sensitive property regarding noise levels during operation of the facility, the Council may require the certificate holder to monitor and record the statistical noise levels to verify that the certificate holder is operating the facility in compliance with the noise control regulations*

It is unclear what additional value Condition 107(ii)(b) provides. Montague has provided detailed information and acoustical analyses required to satisfy Condition 107 for Phase 1. These submittals were stamped by an Oregon Professional Engineer and the same level of detail and analysis would be required for the overall Facility (i.e., the combined Phase 1 and Phase 2) by Condition 107(ii)(a). Montague has submitted several revisions to Exhibit X (November 2017, December 2018, March 2019) and responded to multiple Requests for Additional Information, including most recently in December 2018. Given the duration of the record in this proceeding and the successful history of Montague and its parent company, Avangrid Renewables, LLC (Avangrid), in satisfying the Department on this requirement

for multiple other projects under Energy Facility Siting Council jurisdiction owned and operated by Avangrid (see Exhibit D, *Certificate Holder's Organizational, Managerial, and Technical Expertise*, in RFA 4), it is unclear what questions remain unanswered that would require the addition of Condition 107(ii)(b).

In fact, it is a requirement of Condition 107 to submit evidence of compliance to "the satisfaction of the Department." Field studies are not trivial and require coordination and approval from multiple parties. The grid operators often require coordination to facilitate cycling of equipment on and off as ramping up a 200- to 400-megawatt power project and subsequently ramping it down can present scheduling concerns. Landowners require coordination to provide access to their property, restrain their dogs (who can damage the sound equipment, present a hazard to monitoring staff, or interfere with the measurements when they bark), and potentially alter their daily activities (for example, alter their use of air conditioning or heat pumps, which can influence the sound readings). Lastly, the weather must cooperate during the timeframe that these multiple parties have scheduled for the test. There is no need to conduct a complex field study to demonstrate that no problem is present. In the event of a complaint, the existing Condition 108 already clearly identifies that monitoring can be required as part of the complaint investigation.

Conclusion

Given the extensive nature of the analysis and requirement to satisfy the Department in the preconstruction Condition 107 (i) and (ii)(a) submittal, and because Condition 108 clearly identifies that monitoring can be required, the additional requirement and burden posed by Condition 107 (ii)(b) is not supported.

Comments Regarding Noise and Corona Effect

The DPO states, "Based on an audible corona noise calculation with rainy conditions, corona noise generated by the proposed 3-mile 230-kV transmission line at 80 feet would exceed the ambient degradation standard (L50 = 36.2)" (DPO at p. 190). While computer models and digital equipment can present results to 1/10th of a decibel, such quantities are extraordinarily small. It is not customary to evaluate results based on 1/10th of a decibel. Attached are pages from the Oregon Department of Environmental Quality's *Sound Measurement Procedures Manual*[1] detailing a sample measurement, and from the Oregon Department of Transportation's *Noise Manual*[2] presenting a sample summary table of model results. Fractional decibel values are not presented in the numerous measurements or model results summaries. Clarifying that the L50 of 36.2 should be assessed as 36 is a minor change that does not alter the DPO's conclusion.

[1] Oregon Department of Environmental Quality. 1983. *Sound Measurement Procedures Manual*. May. https://www.oregon.gov/deq/Rulemaking%20Docs/div35npcs01.pdf. pp. 28-31.

[2] Oregon Department of Transportation. 2011. *Noise Manual*. July. https://www.oregon.gov/ODOT/GeoEnvironmental/Docs_Environmental/Noise-Manual.pdf. p. 67.

Attachment
Excerpted Pages from Oregon Department of Environmental Quality and Oregon Department of Transportation Manuals

SOURCE: ACME WOOD PRODUCTS INC. DATE: 9-16-81

1581 S.W. 76TH (DEBARKER, SAW, CHIPPER) BY: GTW

MEASUREMENT SITE: SITE 1, MR & MRS. JONES' NSP COUNTY: MULT.

1576 S.W. 76TH, PORTLAND SHEET: 2/4

Time	Bat.	Calibration dB	F dry bulb	F		Press. mm Hg.	Wind MPH	Wind direct.
1410	✓	114.0					0-5	NW
1515	✓	114.0					2-6	NW

INSTRUMENTATION		
EQUT	TYPE	SERIAL
SLM	GR 1565	12345
MIC	1"	
CAL	GR 1987	1790

WINDSCREEN (ON) OFF

~ Range of Noise: Hi 67 dBA Low 61 dBA Central Tend. 63 dBA

Start Time: 1420 PDT Sample Interval: (5) 10 15 seconds

DATA POINTS	SOUND PRESSURE LEVEL dBA					
1 - 6	65	63	62	61	64	65
7 - 12	63	61	65	CAR	CAR	64
13 - 18	63	62	70	65	63	62
19 - 24	70	62	DOG	64	63	61
25 - 30	62	63	63	61	67	67
31 - 36	TRUCK →	T	T	64	66	65
37 - 42	62	63	64	63	62	64
43 - 48	63	63	64	63	73 R	62
47 - 54	63	63	65	62	64	63
55 - 60	61	64	65	63	63	65
61 - 66	65	66	64	61	62	66
67 - 72	60	61	63	63	64	70
73 - 78	72	61	73 R	74 R	64	64
79 - 84	63	62	60	65	62	64
85 - 90	61	62	67	63	JET	JET →
91 - 96	JET	JET	65	64	64	64
97 - 102	70 R	63	64	63	62	65
103 - 108	66	65	66	62	64	63
109 - 114	64	64	62	63	65	64
115 - 120	64	67	63	64	DOG	DOG
121 - 126	65	66	67	64	66	69
127 - 132	69	CAR	CAR	63	66	64

Note: See back for the minimum number of samples. NPCS-10-1
Indicate all missing data points and give an explanation.

6/76

133 - 138	63	66	65	64	63	66
139 - 144	62	63	65	64	63	64
145 - 150	64	64	65	66	62	64
151 - 156	66	63	68	63	63	63
157 - 162	62	63	64	63	63	62
163 - 168	63	65	64	62	63	68
169 - 174	← COMPLAINANT		TALKING →		64	61
175 - 180	63	63	63	64	63	65
181 - 186	64	61	61	BIRDS →	B	63
187 - 192	64	63	64	62	65	64
193 - 198	62	64	63	62	64	62
199 - 204	CAR	CAR	63	64	60	63
205 - 210	64	62	62	TRUCK →	T	T
211 - 216	T	T	T	63	64	64
217 - 222	69	63	65	63	65	63
223 - 228						
229 - 234						
235 - 240						
241 - 246						
247 - 252						
253 - 258						
259 - 264						
265 - 270						
271 - 276						
277 - 282						
283 - 288						
289 - 294						
295 - 300						
301 - 306						
307 - 312						
313 - 318						
319 - 324						
325 - 330						
331 - 336						

Maximum - Minimum Levels (difference in range)

0-8	9	10	11	12	13	14	15	16	17	18	19	20	21
132	138	174	210	246	288	336	384	438	498	558	618	684	756

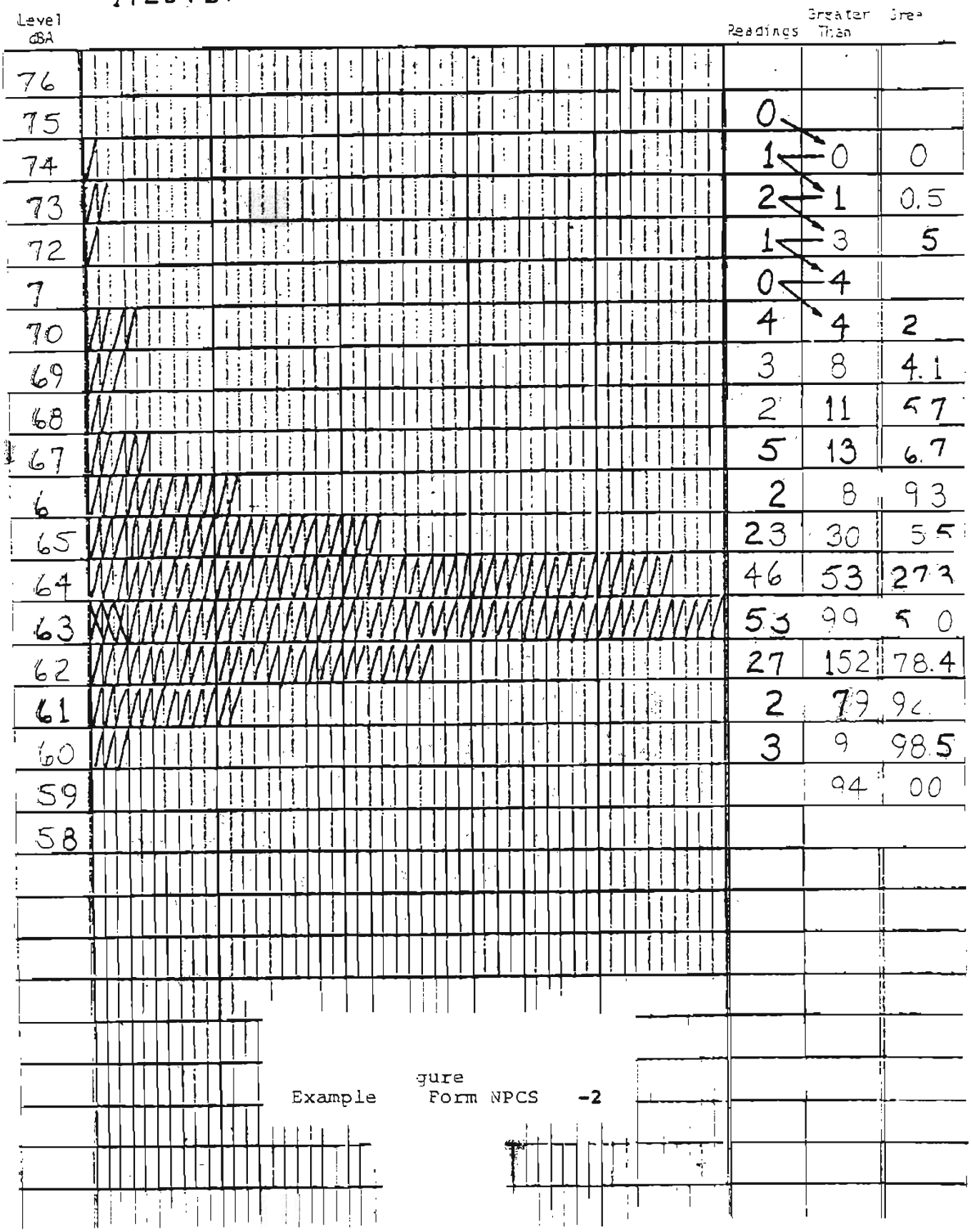
Minimum Number "Good" Samples

Additional data

NPCS-10-1

ICAL COMPI

Date 9-16-81 1420 PDT Source: ACME WOOD PRODUCTS INC. Sheet 3/4



Level dBA	Readings	Greater Than	Grea
76			
75	0		
74	1	0	0
73	2	1	0.5
72	1	3	5
7	0	4	
70	4	4	2
69	3	8	4.1
68	2	11	57
67	5	13	6.7
6	2	8	93
65	23	30	55
64	46	53	273
63	53	99	50
62	27	152	78.4
61	2	79	9[illegible]
60	3	9	98.5
59		94	00
58			

Example gure Form NPCS -2

NPCS 2

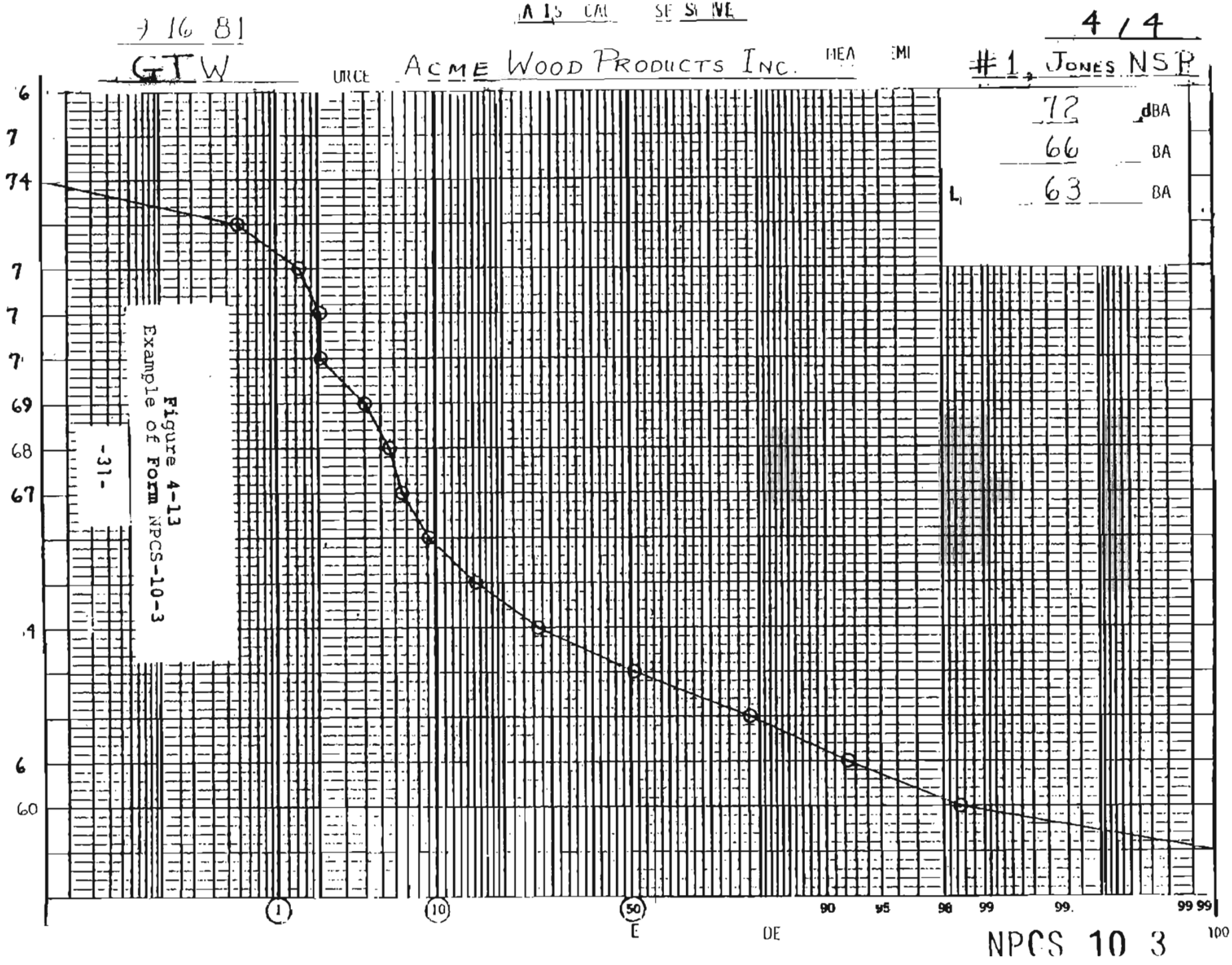


Figure 4-13
Example of Form NPCS-10-3

Table of Results: Existing, No-Build, and Build Alternative Noise Levels (Leq in dBA)

					Existing Conditions	No-Build Alternative		Build Alternative			
Receiver ID	Land Use Activity	Equivalent Units	Distance to Roadway (feet)	Oregon NAAC	Noise Level[1]	Noise Level[1]	Increase over Existing	Noise Level[1]	Impacts	Increase over Existing	Increase over No-build
R1	B	1	130	65	61	62	1	62	0	1	0
R2	B	2	140	65	64	**65**	1	**65**	**2**	1	0
R3	B	1	125	65	62	64	2	64	0	2	0
R4	B	1	80	65	**69**	**70**	1	**70**	**1**	1	0
R5	B	1	200	65	58	60	2	60	0	2	0
R6	B	1	150	65	59	60	1	60	0	1	0
R7	B	1	180	65	59	60	1	60	0	1	0
R8	B	1	98	65	**70**	**71**	1	**72**	**1**	2	1
R9	C	1	59	70	**72**	**75**	3	**75**	**1**	3	0
Summary			Minimum		**55**	**56**		**56**			
			Maximum		**70**	**71**		**72**			
			NAAC Impacts						**5**		
No substantial increase impacts (10 dBA or more above existing conditions) are expected with the project											

Notes:

1. Predicted peak noise hour levels in L_{eq} dBA from FHWA TNM version 2.5; prediction values >/= Oregon NAAC in **Bold** typeface

Montague Wind Power Facility Request for Amendment 4: Draft Proposed Order

To:	Oregon Energy Facility Siting Council
From:	Chase McVeigh-Walker, Siting Analyst
Date:	April 5, 2019
Re:	Draft Proposed Order on Request for Amendment 4 of the Site Certificate

Certificate Holder: Montague Wind Power Facility, LLC, a wholly owned subsidiary of Avangrid Renewables, LLC

Approved Facility (under construction)

Montague Wind Power Facility is an approved wind energy facility authorized to produce up to 404 MW. Currently, 202 MW are under construction (Phase 1). Once construction is complete, Phase 1 ~~the facility (referred to as Phase 1)~~ will include 56 wind turbines, power collection system, supervisory control and data acquisition system, collector substation, 10.5 miles of 230 kilovolt (kV) transmission line, meteorological towers, access roads, public roadway modifications, and temporary laydown areas.

Proposed Amendments:

Certificate holder seeks Energy Facility Siting Council (Council) approval to expand the ~~facility and~~ site boundary to relocate turbines previously approved to a new area and add photovoltaic solar power generation and batteries to the facility (Phase 2). Certificate holder requests the site boundary expansion in order to avoid Washington Ground Squirrel habitat present in the previously approved site boundary~~– referred to as Phase 2~~. Phase 2 includes wind and solar energy facilities and related or supporting facilities, and could include any combination of the facility components presented below and produce up to 202 MW.

Wind Energy Facility: up to 81 wind turbines with maximum wind turbine dimensions for blade tip height up to 597 feet; turbine hub height up to 351 feet; and rotor diameter up to 492 feet; up to 4 meteorological towers up to 351-feet.

Solar Energy Facility: photovoltaic solar array; solar modules, tracker systems, posts, cabling, inverters, transformers, collection system, site access, service roads, and perimeter fencing occupying up to approximately 1,189 acres.

Related or supporting facilities: 3 mile 230 kV transmission line segment; 100 megawatt (MW) battery storage system; collection system; collector substation; Supervisory Control and Data Acquisition (SCADA) system; meteorological towers; operations and maintenance building; transportation and access roads; construction areas.

Site Boundary/Micrositing Corridor: Increase site boundary and micrositing corridor from 33,717 to 47,056 acres.

Facility Location: Gilliam County, Oregon

Staff Recommendation: Approval of Request for Amendment 4 of Site Certificate

Summary
To issue an amended site certificate, the Energy Facility Siting Council (EFSC or the Council) must find that a request for amendment to the site certificate demonstrates that the facility, with proposed changes, satisfies, or with conditions can satisfy, each of the applicable EFSC Siting Standards set forth in Oregon Administrative Rule (OAR) 345, Divisions 22 through 24 as well as all other Oregon statutes and administrative rules applicable to the proposed amended facility.

As staff to EFSC, the Oregon Department of Energy (ODOE or the Department) reviewed Request for Amendment 4 to the Montague Wind Power Facility site certificate, in consultation with specifically identified state and local reviewing agencies and tribal governments. Based upon its review of the amendment request, the Department recommends the Council issue an amended site certificate for the facility, with proposed changes, subject to the existing site certificate conditions as well as the new and amended conditions set forth in the following draft proposed order. The draft proposed order contains the Department's analysis of the amendment request and includes recommended new and amended site certificate conditions. The analysis and recommendations contained in this draft proposed order are not a final determination.

A public comment period is now open on the draft proposed order and complete amendment request. In addition, the Council will hold a public hearing on this draft proposed order and complete amendment request on May 16, 2019 at 5:30 PM, at the Hotel Condon, Condon, Oregon. Please note, interested persons must raise issues on the record of the public hearing, either orally at the public hearing or in writing during the comment period, in order to preserve their right to participate further in the process. The public comment period closes at the close of the public hearing on May 16, 2019. Written or oral comments must be received by the Department by the close of the public hearing. Section II, *Amendment Process*, of the draft proposed order contains additional information regarding the site certificate amendment review process. The public notice associated with the release of this draft proposed order contains additional information regarding the comment period and public hearing.

BEFORE THE
ENERGY FACILITY SITING COUNCIL
OF THE STATE OF OREGON

In the Matter of Request for Amendment 4 for the Montague Wind Power Facility Site Certificate	))))	DRAFT PROPOSED ORDER ON REQUEST FOR AMENDMENT 4 TO THE SITE CERTIFICATE

April 2019

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LIST OF TABLES

LIST OF FIGURES

ATTACHMENTS

I. INTRODUCTION

The Oregon Department of Energy (Department or ODOE) issues this draft proposed order, in accordance with Oregon Revised Statute (ORS) 469.405(1) and Oregon Administrative Rule (OAR) 345-027-0065, based on its review of Request for Amendment 4 (amendment request or RFA4) to the Montague Wind Power Facility site certificate, as well as comments and recommendations received by specific state agencies, local governments, and tribal governments during review of the preliminary amendment request. The certificate holder is Montague Wind Power Facility, LLC (Montague or certificate holder), wholly owned by Avangrid Renewables, LLC, a subsidiary of AVANGRID and part of the IBERDROLA Group.

The certificate holder requests that the Energy Facility Siting Council (EFSC or Council) approve changes to the site certificate to construct and operate the facility, with proposed changes – referred to as Phase 2; Phase 1 is currently under construction.[1] In RFA4, Phase 2 components include a proposed site boundary expansion, wind turbines, battery storage, a solar array, and related or supporting facilities. The certificate holder seeks flexibility in the final design and layout to be selected for Phase 2. To support its request, the certificate holder evaluates three design scenarios intended to represent potential differences in impacts and identify maximum impacts under each applicable Council standard for any Phase 2 design layout selected. The three design scenarios (A, B, C) include varying energy facility components and layouts. Design Scenario A and B represent a maximum and minimum layout and impact scenario including wind turbines and battery storage; Design Scenario C represents a layout and impact scenario for the maximum potential size of the solar array and battery storage.

Based upon review of this amendment request, in conjunction with comments and recommendations received by state agencies, local governments, and tribal governments, the Department recommends that the Council approve and grant a fourth amendment to the Montague Wind Power Facility site certificate subject to the existing, and recommended new and amended conditions set forth in this draft proposed order.

I.A. Name and Address of Certificate Holder

Montague Wind Power Facility, LLC
1125 NW Couch Street, Suite 700
Portland, OR 97209

Parent Company of the Certificate Holder

Avangrid Renewables, LLC,
~~The U.S. division of Iberdrola, S.A.~~
1125 NW Couch Street, Suite 700
Portland, OR 97209

[1] Phase 1 consists of 56 wind turbines, one collector substation, 10.5-miles of 230 kV transmission line, access roads, and laydown areas.

Certificate Holder Contact
Brian Walsh, Senior Developer
Avangrid Renewables, LLC
1125 NW Couch Street, Suite 700
Portland, OR 97209

I.B. Description of the Facility (Phase 1)

The facility, based on final design and currently under construction, includes a wind energy generation facility with up to 56 wind turbines. Maximum wind turbine dimensions include a hub height of 328 feet (100 meters); maximum blade tip height of 492 feet (150 meters); and a minimum aboveground blade tip clearance of 45 feet (14 meters).

The facility includes the following related or supporting facilities, which are briefly described below:

- Power collection system
- Control system
- Substation and 230 kV transmission line
- Meteorological towers
- Access roads
- Public roadway modifications
- Temporary construction areas

Power Collection System

The facility includes a 34.5 kV power collection system that transports power from each wind turbine to a collector substation. To the extent practicable, the collection system would be installed underground at a depth of at least three feet. Not more than 27 miles of the collector system will be installed aboveground.

Control System

The facility includes a fiber optic communications network that links the wind turbines to a central computer at the O&M facilities. A Supervisory, Control and Data Acquisition (SCADA) system would collect operating and performance data from each wind turbine and from the facility as a whole and would allow remote operation of the wind turbines.

Substations and 230 kV Transmission Line

The facility includes one collector substation that interconnects via an aboveground, single-circuit 230 kV transmission line. An approximately 10.5 mile aboveground, single-circuit 230 kV

transmission line connects the collector substation to the 500 kV Slatt-Buckley transmission line owned by Bonneville Power Administration (BPA) at the Slatt substation.

Meteorological Towers

The facility includes two permanent meteorological towers.

Access Roads

The facility includes access roads to provide access to the turbine strings.

Public Roadway Modifications

The facility includes improvements to existing state and county public roads necessary for construction of the facility. These modifications are confined to the existing road rights-of-way and would be undertaken with the approval of the Gilliam County Road Department or the Oregon Department of Transportation, depending on the location of the improvement.

Temporary Construction Areas

Temporary laydown areas are used during construction activities to stage construction and store supplies and equipment. Construction crane paths are used to move construction cranes between turbine strings.

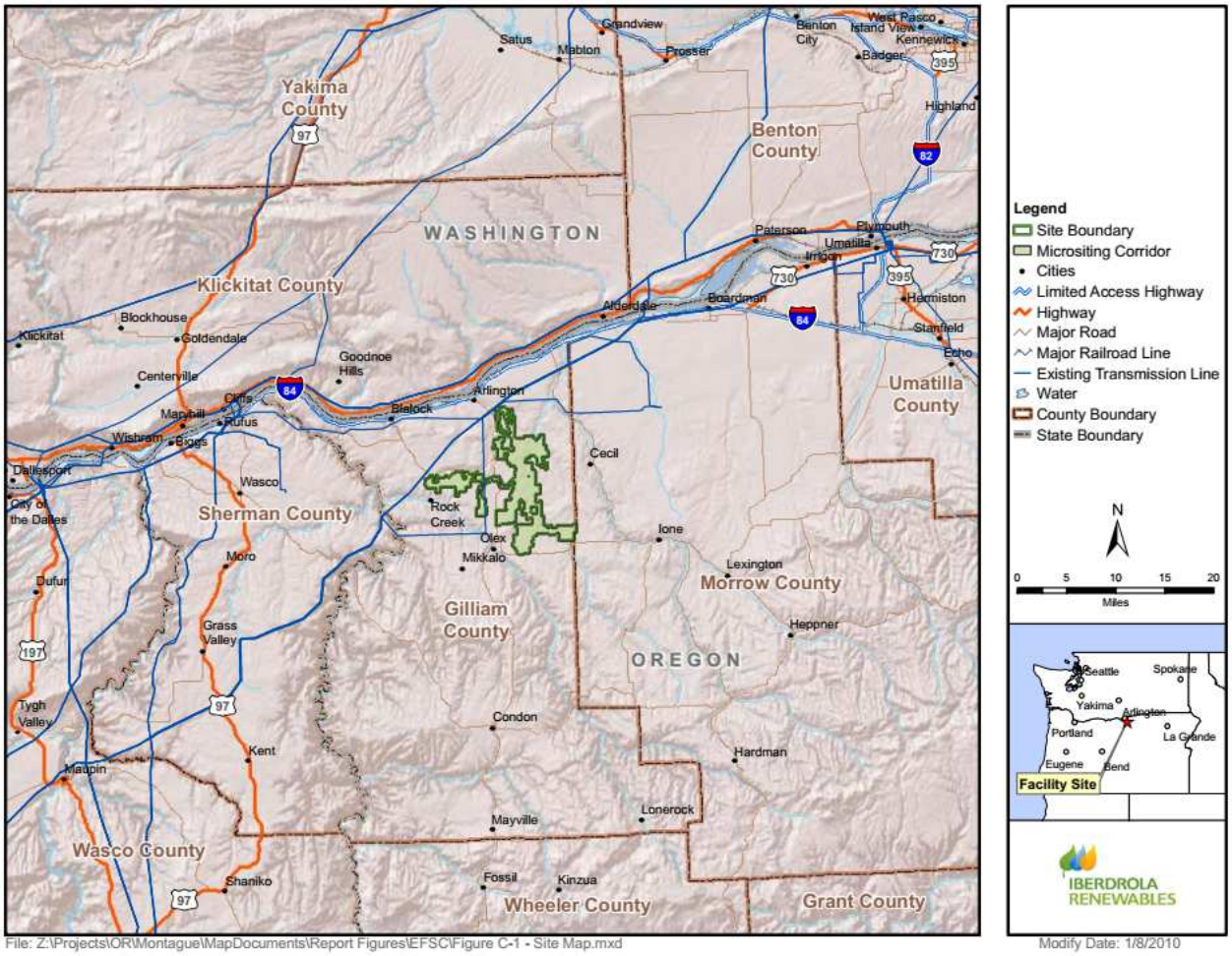
I.C. Description of Facility Location

Site Boundary

The site boundary, as approved, encompasses approximately 33,717 acres and includes the perimeter of the energy facility site and its related or supporting facilities, all temporary laydown and staging areas and all approved corridors.[2] The site boundary is located on private land south of the City of Arlington, within Gilliam County, Oregon as presented in Figure 1: *Regional Location and Site Boundary*.

[2] Pursuant to OAR 345-001-0010(55), the term "site boundary" means the perimeter of the site of a proposed energy facility and its related or supporting facilities, all temporary laydown and staging areas and all corridors proposed by the applicant. The term "energy facility site" means all land upon which an energy facility is located or proposed to be located. The term "energy facility" means only the electric power generating plant while the term "facility,"' as defined in ORS 469.300 (14) means the energy facility together with any related or supporting facilities.

Figure 1: Regional Location and Site Boundary



Micrositing Corridor

A micrositing corridor, by definition, means a continuous area of land within which construction of facility components may occur, subject to site certificate conditions.[3] Micrositing corridors are intended to allow some flexibility in specific component locations and design in response to site-specific conditions and engineering requirements to be determined prior to construction.

Transmission Line Corridor

The transmission line corridor extends approximately 10.5 miles and is ½-mile in width from the facility's Phase 1 collector substation to Bonneville Power Administration's (BPA) Slatt substation.

[3] OAR 345-001-0010(32)

I.D. Procedural History

The Council issued the *Final Order on the Application for Site Certificate for the Montague Wind Power Facility (Final Order on the Application)* on September 10, 2010, which authorized construction and operation of a 404 MW wind energy generation facility, with up to 269 wind turbines and related or supporting facilities.

On December 28, 2012, the certificate holder submitted to the Department its Request for Amendment 1 (RFA1) for the facility. RFA1 requested extension of the construction commencement and completion deadlines by two years, reduction in the minimum aboveground blade-tip clearance, and transfer of the site certificate.[4] The Council issued a *Final Order on Amendment 1 of the Site Certificate* on June 21, 2013, which authorized an extension of the construction commencement deadline from September 14, 2013 to September 14, 2015; and, extension of the construction completion deadline from September 14, 2016 to September 14, 2018.

On March 11, 2015, the certificate holder submitted to the Department its Request for Amendment 2 (RFA2). RFA2 requested extension of the construction commencement and completion deadlines by two years. The Council issued a *Final Order on Amendment 2 of the Site Certificate* on December 4, 2015 which authorized an extension of the construction commencement deadline from September 14, 2015 to September 14, 2017; and, extension of the construction completion deadline from September 14, 2018 to September 14, 2020.

On May 4, 2017, the certificate holder submitted to the Department its Request for Amendment 3 (RFA3). RFA3 requested authorization to change a wind turbine dimension – to reduce the minimum aboveground blade-tip clearance. The Council issued a *Final Order on Amendment 3 of the Site Certificate* on July 12, 2017, which authorized the change in minimum aboveground blade-tip clearance.

On January 9, 2018, the Department received the preliminary Request for Amendment (pRFA4) to the Montague Wind Power Facility's existing site certificate.[5] The Department initiated consultation with reviewing agencies and posted an announcement on the Department's website notifying the public that pRFA4 had been submitted. Under OAR 345-027-0063(5), an RFA is complete when the Department finds that a certificate holder has submitted information adequate for the Council to make findings or impose conditions on all applicable laws and Council standards. Pursuant to OAR 345-027-0063(2), on February 20, 2018 the Department

[4] Transfer of the site certificate to Portland General Electric was not completed and Montague Wind Power Facility LLC remains the site certificate holder.

[5] ~~The Department received pRFA4 on November 21, 2017. However, based on outstanding unpaid invoices for ongoing siting work related to the Montague Wind Power facility at the time, the Department was restricted from commencing work on pRFA4 by a "stop work order" to be lifted upon unpaid invoice resolution. On January 9, 2018, Avangrid Renewables, the parent company of Montague Wind Power Facility, LLC made full payment of fees and the Stop Work Order was lifted.~~

determined pRFA4 to be incomplete. The Department issued requests for additional information on March 9, May 24, June 15, July 25, August 15, September 21, and December 7, 2018.[6] The certificate holder provided revised exhibits, responses to the information requests, and additional revisions to the scope of the amendment request from April through December, 2018. After reviewing the revised exhibits, the Department determined the RFA to be complete and, on January 15, 2019, the certificate holder filed a complete RFA4. On March 25, 2019, the certificate holder submitted an amended RFA4, which was found to be complete on April 4, 2019. The certificate holder filed a complete revised RFA4 on April 5, 2019 and on the same day, the Department posted an announcement on the Department's website notifying the public that the complete RFA had been received.

II. AMENDMENT PROCESS

II.A. Requested Amendment

In RFA4, the certificate holder requests Council approval to amend its site certificate for the construction and operation of new facility components (referred to as "Phase 2"); addition of new area within the site boundary and micrositing corridor; and, new and amended site certificate conditions.

The certificate holder seeks flexibility to install any combination of the wind and solar energy facility components as long as the total maximum output of Phase 2 would not exceed 202 MW. The certificate holder states that the combined maximum output from Phase 1 and 2 would not exceed 404 MW.[7] To support the flexibility requested, the certificate holder performed comprehensive field surveys to support the requested increase in micrositing corridor and evaluates a range of potential impacts based on three design scenarios (referred to as Scenario A, B and C). Scenarios A and B represent a maximum and minimum disturbance layout, respectively, that includes wind turbines and battery storage; Scenario C represents a scenario that includes a disturbance layout for a solar photovoltaic array plus battery storage that would occupy a maximum footprint up 1,189 acres. The three design scenarios are summarized below:

Proposed Design Scenario A – Wind and Battery Storage:

- Up to 81 wind turbines (maximum blade tip height of 486 feet; maximum rotor diameter of 381 feet; maximum aboveground blade tip clearance of 46 feet)
- Lithium-ion or flow battery storage system (located on an approximately 6.5 acre site)
- 3-mile segment of aboveground 230 kV transmission line
- Above- and belowground collector lines, new access roads, existing road improvements, meteorological towers (approximately 351 feet in height), collector substation (located

[6] MWPAMD4. Request for Additional Information. 2018-03-09; 2018-05-24; 2018-06-15; 2018-07-25; 2018-08-15; 2018-09-21; 2018-12-07.

[7] The specific power generating capacity of an energy facility or facility components, such as an individual wind turbine, is not relevant to a Council standard.

within an approximately 4 acre site), and an O&M building (located within an approximately 10 acre site)
- Temporary laydown areas

Proposed Design Scenario B – Wind and Battery Storage:

- Up to 48 wind turbines (maximum blade tip height of 597.1 feet; maximum rotor diameter of 492.1 feet; maximum aboveground blade tip clearance of 46 feet)
- Lithium-ion or flow battery storage system (located on an approximately 6.5 acre site)
- 3-mile segment of aboveground 230 kV transmission line
- Above- and belowground collector lines, new access roads, existing road improvements, meteorological towers (approximately 351 feet in height), collector substation (located within an approximately 4 acre site), and an O&M building (located within an approximately 10 acre site)
- Temporary laydown areas

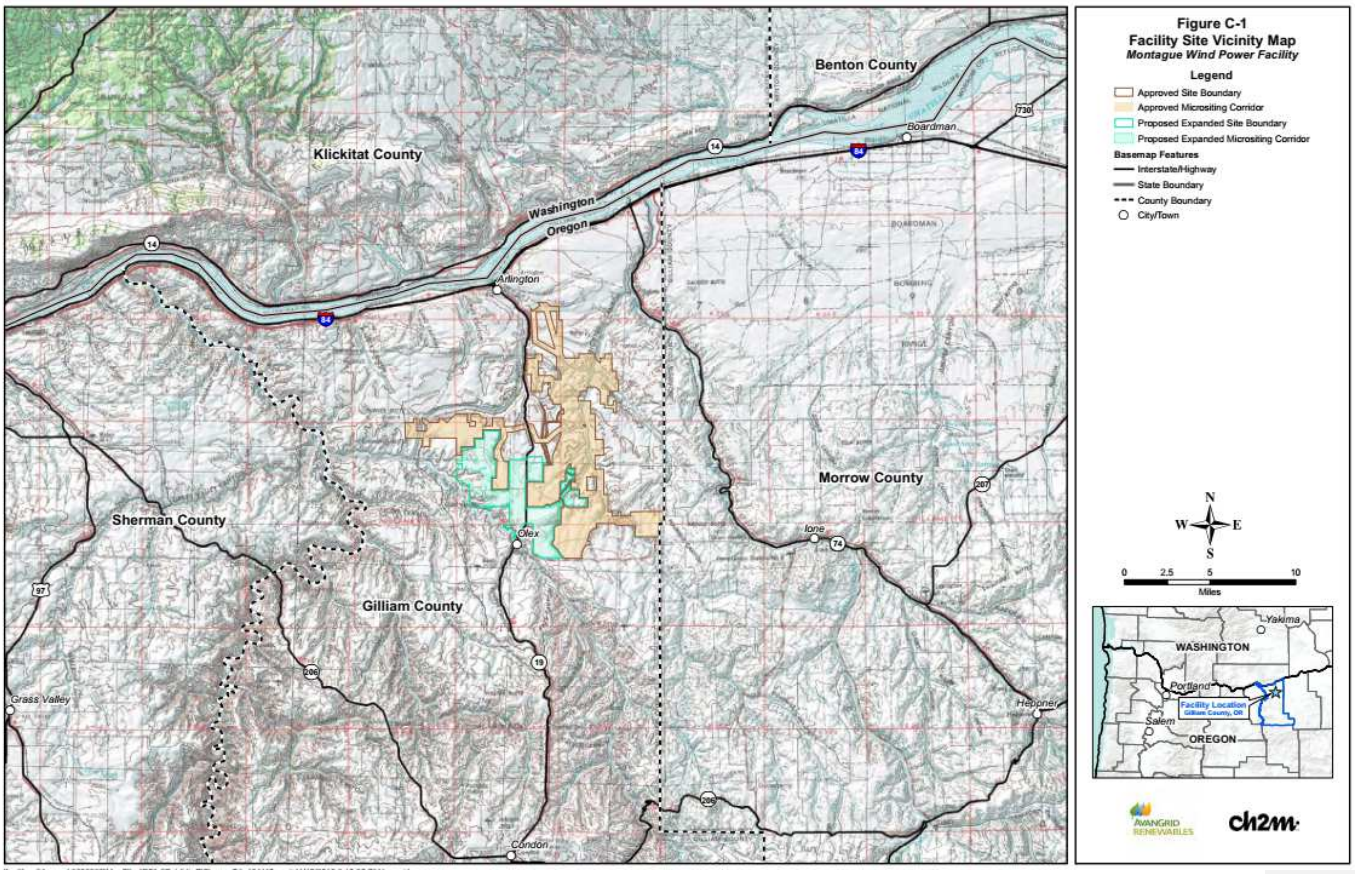
Proposed Design Scenario C - Solar Photovoltaic and Battery Storage:

- Solar photovoltaic array to occupy a maximum area of approximately 1,189 acres
- Lithium-ion or flow battery storage system (located on an approximately 6.5 acre site)
- 3-mile segment of aboveground 230 kV transmission line
- Above- and belowground collector lines, new access roads, existing road improvements, meteorological towers (approximately 351 feet in height), collector substation (located within an approximately 4 acre site), and an O&M building (located within an approximately 10 acre site)
- Temporary laydown areas

Site Boundary

The certificate holder requests to add area, approximately 13,339 acres, to the previously approved site boundary, increasing the total site boundary area from 33,717 to 47,056 acres. In Figure 2: *Proposed Amended Site Boundary*, below, the area within the site boundary, as approved, is shaded "tan;" the proposed new area to be included in the site boundary is shaded "blue." The proposed amended site boundary would include all blue and tan shaded areas. The proposed new area, encompassing approximately 13,339 acres, is adjacent to the previously approved site boundary and previously evaluated as part of a withdrawn EFSC project, the Baseline Wind Project.

Figure 2: Proposed Amended Site Boundary



Micrositing Corridor

The site boundary, as approved, represents the micrositing corridor. For RFA4, the site boundary and micrositing corridor, as amended, differ by approximately 4,358 acres based on analysis completed (see Figure 3 below for difference between site boundary and micrositing corridor areas).

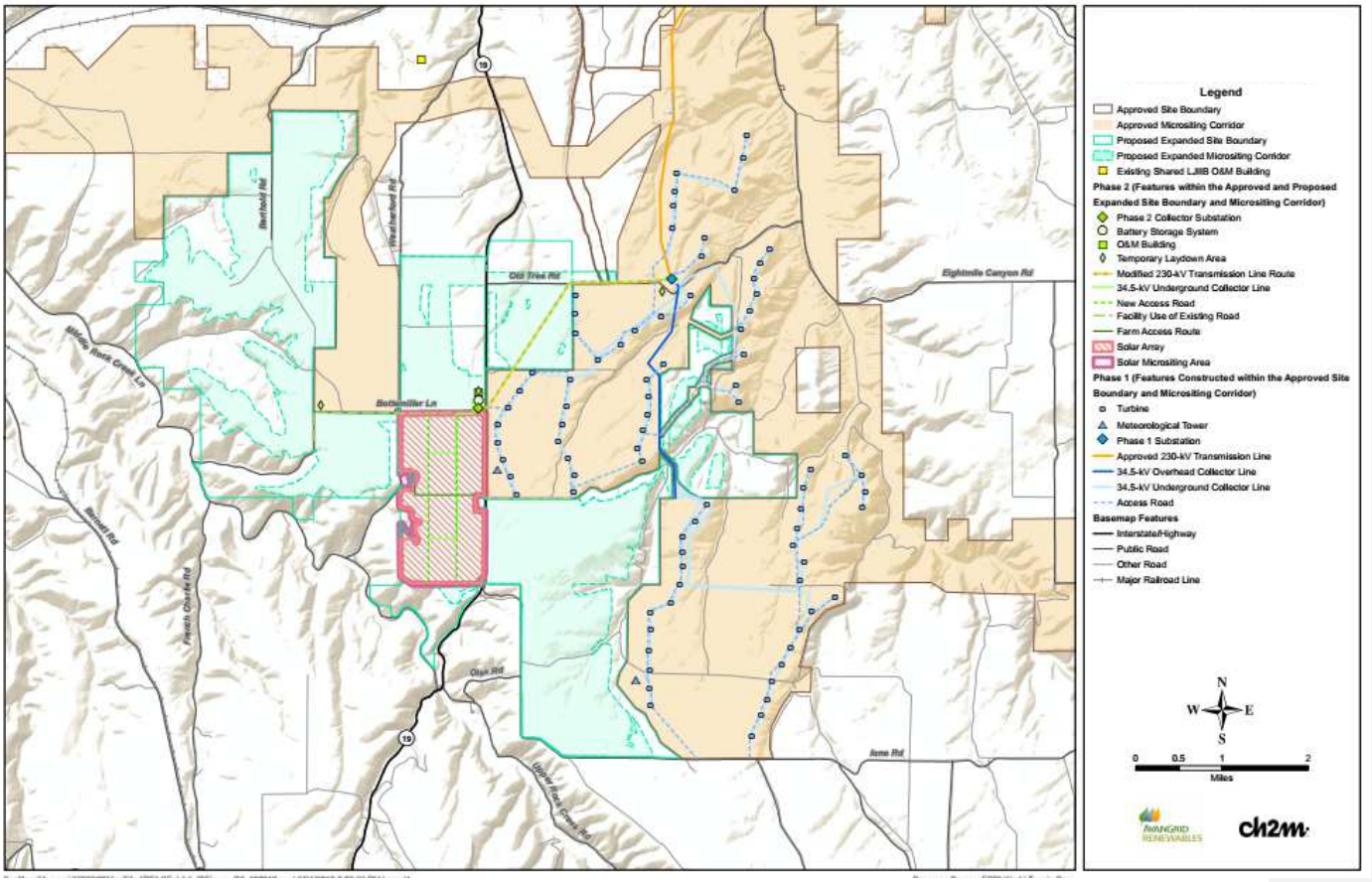
The proposed amended micrositing corridor includes a proposed solar micrositing area, evaluated for the proposed solar array and its related or supporting facilities. The proposed solar micrositing area includes approximately 1,189 acres, and encompasses an area extending approximately 3 miles south of Bottemiller Lane along Highway 19. The area within the proposed amended micrositing corridor encompasses approximately 8,981 acres.

As presented in Figure 3, *Site Boundary and Micrositing Corridor*, there are areas within the proposed amended site boundary which are not included in the proposed amended micrositing corridor. Therefore, while these areas are included in the site boundary, these areas have yet to be evaluated for construction~~authorization to site facility components within these locations has not been obtained~~.

1

2

3 **Figure 3: Site Boundary and Micrositing Corridor – Approved and as Proposed**



II.B. Recommended Amended Site Certificate and Condition Format

The recommended amended site certificate includes existing and recommended new and amended conditions. Some of the conditions apply to the entire facility, both Phase 1 and Phase 2; some conditions apply only to Phase 1, and some conditions apply only to Phase 2. Previously imposed conditions that are not recommended to be amended through new or deleted language would apply to both Phase 1 and Phase 2.

Previously imposed conditions that are recommended to be amended, but that include differing requirements for previously approved components in Phase 1, and Phase 2, include a delineation format, where a roman numeral "i" indicates the requirements of the condition apply to Phase 1 components, including the approved related or supporting facilities; and, roman numeral "ii" indicates that requirements of the amended condition apply to proposed components of Phase 2 and its related or supporting facilities.

II.C. Amendment Review Process

Council rules describe the processes for review of requests for site certificate amendment at OAR 345-027-0051. The Type A review is the standard or "default" site certificate amendment process for changes that require an amendment; RFA4 is being reviewed under the Type A review process. The Type A review includes a public hearing on the draft proposed order and an opportunity for a contested case proceeding. Council rules authorize the Department to adjust the timelines for these specific procedural requirements, if necessary.

The certificate holder submitted a complete RFA4 on January 15, 2019, and on the same day, the Department posted the complete RFA4 on its website and posted an announcement on the project website informing the public that the complete RFA4 had been received and is available for viewing. On March 25, 2019, the certificate holder submitted an amended RFA4, which was found to be complete on April 4, 2019. The certificate holder filed a complete revised RFA4 on April 5, 2019 and on the same day the Department a posted the amended complete RFA4 on its website.

Reviewing Agency Comments on Request for Amendment 4

The Department received comments on the amendment request from the Special Advisory Group, reviewing agencies, and Tribal Governments listed below. All agency comments received are included as Attachment B of this order.

- Gilliam County Court (Special Advisory Group)
- Oregon Department of Land Conservation and Development
- Oregon Department of Fish and Wildlife
- Oregon Department of State Lands
- Oregon State Historic Preservation Office

- Oregon Department of Geology and Mineral Industries
- Oregon Department of Transportation
- Oregon Department of Aviation
- Confederated Tribes of the Umatilla Indian Reservation
- Confederated Tribes of the Warm Springs Reservation of Oregon

Comments from these agencies are incorporated into the Department's analysis of Council standards below, as applicable.

II.D. Council Review Process

Notice of the comment period on RFA4 and draft proposed order and notice of the public hearing on the draft proposed order was issued on Friday, April 5, 2019. The notice was distributed to all persons on the Council's general mailing list, to the special mailing list established for the facility, property owners within and adjacent to the site boundary and to a list of reviewing agencies as defined in OAR 345-001-0010(52). The Council will hold a public hearing where oral comments may be provided to Council on May 16, 2019, at 5:30 p.m., at Hotel Condon in Condon, Oregon. The written comment period is now open, and will close at the close of the public hearing on May 16, 2019. Written comments must be received by the Department by the close of the public hearing on May 16, 2019.

Following the close of the record of the public hearing and Council's review of the draft proposed order, the Department will issue a proposed order, taking into consideration Council comments, any comments received "on the record of the public hearing" (i.e., oral testimony provided at the public hearing and written comments received by the Department after the date of the notice of the public hearing and before the close of the public hearing comment period), including any comments from reviewing agencies, special advisory groups, and Tribal Governments and certificate holder. Concurrent with the issuance of the proposed order, the Department will issue a notice of contested case and a public notice of the proposed order.[8]

Only those persons who comment in person or in writing on the record of the public hearing may request a contested case proceeding on their issues raised, unless the Department did not follow the follow the requirements of OAR 345-027-0067, or unless the action recommended in the proposed order differs materially from the draft proposed order, including any recommended conditions of approval, in which case the person may raise only new issues within the jurisdiction of the Council that are related to such differences.

All rules and supporting evidence that a person may wish to cite or include in a request for a contested case proceeding must be included in comments provided on the record of the draft proposed order public hearing. See OAR 345-027-067(3)(G) "The Council will not accept or consider any further public comment on the request for amendment or on the draft proposed

[8] See OAR 345-027-0071.

order after the close of the public hearing." Additionally, to raise an issue in a contested case proceeding, the issue must be within Council jurisdiction, and the person must have raised the issue on the record of the public hearing with "sufficient specificity to afford the Council, the Department, and the certificate holder an adequate opportunity to respond to the issue."[9]

The Council's final order is subject to judicial review by the Oregon Supreme Court. Only a party to the contested case proceeding may request judicial review and the issues on appeal are limited to those raised by the parties to the contested case proceeding. A petition for judicial review must be filed with the Supreme Court within 60 days after the date of service of the Council's final order or within 30 days after the date of a petition for rehearing is denied or deemed denied.[10]

If no contested case is requested, the Council shall adopt, modify or reject the proposed order and issue a final order approving or denying the site certificate amendment request based upon the applicable laws and Council standards required under OAR 345-027-0075(2) and in effect on the dates described in OAR 345-027-0075(3).

II.E. Applicable Division 27 Rule Requirements

A site certificate amendment is necessary under OAR 345-027-0050(4) because the certificate holder requests to design, construct, and operate the facility in a manner different from the description in the site certificate, and the proposed changes: (1) could result in a significant adverse impact to a resource or interest protected by a Council standard that the Council has not addressed in an earlier order; (2) could impair the certificate holder's ability to comply with a site certificate condition; or (3) could require new conditions or modification to existing conditions in the site certificate, or could meet more than one of these criteria.

The Type A amendment review process (consisting of OARs 345-027-0059, -0060, -0063, -0065, -0067, -0071 and -0075) is the default amendment review process and shall apply to the Council's review of a request for amendment proposing a change described in OAR 345-027-0050(2), (3), and (4).[11]

III. REVIEW OF THE REQUESTED AMENDMENT

Under ORS 469.310, the Council is charged with ensuring that the "siting, construction and operation of energy facilities shall be accomplished in a manner consistent with protection of the public health and safety." ORS 469.401(2) further provides that the Council must include in the amended site certificate "conditions for the protection of the public health and safety, for the time for completion of construction, and to ensure compliance with the standards, statutes

[9] OAR 345-027-0071(5).
[10] ORS 469.403 and OAR 345-027-0071(12).
[11] OAR 345-027-0051(2).

and rules described in ORS 469.501 and ORS 469.503."[12] The Council implements this statutory framework by adopting findings of fact, conclusions of law, and conditions of approval concerning the ability of the certificate holder to maintain compliance with the Council's Standards for Siting Facilities at OAR Chapter 345, Divisions 22, 24, 26, and 27.

As described in Section II.A. *Requested Amendment*, the certificate holder seeks flexibility to install any combination of the wind and solar energy facility components as long as the total maximum output would not exceed 202 MW; however, the Department and Council do not regulate the electrical generation capacity or output of the facility or facility components, but rather Council rules and standards are concerned with the potential impact of a proposed facility and its components. The Department understands that the certificate holder requests flexibility in final design layout for Phase 2, including a potential final Phase 2 design layout that would differ from the three design scenarios represented in RFA4.

As presented in this draft proposed order, there are Council standards that are quantitative and rely on, for example, the location, number of, and dimension of facility components to assess potential visual, noise, health and safety, and land use impacts of facility components. There are Council standards that are qualitative and rely on best management practices and plans to evaluate and minimize impacts to, for example, soils, seismic and non-seismic hazards. To afford the requested flexibility, the Department recommends Council impose conditions, as needed, based on the methodology and maximum impact evaluated for each design scenario but not be prescriptive to a design scenario or specific proposed facility component.

This draft proposed order includes the Department's analysis of whether Phase 2 meets each applicable Council standard (with mitigation and subject to compliance with existing and recommended conditions, as applicable), based on the information in the record. Following the written comment period on the draft proposed order and Council review of the draft proposed order, the Department will issue its proposed order, which will include the Department's consideration of the comments and any additional evidence received on the record of the draft proposed order.

III.A. General Standard of Review: OAR 345-022-0000

> *(1) To issue a site certificate for a proposed facility or to amend a site certificate, the Council shall determine that the preponderance of evidence on the record supports the following conclusions:*
>
> > *(a) The facility complies with the requirements of the Oregon Energy Facility Siting statutes, ORS 469.300 to ORS 469.570 and 469.590 to 469.619, and the standards adopted by the Council pursuant to ORS 469.501 or the overall public benefits of the*

[12] ORS 469.401(2).

facility outweigh the damage to the resources protected by the standards the facility does not meet as described in section (2);

(b) Except as provided in OAR 345-022-0030 for land use compliance and except for those statutes and rules for which the decision on compliance has been delegated by the federal government to a state agency other than the Council, the facility complies with all other Oregon statutes and administrative rules identified in the project order, as amended, as applicable to the issuance of a site certificate for the proposed facility. If the Council finds that applicable Oregon statutes and rules, other than those involving federally delegated programs, would impose conflicting requirements, the Council shall resolve the conflict consistent with the public interest. In resolving the conflict, the Council cannot waive any applicable state statute.

*****

(4) In making determinations regarding compliance with statutes, rules and ordinances normally administered by other agencies or compliance with requirement of the Council statutes if other agencies have special expertise, the Department of Energy shall consult such other agencies during the notice of intent, site certificate application and site certificate amendment processes. Nothing in these rules is intended to interfere with the state's implementation of programs delegated to it by the federal government.

Findings of Fact

OAR 345-022-0000 provides the Council's General Standard of Review and requires the Council to find that a preponderance of evidence on the record supports the conclusion that the facility, with proposed changes, would comply with the requirements of EFSC statutes and the siting standards adopted by the Council and that the facility, with proposed changes, would comply with all other Oregon statutes and administrative rules applicable to the issuance of an amended site certificate for the facility.[13]

The requirements of OAR 345-022-0000 are discussed in the sections that follow. The Department consulted with other state agencies, and Gilliam County Court during review of RFA4 to aid in the evaluation of whether the facility, with proposed changes, would maintain compliance with statutes, rules and ordinances otherwise administered by other agencies. Additionally, in many circumstances the Department relies upon these reviewing agencies' special expertise in evaluating compliance with the requirements of Council standards.

[13] OAR 345-022-0000(2) and (3) apply to RFAs where an certificate holder has shown that the proposed amendments cannot meet Council standards or has shown that there is no reasonable way to meet the Council standards through mitigation or avoidance of adverse effects to protected resources; and, for those instances, establish criteria for the Council to evaluate in making a balancing determination. The certificate holder does not assert that the proposed amendments cannot meet an applicable Council standard. Therefore, OAR 345-022-0000(2) and (3) do not apply to this review.

OAR 345-022-0000(2) and (3) apply to RFAs where a certificate holder has shown that the proposed amendments cannot meet Council standards, or has shown that there is no reasonable way to meet the Council standards through mitigation or avoidance of the damage to protected resources; and, for those instances, establish criteria for the Council to evaluate in making a balancing determination. The certificate holder does not assert that the facility, with proposed changes, cannot meet an applicable Council standard. Therefore, OAR 345-022-0000(2) and (3) do not apply to this review.

Certificate Expiration (OAR 345-027-0013)

A site certificate, or amended site certificate, becomes effective upon execution by the Council Chair and the certificate holder. A site certificate, or amended site certificate, expires if construction has not commenced on or before the construction commencement deadline, as established in the site certificate and statutorily required under ORS 469.401(2).

The Council's imposition of construction deadlines in the amended site certificate should reflect a balance between the Council's concern regarding potential circumstantial changes (regulatory and environmental) and the individual circumstances of the amendment request. In addition, the Department acknowledges that there are a number of unforeseen factors that can delay a certificate holder's commencement of construction and completion, including but not limited to financial, economic, or technological changes. The Department also notes that while each amendment request is evaluated on its own facts, historic Council decisions on construction and commencement deadlines were reviewed to inform this analysis. In most instances of decisions on applications, Council has required construction commencement and completion of wind and solar energy facilities within three and six years, respectively, after the effective date of the site certificate and in some instances the completion deadline is established based on date of construction commencement and not effective date of site certificate.

In RFA4, the certificate holder requests to extend the previously imposed construction deadline for the facility, to allow for construction of Phase 2, from September 14, 2020 to September 14, 2023. However, the previously imposed construction commencement and completion deadlines apply to Phase 1. The Department recommends Council apply construction commencement and completion deadlines specific to Phase 2, and not consider the new deadlines an extension request. As noted, Phase 1 is already under construction.

The certificate holder anticipates an 18 months construction schedule for Phase 2, however, the Department recommends Council grant construction commencement and completion deadlines based upon three and six years following the date of Council approval. This timeframe would be consistent with historic Council decisions and represents a reasonable timeframe. The Department recommends that Council amend Conditions 24 and 25 as presented in underline/strikethrough below:

Recommended Amended Condition 24:

The certificate holder shall:

i. ~~b~~Begin construction of Phase 1 of the facility by September 14, 2017. Under OAR 345-015-0085(9), a site certificate is effective upon execution by the Council Chair and the applicant. The Council may grant an extension of the deadline to begin construction in accordance with OAR 345-027~~-0030~~-0085 or any successor rule in effect at the time the request for extension is submitted. [ASC; AMD2; AMD4]

ii. The certificate holder shall begin construction of Phase 2 of the facility by [SPECIFIC DATE TO BE INCLUDED IN FINAL ORDER AND SITE CERTIFICATE – 3 years from date of Council approval]. ~~Under OAR 345-015-0085(9), a site certificate is effective upon execution by the Council Chair and the certificate holder~~. The Council may grant an extension of the deadline to begin construction in accordance with OAR 345-027-0085 or any successor rule in effect at the time the request for extension is submitted. [AMD4]

Recommended Amended Condition 25:

The certificate holder shall

i. ~~c~~Complete construction of Phase 1 of the facility by September 14, 2020. Construction is complete when: (1) the facility is substantially complete as defined by the certificate holder's construction contract documents, (2) acceptance testing has been satisfactorily completed and (3) the energy facility is ready to begin continuous operation consistent with the site certificate. The certificate holder shall promptly notify the Department of the date of completion of construction. The Council may grant an extension of the deadline for completing construction in accordance with OAR 345-027~~-0030~~-0085 or any successor rule in effect at the time the request for extension is submitted. [ASC; AMD2; AMD4]

ii. The certificate holder shall complete construction of Phase 2 of the facility by [3 years from date of construction commencement]. Construction is complete when: (1) the facility is substantially complete as defined by the certificate holder's construction contract documents, (2) acceptance testing has been satisfactorily completed and (3) the energy facility is ready to begin continuous operation consistent with the site certificate. The certificate holder shall promptly notify the Department of the date of completion of construction. The Council may grant an extension of the deadline for completing construction in accordance with OAR 345-027-0085 or any successor rule in effect at the time the request for extension is submitted. [AMD4]

Mandatory and Site-Specific Conditions in Site Certificates [OAR 345-025-0006 and OAR 345-025-0010]

OAR 345-025-0006 lists certain mandatory conditions that the Council must adopt in every site certificate. The Council's October 2017 rule changes moved the mandatory conditions from Division 27 to Division 25. As such, the Department recommends Council administratively

amend the rule citations included in the previously imposed mandatory and site-specific conditions, as presented in Attachment A of this order.

Council previously imposed Condition 27, mirroring OAR 345-025-0006(3)(a), requiring that the certificate holder design, construct, operate and retire the facility substantially as described in the site certificate. Consistent with OAR 345-025-0006(3)(a), Condition 27 establishes dimensional specifications and individual wind turbine generating capacity for the wind turbine technologies to be selected during final design. The Department recommends Council amend Condition 27 based on specifications and dimensions of proposed facility components relied upon in the RFA4 impact assessment, as follows:

Recommended Amended Condition 27: The certificate holder shall construct a facility substantially as described in the site certificate and may select turbines of any type, subject to the following restrictions and compliance with all other site certificate conditions. Before beginning construction, the certificate holder shall provide to the Department a description of the turbine types selected for the facility demonstrating compliance with this condition.

i. For Phase 1 facility components:

(a) The total number of turbines ~~at the facility~~ must not exceed 81~~269~~ turbines.

~~(b) The combined peak generating capacity of the facility must not exceed 404 megawatts and the peak generating capacity of any individual turbine must not exceed 3.6 megawatts.~~

(c) The turbine hub height must not exceed 100 meters and the maximum blade tip height must not exceed 150 meters.

(d) The minimum blade tip clearance must be 14 meters above ground. [Amendment #3]

~~(e) The certificate holder shall request an amendment of the site certificate to increase the combined peak generating capacity of the facility beyond 404 megawatts, to increase the number of wind turbines to more than 269 wind turbines or to install wind turbines with a hub height greater than 100 meters, a blade tip height greater than 150 meters or a blade tip clearance less than 14 meters above ground. [Amendment #3]~~ [Final Order on ASC; AMD3]

ii. For Phase 2 facility components:

(a) Components may include any combination of wind and solar energy generation equipment, up to 81 wind turbines or the maximum layout (including number and size) of solar array components substantially as described in RFA4.

(b) The turbine ~~hub height must not exceed 351 feet (107 meters) and the~~ maximum blade tip height must not exceed 597 feet (182 meters). The minimum aboveground blade tip clearance must be 46 feet (14 meters). [AMD4]

Site Specific Conditions [OAR 345-025-0010]

In addition to mandatory conditions imposed on all facilities, the Council rules also include "site specific" conditions at OAR 345-025-0010 that the Council may include in the site certificate to address issues specific to certain facility types or proposed features of facilities. Since the time the Council issued the site certificate in 2010, the Council reorganized the OAR 345, Division 27 and Division 25 rules. The Department recommends that the Council make minor administrative adjustments to certain site certificate conditions to update references to Oregon Administrative Rules to reflect the relocation of the site-specific conditions from Division 27 to Division 25. These conditions are noted in strike-through/underline in Attachment A, Draft Amended Site Certificate.

Additionally, the Department recommends the Council amend Condition 18 imposed pursuant to OAR 345-025-0010(5), applicable to transmission lines:

> **Recommended Amended Condition 18**: ~~If the proposed energy facility is a pipeline or a transmission line or has, as a related or supporting facility, a pipeline or transmission line, the Council shall specify an approved corridor in the site certificate and shall allow the certificate holder to construct the pipeline or transmission line anywhere within the corridor, subject to the conditions of the site certificate. If the applicant has analyzed more than one corridor in its application for a site certificate, the Council may, subject to the Council's standards, approve more than one corridor.~~ The certificate holder is authorized to construct a 230 kV transmission line anywhere within the approved corridor, subject to the conditions of the site certificate. The approved corridor is ½-mile in width and extends approximately 14 miles from the Phase 1 collector substation to Phase 2 collector substation to BPA's Slatt Substation as presented in Figure 1 of the site certificate.
> [OAR 345-025-0010(5); ASC; AMD4]

Construction and Operation Rules for Facilities [OAR Chapter 345, Division 26]

The Council has adopted rules at OAR Chapter 345, Division 26 to ensure that construction, operation, and retirement of facilities are accomplished in a manner consistent with the protection of the public health, safety, and welfare and protection of the environment. These rules include requirements for compliance plans, inspections, reporting and notification of incidents. The certificate holder must construct the facility substantially as described in the amended site certificate [OAR 345-025-0006(3)] and the certificate holder must construct, operate, and retire the facility in accordance with all applicable rules adopted by the Council in OAR Chapter 345, Division 26.[14]

[14] Applicable rule requirements established in OAR Chapter 345, Division 26 include OAR 345-026-0005 to OAR 345-026-0170.

Conclusions of Law

Based on the foregoing findings of fact and conclusions of law, and subject to compliance with the existing and recommended amended conditions, the Department recommends that the Council find that the facility, with proposed changes, would satisfy the requirements of OAR 345-022-0000.

III.B. Organizational Expertise: OAR 345-022-0010

(1) To issue a site certificate, the Council must find that the applicant has the organizational expertise to construct, operate and retire the proposed facility in compliance with Council standards and conditions of the site certificate. To conclude that the applicant has this expertise, the Council must find that the applicant has demonstrated the ability to design, construct and operate the proposed facility in compliance with site certificate conditions and in a manner that protects public health and safety and has demonstrated the ability to restore the site to a useful, non-hazardous condition. The Council may consider the applicant's experience, the applicant's access to technical expertise and the applicant's past performance in constructing, operating and retiring other facilities, including, but not limited to, the number and severity of regulatory citations issued to the applicant.

(2) The Council may base its findings under section (1) on a rebuttable presumption that an applicant has organizational, managerial and technical expertise, if the applicant has an ISO 9000 or ISO 14000 certified program and proposes to design, construct and operate the facility according to that program.

(3) If the applicant does not itself obtain a state or local government permit or approval for which the Council would ordinarily determine compliance but instead relies on a permit or approval issued to a third party, the Council, to issue a site certificate, must find that the third party has, or has a reasonable likelihood of obtaining, the necessary permit or approval, and that the applicant has, or has a reasonable likelihood of entering into, a contractual or other arrangement with the third party for access to the resource or service secured by that permit or approval.

(4) If the applicant relies on a permit or approval issued to a third party and the third party does not have the necessary permit or approval at the time the Council issues the site certificate, the Council may issue the site certificate subject to the condition that the applicant shall not commence construction or operation as appropriate until the third party has obtained the necessary permit or approval and the applicant has a contract or other arrangement for access to the resource or service secured by that permit or approval.

Findings of Fact

Subsections (1) and (2) of the Council's Organizational Expertise standard require that the certificate holder demonstrate its ability to design, construct and operate the facility, with proposed changes, in compliance with Council standards and all site certificate conditions, and in a manner that protects public health and safety, as well as its ability to restore the site to a useful, non-hazardous condition. The Council may consider the certificate holder's experience and past performance in constructing, operating and retiring other facilities in determining compliance with the Council's Organizational Expertise standard. Subsections (3) and (4) address third party permits.

Compliance with Council Standards and Site Certificate Conditions

The Council may consider a certificate holder's past performance, including but not limited to the quantity or severity of any regulatory citations in the construction or operation a facility, type of equipment, or process similar to the facility, in evaluating whether a proposed change may impact the certificate holder's ability to design, construct and operate a facility in compliance with Council standards and site certificate conditions.[15] To evaluate whether the facility, with proposed changes, would impact the certificate holder's ability to comply with Council standards and site certificate conditions, the Department presents an evaluation of the certificate holder's relevant experience with constructing and operating similar systems and considers whether any regulatory citations have been received for its facilities.

Montague Wind Power Facility, LLC, is a project-specific LLC and therefore relies upon the organizational expertise and experience of its parent company, Avangrid Renewables (Avangrid).[16] In RFA4, the certificate holder states that Avangrid is the second largest operator of wind energy projects in the United States, and that Avangrid has not received any regulatory citations during construction or operation of a facility, type of equipment, or process similar to the proposed changes.[17] Furthermore, the certificate holder explains that Avangrid has operated renewable energy projects in Oregon since 2001, and currently owns more than 1,483 MW of utility-scale wind and solar generation in the state, including four EFSC jurisdictional wind facilities (Klamath Cogeneration Project, Klondike III Wind Project, Leaning Juniper IIA Wind Power Facility, and Leaning Juniper IIB Wind Power Facility), and Oregon's largest operating solar PV facility, the Gala Solar project in Crook County (not subject to EFSC jurisdiction). Avangrid's previous experience both in and out of Oregon includes designing, constructing, and operating wind, solar, and co-generation energy facilities, substations, both low- and high-voltage electrical lines, and is currently in the permitting phase for four battery

[15] OAR 345-021-0010(1)(d)(D)
[16] The certificate holder's parent company, Avangrid Renewables, formally Iberdrola Renewables, owns and operates more than 6,000 MW of utility-scale renewable energy production throughout the United States. Furthermore, 1,483 MW of the 6,000 MW's of renewable energy owned and operated by Avangrid is produced in Oregon.
[17] MWPAMD4 Exhibit D, p.D-6 2019-04-05

storage projects in the United States, including the battery storage system proposed in RFA4.[18] The certificate holder explains that the design and operation of a battery storage facility is "fundamentally similar" to the aforementioned facilities and components, and compliance with Condition 34 would ensure that experienced, qualified contractors would be selected to construct and install the battery storage system. Based on review of the record for the facility, the Department confirms that, to date, no regulatory citations had been issued by the Department for any EFSC-jurisdictional Avangrid- operated facility.

The Department recommends that the Council find that the certificate holder has demonstrated an ability to design, construct, and operate the facility, with proposed changes, in compliance with Council standards and site certificate conditions for the following reasons: the certificate holder demonstrates experience constructing and operating multiple energy facilities with varying forms of energy generation, experience constructing and operating related or supporting facility components; the certificate holder has not received regulatory citations for its EFSC jurisdictional facilities; and, existing site certificate conditions require the certificate holder to select qualified contractors and contractually require compliance with site certificate conditions during facility design, construction and engineering.

Public Health and Safety

The proposed change in wind turbine size could result in health and safety risks from blade failure, structural and reliability concerns, ice throw, risks to public and private providers of air transportation and agricultural services, and risks to public providers of fire service during tower rescue events. The Department's evaluation of these risks is presented in Section III.M., *Public Services* and Section III.P.1., *Public Health and Safety Standards for Wind Facilities* of this order.

Construction and operation of the proposed battery storage systems could also result in public health and safety risks during battery and battery waste transport; and, onsite handling and storage of battery-related materials and waste. This is further discussed in Sections III.M., *Public Services* and Section III.N., *Waste Minimization* of this order.

In RFA4, the certificate holder describes that the facility, with proposed changes, would be constructed and operated in a manner that complies with Conditions 60 through 63. During construction and operation of the facility, with proposed changes, Conditions 60 through 63 require the certificate holder to develop and implement a fire safety plan in consultation with the North Gilliam County Rural Fire Protection District, provide a site plan of the facility to the North Gilliam County Rural Fire Protection District, ensure that all construction personnel and on-site employees are trained in fire prevention and response by qualified instructors or members of the local fire districts.

[18] MWPAMD4 Montague RAI-4 Response Transmittal and Table, p.4 2018-08-23

In addition to Conditions 60 through 63, the certificate holder states that the facility would be constructed and operated to comply with federal regulations governing the transportation of hazardous materials and manufacturer's recommendations. Proposed Revised Condition 55 under Section III.D requires the certificate holder to comply with federal regulations~~the requirements of the Department of Transportation Pipeline and Hazardous Material Administration's *49 Code of Federal Regulations (CFR) 173.185*. These regulations provide requirements for the prevention of dangerous evolution of heat; prevention of short circuits; prevention of damage to terminals; and, prevention of contact with other batteries or conductive materials~~. To minimize potential health and safety impacts during onsite handling and transport of battery and battery waste during facility construction and operation, the Department recommends Council impose Condition 116 as follows:

> **Recommended Condition 116:** The certificate holder shall transport and dispose of battery and battery waste by a licensed hauler and comply with all applicable federal regulations and manufacturer recommendations related to the transport of hazardous battery materials [AMD 4]. ~~:~~
> ~~a. Prior to and during construction, as applicable, provide evidence to the Department that a contractual agreement has been obtained for transport and disposal of battery and battery waste by a licensed hauler and requires the third-party to comply with all applicable laws and regulations, including applicable provisions of 49 CFR 173.185.~~
> ~~b. Prior to transporting and disposing of battery and battery waste during facility operations, provide evidence to the Department that a contractual agreement has been obtained for transport and disposal of battery and battery waste by a licensed hauler and requires the third-party to comply with all applicable laws and regulations, including applicable provisions of 49 CFR 173.185.~~
> ~~[AMD4]~~

Based upon the evidence and reasoning provided in RFA4, and compliance with existing, recommended new and amended conditions, the Department recommends the Council find that the certificate holder has provided reasonable assurance that it can design, construct, operate, and retire the facility, with proposed changes, in a manner that protects public health and safety in accordance with the Organizational Expertise standard.

Ability to Restore the Site to a Useful, Non-Hazardous Condition

The certificate holder's ability to restore the facility site to a useful, non-hazardous condition is evaluated in Section III.G., *Retirement and Financial Assurance* of this order, in which the Department recommends that Council find that the certificate holder would continue to be able to comply with the Retirement and Financial Assurance standard.

ISO 900 or ISO 14000 Certified Program

OAR 345-022-0010(2) is not applicable because the certificate holder has not proposed to design, construct or operate the facility, with proposed changes, according to an ISO 9000 or ISO 14000 certified program.

Third-Party Permits

OAR 345-022-0010(3) addresses the requirements for potential third party contractors. In RFA4, the certificate holder identifies five state permits that may be required for construction and operation of Phase 2, and would be obtained by third-party contractors, if required. The third-party permits would include a Oregon Department of Environmental Quality (DEQ) issued onsite sewage disposal construction-installation permit for the proposed O&M building; a DEQ issued general water pollution control facilities permit for wastewater and stormwater management of a temporary construct batch plant (WPCF-1000); a DEQ issued general water pollution control facilities permit for solar module washing during facility operations (WPCF-1700-B); a Oregon Water Resources Department (OWRD) issued limited water use license for construction-related water use; and a Oregon Department of Transportation (ODOT) issued oversize load movement permit/load registration for transporting large or overweight equipment to the site. While not specifically identified in RFA4, because a third-party DEQ issued WPCF-1000 permit was identified for a temporary batch plant, it is possible that additional third-party permits would be required for a temporary concrete batch plant, including a land use permit from Gilliam County and a DEQ issued Air Contaminant Discharge Permit.

With the exception of the ODOT permit, the above-described third party permits would normally be included in and governed by the site certificate. Therefore, because these permits would normally be included in and governed by the site certificate and are necessary permits for the construction and operation of the facility – and are permits for equipment and facilities that would be located within the approved site boundary, the Department recommends Council amend Condition 29 as follows:

> **Recommended Amended Condition 29:** Before beginning construction of each phase, the certificate holder shall~~:~~ ~~i. For Phase 1,~~ provide confirmation to the Department and Gilliam County that the construction contractor or other third party has obtained all necessary permits or approvals and shall provide to the Department proof of agreements between the certificate holder and the third party regarding access to the resources or services secured by the permits or approvals.

i. For Phase 2, submit to the Department and Gilliam County a list of third-party permits to be obtained or that have been obtained.
   a. The certificate holder shall submit to the Department copies of all obtained third party permits.
   b. Provide to the Department in semi-annual reports pursuant to OAR 345-026-0080, copies of compliance recordkeeping as required by third-party permits normally governed by the site certificate (e.g. Type I Administrative Review Conditional Use Permit for Temporary Batch Plant; Air Contaminant Discharge Permit for Batch Plant; Limited Water Use License; Water Right; Water Pollution Control Facilities Permit(s)).

Conclusions of Law

Based on the evidence in the record, and subject to compliance with the existing, recommended new and recommended amended conditions, the Department recommends that the Council find that the certificate holder would continue to satisfy the requirements of the Council's Organizational Expertise standard.

III.C. Structural Standard: OAR 345-022-0020

(1) Except for facilities described in sections (2) and (3), to issue a site certificate, the Council must find that:

(a) The applicant, through appropriate site-specific study, has adequately characterized the seismic hazard risk of the site;

(b) The applicant can design, engineer, and construct the facility to avoid dangers to human safety and the environment presented by seismic hazards affecting the site, as identified in subsection (1)(a);

(c) The applicant, through appropriate site-specific study, has adequately characterized the potential geological and soils hazards of the site and its vicinity that could, in the absence of a seismic event, adversely affect, or be aggravated by, the construction and operation of the proposed facility; and

(d) The applicant can design, engineer and construct the facility to avoid dangers to human safety and the environment presented by the hazards identified in subsection (c).

(2) The Council may not impose the Structural Standard in section (1) to approve or deny an application for an energy facility that would produce power from wind, solar or geothermal energy. However, the Council may, to the extent it determines appropriate, apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.
***[19]

Findings of Fact

As provided in section (1) above, the Structural Standard generally requires the Council to evaluate whether the certificate holder has adequately characterized the potential seismic, geological and soil hazards of the site, and whether the certificate holder can design, engineer and construct the facility to avoid dangers to human safety and the environment from these hazards. Pursuant to OAR 345-022-0020(2), the Council may issue a site certificate for a wind or solar energy facility without making findings regarding compliance with the Structural Standard; however, the Council may apply the requirements of the standard to impose site certificate conditions. The analysis area for the Structural Standard is the area within the site boundary.[20]

The Department notes that rulemaking conducted since the last Council decision on the Montague Wind Power Facility established new informational requirements within OAR Chapter 345, Division 21. Specifically, OAR 345-021-0010(h)(F)(i) and OAR 345-021-0010(h)(F)(ii) require the certificate holder to discuss the facility's disaster resilience, and ability to withstand impacts that may arise from future climate conditions. Also as part of the rule change, Council amended its mandatory condition requirements at OAR 345-025-0006(12)(13) and (14). Based in the recent changes, the Department recommends that Council amend Conditions 12, 13, and 14 as follows to be consistent with the mandatory condition language:

Recommended Amended Condition 12:
The certificate holder shall design, engineer and construct the facility to avoid dangers to human safety and the environment presented by seismic hazards affecting the site that are expected to result from all maximum probable seismic events. As used in this rule "seismic hazard" includes ground shaking, ground failure, landslide, liquefaction triggering and consequences (including flow failure, settlement buoyancy, and lateral spreading), cyclic softening of clays and silts, fault rupture, directivity effects and soil-structure interaction. ~~tsunami inundation, fault displacement and subsidence.~~

[19] OAR 345-022-0020(3) does not apply to this amendment because the facility, with proposed changes, would not meet the criteria for a special criteria facility as defined in ORS 469.373(1).
[20] Site boundary, as defined in OAR 345-001-0010(55), is the area within the perimeter of the facility, its related or supporting facilities, all temporary laydown and staging areas, and all micrositing corridors.

[AMD4]

Recommended Amended Condition 13:
The certificate holder shall notify the Department, the State Building Codes Division and the Department of Geology and Mineral Industries promptly if site investigations or trenching reveal that conditions in the foundation rocks differ significantly from those described in the application for a site certificate. After the Department receives the notice, the Council may require the certificate holder to consult with the Department of Geology and Mineral Industries and the Building Codes Division ~~and~~ to propose and implement corrective or mitigation actions.
[AMD4]

Recommended Amended Condition 14:
The certificate holder shall notify the Department, the State Building Codes Division and the Department of Geology and Mineral Industries promptly if shear zones, artesian aquifers, deformations or clastic dikes are found at or in the vicinity of the site. After the Department receives notice, the Council may require the certificate holder to consult with the Department of Geology and Mineral Industries and the Building Codes Division to propose and implement corrective or mitigation actions.
[AMD4]

Geological and Soil Stability

In September 2017, both the certificate holder and the certificate holder's geotechnical consultant, CH2M, of Portland, Oregon, met with the Oregon Department of Geology and Mineral Industries (DOGAMI) to discuss the geological consideration for Phase 2. During the consultation, general details of the analysis area, and the underlying geology and terrain were discussed. Discussion focused on foundation types and design criteria, as well as hazards related to ground shaking, landslide potential, and soil conditions at the site. CH2M conducted limited geological site reconnaissance of the proposed site boundary expansion and a detailed literature review of the regional geology, including an evaluation of published literature and geologic mapping.

CH2M conducted a limited geological site reconnaissance of the proposed expanded facility to observe the existing features at the site and look for evidence of past or potential geologic hazards. The site reconnaissance included evaluation of existing exposures of soil and rock (typically in road cuts, quarries, and drainages), classification of soils, and observation of typical slopes in the proposed turbine and transmission line areas.

A detailed literature review of the regional geology including the entire site boundary was also performed, including evaluation of published literature and geologic mapping.

As evaluated in the *Final Order on the ASC*, the approved facility (Phase 1) is located approximately 5 miles south of Arlington, Oregon, in Gilliam County, situated along the top

plateau of the Columbia Plateau Physiographic Provence. The Columbia Plateau Physiographic Provence consists of a large plateau underlain by a series of basalt flows.[21] The certificate holder explains that the top of plateau tends to be relatively flat to gently rolling, and that streams have dissected the plateau into steep-sided canyons. As proposed, Phase 2 would also be located atop the plateau of the Columbia Plateau Physiographic Provence, however, the proposed expansion would be concentrated along the small canyons and plateaus that border Rock Creek.[22]

Potential Seismic, Geological and Soil Hazards

OAR 345-022-0020(1)(a) requires the certificate holder to adequately characterize the seismic hazard risk of the site. In the *Final Order on the ASC*, Council evaluated three sources of potential seismic hazards; interpolate events at the interface between the Juan de Fuca and North American plates in the Cascadia Subduction Zone (CSZ), intraslab events in the CSZ, and potentially active crustal faults (crustal events) within the vicinity of the facility. In RFA4, Exhibit H, the certificate holder conducted updated mapping of active faults within the proposed amended facility site boundary, and within 50 miles of the proposed amended site boundary, and determined that the site boundary, including the proposed Phase 2 expansion, did not contain any active faults.

Based on the preliminary geotechnical studies, the certificate holder asserts that there are no potentially active faults within the proposed amended Facility site boundary. Figure H-2 of RFA4 identifies historic earthquakes and quaternary faults within approximately 50 miles of the facility site boundary, with proposed changes. The nearest late-Quaternary-age fault that presents the largest potential for seismic contribution to the Facility, as mapped in Figure H-2 is the Mill Creek fault. This is the only late-Quaternary-age fault (<15,000 years old) mapped within 50 miles of the Facility site boundary. Other middle-Quaternary-age faults (<750,000 years old) in the area include the Arlington-Shutler Butte fault and the Horse Heaven Hills fault.

As mentioned above, the facility, with proposed changes is proposed to be constructed on terrain that is primarily flat, underlain with shallow, stable bedrock. As such, the certificate holder states that the design of the facility is not expected to be prone to seismically induced landslides. Furthermore, the certificate holder explains that slopes within the site boundary are generally less than 5 percent, and that to avoid damage to turbines and transmission towers, during final design of Phase 2, turbines would not be sited along the crests of slopes. The certificate holder conducted a nonseismic hazard assessment and concluded that the facility could potentially be impacted by the following nonseismic hazards; slope instability and ensuing landslides, soil erosion, collapsed loess potential, and volcanic eruptions. However,

[21] MWPAPPDoc157 MWP Final Order, p. 114

[22] MWPAMD4Doc Exhibit H, p. H-3

based on geologic mapping and site reconnaissance observations, slopes within the facility site boundary are not considered to be susceptible to landslides.

Existing Condition 53 requires the certificate holder to design and construct the facility in accordance with the requirements of the 2007 Oregon Structural Specialty Code, and the 2006 International Building Code. As proposed, Phase 2 facility components will be designed for the Maximum Considered Earthquake (MConE) event, according to the 2012 *International Building Code* (IBC) as amended by the Oregon Structural Specialty Code. However, those codes are out of date. As described below, the Department recommends that Condition 53 be updated to reference current building codes that are in place at the time the Phase 2 facility goes to construction.

> **Recommended Amended Condition 5~~3~~2**:
> The certificate holder shall design and construct each phase of the facility in accordance with requirements of the current Oregon Structural Specialty Code ~~(OSSC 2007)~~ and ~~the 2006~~ International Building Code.

Design, Engineer and Construct Facility to Avoid Dangers to Human Safety from Seismic and Non-Seismic Hazards

The certificate holder has presented evidence in RFA4 that it can design, engineer, and construct the Phase 2 facility to avoid dangers to human safety and the environment in accordance with the Council's Structural Standard. In addition to information provided on the record of the original final order, and pre-construction geotechnical investigation of the Phase 1 site boundary, the Department recommends amendments to Condition 52 which will require the certificate holder to conduct additional pre-construction geotechnical investigations at the Phase 2 facility site. The Phase 2 site boundary is adjacent to the Phase 1 site, currently under construction, and which has been demonstrated to comply with the Structural Standard. The certificate holder has consulted with DOGAMI as part of both pre-construction compliance for Phase 1, and as part of the application for RFA4.

The Council also previously imposed Condition 52, which requires a pre-construction geotechnical report be conducted, conforming to the most current DOGAMI guidelines for conducting such studies accounting for the possibility that DOGAMI revises or updates its guidelines prior to the construction of Phase 2. The Department also recommends that Condition 52 require the certificate holder to provide the pre-construction geotechnical report to both the Department and to DOGAMI at least 90 days prior to~~p~~ ~~C~~construction to allow for both the Department and DOGAMI sufficient time to review and comment on the report. Furthermore, the Department recommends that Council amend the condition to include specific geotechnical work as proposed by the certificate holder.[23] As such, the Department recommends that the Council amend Condition 52 as follows:

[23] MWPAMD4 Exhibit H, p.H-6 2019-04-05

Recommended Amended Condition 52:

Before beginning construction of each phase of the facility ~~: i. Phase 1 of the facility,~~ the certificate holder shall conduct a site-specific geotechnical investigation and shall report its findings to the Oregon Department of Geology & Mineral Industries (DOGAMI) and the Department at least 60 days prior to beginning construction of the phase. The certificate holder shall conduct the geotechnical investigation after consultation with DOGAMI and in general accordance with the current DOGAMI guidelines~~open file report 00-04 "Guidelines for Engineering Geologic 24 Reports and Site-Specific Seismic Hazard Reports."...~~

~~[Final Order]~~

~~i. Phase 2 of the facility, the certificate holder must: conduct a site-specific geotechnical investigation and shall report its findings to the Oregon Department of Geology & Mineral Industries (DOGAMI) and the Department. The report must be submitted to the Department and DOGAMI at least 90 days prior to beginning construction of Phase 2, unless otherwise agreed upon by the Department.~~

~~The certificate holder shall conduct the geotechnical investigation in general accordance with current DOGAMI guidelines for engineering geologic reports, and site-specific seismic hazards, and shall include at least the following activities:~~

~~a. Reviewing available data from previous geotechnical explorations in the vicinity of the approved and proposed expanded site boundary.~~

~~b. Reviewing available geologic information from published sources.~~

~~c. Subsurface explorations (including soil borings, test pits, infiltration tests, and possible geophysical testing) at locations of proposed facility components.~~

~~d. Collecting additional soil samples for classification and laboratory testing and conducting laboratory tests on selected soil samples, if necessary to comply with DOGAMI guidelines.~~

[AMD4]

Disaster Resilience and Climate Change Adaption

The certificate holder states in Exhibit H that the facility, with proposed changes, will be designed to meet or exceed the minimum standards required by the design code and maintain core operations without interruption from a maximum-considered earthquake. Montague represents that the facility will be designed to be resilient after a potential disaster, such as a seismic event or an event related to future climate conditions, and that the Oregon Resilience Plan will be evaluated during final design of Facility components.[24]

[24] MWPAMD4 Exhibit H, p.H-14 2019-04-05

Furthermore, the certificate holder evaluated future climate change conditions, and indicates that future climate change conditions should not have a major impact on the geologic, geotechnical, and seismic conditions at the facility, with proposed changes. The certificate holder explains in Exhibit H of the RFA that, in general, increased rainfall intensity and long-term precipitation increases could lead to an increase in soil erosion compared to historical erosion and that existing ancient landslides could become reactivated by saturation that occurs as a result of increased annual precipitation. However, no ancient landslides were observed at the site during the preliminary geotechnical reconnaissance and studies, and in accordance with Condition 52, a pre-construction geotechnical investigation will be required prior to Phase 2 construction. Future drought conditions and any associated loss of vegetation could increase the potential for dust storms; the certificate holder will be required to revegetate areas of temporary impact, in accordance with Condition 92.

Risks associated with fire and inclement weather are discussed within this order in Sections III.M Public Services and Section III.P.1 Public Health and Safety Standards for Wind Energy Facilities. The Gilliam County Fire Services indicated that it is available to respond in the event of an emergency, and Condition 60 requires the implementation of a fire safety plan.

Subject to compliance with the existing and proposed amended conditions, the Department recommends that the Council find that the certificate holder has adequately characterized the potential geologic and soil hazards within the site boundary and its vicinity that could, in the absence of a seismic event, adversely affect or be aggravated by the construction and operation of the facility, and that the certificate holder could design, engineer, and construct the facility to avoid dangers to human safety presented by the identified hazards.

Conclusions of Law

Based on the foregoing analysis, and subject to the existing conditions in the site certificate, the Department recommends that the Council find that the facility, with proposed changes, continues to comply with the Council's Structural Standard.

III.D. Soil Protection: OAR 345-022-0022

> *To issue a site certificate, the Council must find that the design, construction and operation of the facility, taking into account mitigation, are not likely to result in a significant adverse impact to soils including, but not limited to, erosion and chemical factors such as salt deposition from cooling towers, land application of liquid effluent, and chemical spills.*

Findings of Fact

The Soil Protection standard requires the Council to find that, taking into account mitigation, the design, construction and operation of a facility are not likely to result in a significant

adverse impact to soils. The certificate holder's assessment of potential soil impacts and compliance with the Soil Protection standard are included in Exhibit I of RFA4. Additional information related to the proposed facility's potential effects to soils and proposed mitigation measures, as described by the certificate holder can be found in Exhibit G (Materials Analysis) and Exhibit K (Land Use) of RFA4.

The analysis area for the Soil Protection standard is the area within the site boundary. As proposed, Design Scenario A (the maximum turbine layout scenario) would have the most temporary disturbance (499.24 acres), and Design Scenario C, the solar array scenario, would have the most permanent disturbance (1,207.6 acres).

The Council addressed the Soil Protection Standard in the *Final Order on the ASC*, *Final Order on Amendment 1*, *Final Order on Amendment 2*, and *Final Order on Amendment 3*. In the *Final Order on the ASC*, the Council found that the design, construction, and operation of the facility (Phase 1), when taking into account mitigation, would not result in a significant adverse impact to soils. Concurrently, the Council adopted nine conditions (Conditions 38, 44, 55, 56, 80, 81, 82, 85, and 92) to control and mitigate potential adverse impacts to soils and to mitigate the risk of soil contamination during construction and operation.

Existing Soil Conditions and Land Use

The land within the proposed site boundary expansion has primarily been used for dryland wheat production or rangeland, with some small areas of non-disturbed land. All land within the proposed amendment is zoned as exclusive farm use. Within the proposed amendment site boundary expansion, approximately one square mile of land is irrigated, and consists of crop circles, with irrigation provided by central pivots.[25] A second, smaller area or irrigated land exists on the northern side of Old Tree Road. The proposed Phase 2 facility would avoid the irrigated farmland.

Existing soil conditions within the analysis area are described and shown in Exhibit I of RFA4. Table I-1 of Exhibit I describes the soils units, including the erosion potential, of the various soil types located within the analysis area.[26] The main soil types within Phase 2 are the (1) Ritzville Silt Loam; (2) Warden Silt Loam; and (3) Willis Silt Loam, the same soil type as in the Phase 1 site boundary. The certificate holder classified the soil types using Natural Resources Conservation Service (NRCS) Soil Survey Geographic Database and associated soil surveys for Gilliam County. Further, the certificate holder states that the soils types within the proposed site boundary expansion have a moderate to high potential for susceptibility to water and wind erosion. Recommended mitigation measures to reduce erosion risk are described below in this this section.

[25] MWPAMD4 Exhibit I, p.I-2 2019-04-05
[26] MWPAMD4 Exhibit I, p.I-3 2019-04-05

Council previously imposed Conditions 44, and 92 which require the site certificate holder to control and mitigate potential adverse impacts to soils and to also mitigate any risk of soil contamination during facility construction and operation. Because the requirements of Conditions 44, and 92 would continue to apply to Phase 2, the Department recommends that Council administratively amend each of the conditions as presented in Attachment A of this order.

Potential Adverse Impacts to Soil

The certificate holder's assessment of how the proposed amendment may impact soils is provided in Exhibit I of RFA4. Additional information related to potential impacts to soils, as described by the certificate holder, can also be found in Exhibit G, Exhibit H, and Exhibit K.

Potential Impacts during Construction

Construction of the proposed amended facility components under any of the three design scenarios would result in permanent soil disturbance to account for the footprint of permanent facility components including the wind turbines, permanent access roads, the battery storage system area, O&M building, and if selected, the solar array. Potential adverse impacts to soil within the analysis area (site boundary) could occurs as a result of construction and operation of the proposed amended facility, specifically soil erosion impacts from wind or rain during the construction of facility components requiring shallow excavations and the removal of surface vegetation. Potential construction impacts to soils would be relatively consistent across all three design scenarios. Although the construction of underground cables, roadways, the solar array, and turbine pads would all require shallow excavation and vegetation removal, the impacts would be temporary, and the exposure of the soils to wind and water erosion during construction would "prevail for a relatively limited time period until trenches are backfilled and pads are constructed."[27] Additionally, as required by the Habitat Mitigation Plan, areas temporarily disturbed during construction would be revegetated and restored after construction is complete, further reducing potential for erosion.

The certificate holder explains that the use of heavy machinery to deliver aggregate, concrete, water, turbine components, cranes, support structures, could cause localized soil compaction, resulting in temporary loss of agricultural productivity during construction.[28] In Section I.6.2 of Exhibits I, the certificate holder asserts that the agricultural productivity will be "restored" after construction. To ensure that any temporary loss of agricultural productivity will be restored after construction, the Department recommends that Council adopt the following Condition 92:

> **Recommended Amended Condition 92**:
> The certificate holder shall restore areas disturbed by facility construction but not occupied by permanent facility structures according to the methods and monitoring procedures described in the final Revegetation Plans for each phase of the facility, as approved by the Department in consultation with ODFW. The final Revegetation Plan shall be based on the draft plan ~~that is incorporated~~ provided in Attachment ~~F~~E in the *Final Order on Request for Amendment #~~3~~4*, and as amended from time to time. [AMD4]

Section III.H. of this Draft Proposed Order provides further explanation of how agricultural productivity will be restored, mitigation measures, and recommended conditions for the proposed amendment.

Potential Impacts during Operation

[27] MWPAMD4 Exhibit I, p.I-4 2019-04-05
[28] *Id.*

For all three design scenarios, the Department evaluated the likelihood of potential adverse impacts associated with the operation of Phase 2 components. Impacts associated with the solar array only apply to Design Scenario C. Potential impacts to soils may include erosion due to stormwater drainage from structures and concrete or gravel surfaces, or the repair or maintenance of underground facility components and inadvertent spills of small amounts of chemicals used at the facility may also potentially impact soils at the facility.[29] If constructed, the solar array may need to be washed occasionally; if so, the certificate holder states that the wash water would be allowed to evaporate and seep into the ground in accordance with a General Water Pollution Control Facilities Permit (WPCF) 1700-B, issued by DEQ. Council previously imposed Condition 87, which allows for blade-washing, subject to restrictions recommended by DEQ. The Department recommends that the Council amend Condition 87, to also include the washing of solar panels during facility operation, subject to the DEQ recommended restrictions, as an acceptable practice. WPCF permits are state-issued permits and would be under control of an EFSC-issued site certificate; however, the certificate holder states in Exhibit E that if a WPCF permit is necessary, it would be secured by a third-party contractor, which is allowed in accordance with OAR 345-022-022-0110(3) and (4). Additionally, Condition 80 is recommended to be updated to include a requirement for a topsoil management plan. This is a requirement of the Council's Land Use standard and OAR 660-033-0130(38)(f)(B).

Once constructed, operations of the amended facility would be confined to the gravel aprons surrounding each turbine site and the gravel roads, including any roads within and surrounding the wind turbine generators, the solar array, and the battery storage pads. Chemicals including lubricating oils, transformer coolant, and pesticides for weed control, would be used and stored on site. The use and storage of the aforementioned chemicals within the proposed amended site boundary would present a low risk to soils from accidental spills.

The certificate holder states that only if a lithium-ion battery system is chosen will the battery storage system contain chemicals that would present a risk to soils from accidental spills. Furthermore, not all lithium-ion battery systems require liquid coolant, but are typically air cooled. If a lithium ion battery storage system with a liquid cooling system is chosen, only the coolant, which is similar to automotive antifreeze, would contain potentially hazardous chemicals. If a lithium-ion battery storage system is selected (rather than a flow battery system), approximately ~~the replacement of~~ 7,600 gallons ~~per 1 MW~~ of liquid coolant would be needed for the 100 MW battery storage system~~contained and recirculated within each battery module~~.[30] The coolant would be replaced every seven years, corresponding with the replacement of the battery modules every seven years. The coolant would be contained within

[29] MWPAMD4 Exhibit I, p.I-6 2019-04-05

[30] In response to RAI "G-1" from the RAI-1 Responses, the certificate holder clarified that the represented gallons are the total, not per MW. In response to RAI "G-3" from the RAI-1 Responses, the certificate holder clarifies that Lithium-ion battery systems do not typically require liquid coolant, but rather are air cooled. However, there are some Lithium-ion battery systems that require coolant (like the Tesla Powerpack). MWPAMD4Doc Montague RAI-1 Response Transmittal and Table 2018-04-11

each battery module during operation, and when the modules are replaced, the coolant will be replaced and disposed of at a facility approved to handle such material.

Similarly, if a flow battery storage system is selected, 7,000 gallons per 1 MW of electrolyte solution would be contained within each battery storage module. However, as described in RFA Exhibit G, the electrolyte solution is nonhazardous and nontoxic, and nonflammable and nonexplosive. As such, flow batteries, if chosen, would not present a risk to soil contamination. The certificate holder explains that 7,000 gallons per 1 MW of electrolyte solution would be replaced every 20 years, and would be disposed of at a licensed facility that is both permitted and operated in compliance with applicable.

The certificate holder states in Exhibit I and U that the operation and maintenance of the battery storage facility will not likely affect soil; the certificate holder will conduct inspections of the battery storage systems, which are stored in leak-proof modules on concrete pads. As such, even if a spill of material within the battery storage system were to occur, it is unlikely that the spilled material would reach native soil. The following recommended condition the Department recommends Council impose would apply to any final design or configuration in which the certificate holder proposes to construct battery storage. The recommended condition, Condition 118 is as follows:

Recommended Condition 118:

During facility operation, the certificate holder shall~~:~~

~~a.~~ Conduct ~~monthly~~ inspections of the battery storage systems, in accordance with manufacturer specifications. The certificate holder shall maintain documentation of inspections and upon request, provide a summary of the inspections~~, including any corrective actions, and shall submit copies of inspection documentation in its annual report~~ to the Department.

~~b. Provide evidence in its annual report to the Department of active property coverage under its commercial business insurance from high loss-catastrophic events, including but not limited to, onsite fire or explosion~~. [AMD4]

The certificate holder indicates that in the unlikely event of an accidental hazardous materials release, any spill or release will be cleaned up according to applicable regulations. The Department recommends that the Council amend condition 80 to include a requirement that the certificate holder consult with DEQ, and if a Spill Prevention, Containment, and Contingency plan is determined to be necessary for Phase 2 operation. If DEQ determines that a SPCC is necessary, the certificate holder shall provide the Dd~~d~~epartment a copy of the SPCC. ~~If DEQ determines that a SPCC is not needed during Phase 2 operation, the certificate holder shall prepare and submit to the department for review and approval, an operational Spill Prevention and Management.~~

As such, the Department recommends that Council amend Conditions 87 and 80 as follows;

Recommended Amended Condition 87:
During facility operation, if blade-washing or washing of solar panels becomes necessary, the certificate holder shall ensure that there is no runoff of wash water from the site or discharges to surface waters, storm sewers or dry wells. The certificate holder shall not use acids, bases or metal brighteners with the wash water. The certificate holder may use biodegradable, phosphate-free cleaners sparingly.

Recommended Amended Condition 80:

i. The certificate holder shall conduct all construction work in compliance with an Erosion and Sediment Control Plan (ESCP) satisfactory to the Oregon Department of Environmental Quality and as required under the National Pollutant Discharge Elimination System (NPDES) Storm Water Discharge General Permit 1200-C. The certificate holder shall include in the ESCP any procedures necessary to meet local erosion and sediment control requirements or storm water management requirements. [AMD4]

ii.

a. Before beginning construction of Phase 2 solar array~~facility components~~, the certificate holder shall submit to the Department and Gilliam County Planning Director ~~for review and approval~~ a topsoil management plan consistent with ~~including how topsoil will be stripped, stockpiled, and clearly marked in order to maximize topsoil preservation and minimize erosion impacts. [~~OAR 660-033-0130(38)(f)(B)~~]~~. The topsoil management plan may be incorporated into the final Erosion and Sediment Control Plan, required under sub(iii) ~~or may be provided to the Department as a separate plan~~.

b. Prior to beginning facility operation, the certificate holder shall provide the Dd~~d~~epartment a copy of ~~a DEQ approved operational~~ the SPCC plan ~~,~~ if ~~determined to be~~ required by DEQ. ~~If an SPCC plan is not required by DEQ, the certificate holder shall prepare and submit to the department for review and approval an operational Spill Prevention and Management plan.~~

~~c. During operation, if blade washing and/or solar array washing becomes necessary, the certificate holder shall conduct all equipment washing in~~

~~compliance with a General Water Pollution Control Permit (WPCF) 1700-C, as issued by DEQ to the site certificate holder's third party contractor. A copy of the permit shall be provided to the Department prior to blade or solar array washing.~~ [AMD4]

Measures to Mitigate Potential Adverse Impacts to Soils

Erosion Concerns

As described above, construction of the proposed Phase 2 facility would result in permanent and unavoidable impacts to soils. However, there are a number of measures and best management practices (BMP's) that the certificate holder proposes to implement, to minimize impacts to soils, including erosion and soil compaction.

The proposed Phase 2 facility is subject to the requirements of the National Pollutant Discharge Elimination System Stormwater Discharge permit (NPDES 1200-C permit), which requires the development and implementation of an erosion and sediment control plan to minimize impacts to soils and the environment. NPDES 1200-C permits are federally-delegated from the U.S. Environmental Protection Agency to DEQ, and are therefore not included in or governed by the site certificate. During construction, the certificate holder would continue to be subject to the requirements of the NPDES 1200-C Construction Stormwater Permit. The NPDES 1200-C Permit Application was included as an attachment to Exhibit I, Attachment I-1, and has been reviewed by the Oregon Department of Environmental Quality (DEQ), and renewed through December 14, 2020. The NPDES 1200-C permit applies during construction, and is intended to regulate and manage stormwater. Compliance with the NPDES 1200-C permit and associated Erosion and Sediment Control Plan (ESCP), as approved by DEQ, would reduce erosion and soil impacts. The Department recommends that the Council find that existing site certificate Condition 80 shall continue to apply to the facility, including the proposed amendment. Condition 80 requires the certificate holder to conduct all construction work in compliance with the NPDES 1200-C permit and associated ESCP, satisfactory to the Department, and approved by DEQ.

During operation of the proposed amended facility, the certificate holder will continue to perform routine inspections on all roads, pads, and trenched areas, and will maintain or repair erosion and sediment control measures, in accordance with Council's previously adopted condition 85. Condition 85 requires the certificate holder to routinely inspect and maintain all roads, pads and trenched areas, while also maintaining or repairing erosion and sediment control measures.

In Section I.3 of RFA4 Exhibit I, the certificate holder states that Condition 44 of the Amended Site Certificate "duplicates the requirements of condition 92" and should be removed. The Department disagrees with this claim, and notes that the requirements of Condition 44 specifically apply to construction completion, whereas Condition 92 applies to facility operation. The Department recognizes that the requirements are similar, but the implementation phase of each condition is different. To control and mitigate potential impacts

during operation of the proposed amended facility, the Department recommends that Council amend Condition 85, requiring routine inspections and maintenance to all roads, pads, and trenched areas, and as necessary, maintenance or repair to erosion and sediment control measures during facility operation.

> **Recommended Amended Condition 85:**
> During facility operation, the certificate holder shall routinely inspect and maintain all facility components including roads, pads (including turbine and battery storage pad), solar array, and trenched areas and, as necessary, maintain or repair erosion and sediment control measures.

In Exhibit I, Section I.7, the certificate holder lists a number of mitigation measures and Best Management Practices (BMP's) that would be implemented to minimize impacts to soils.[31] As described by the certificate holder, those mitigation measures and BMP's include:

1. **Stabilized Construction Entrance/Exit**: Stabilized construction entrance/exits will be installed at newly constructed roads and construction laydown areas. The stabilized construction entrance/exits will be inspected and maintained for the duration of Facility life.
2. **Existing Vegetation:** To the extent practicable, existing vegetation will be preserved.
3. **Silt Fencing:** Silt fencing will be installed on contour downgradient of excavations, turbine footings, the operations and maintenance (O&M) building, and the substations. Silt fencing will also be installed around the perimeter of material stockpiles and construction staging areas.
4. **Straw Wattles:** Straw wattles may be installed to decrease the velocity of sheet flow stormwater along the downgradient edge of access roads adjacent to slopes or sensitive area.
5. **Mulching:** Mulch will be provided to immediately stabilize soil exposed as a result of land- disturbing activities and during the reseeding of disturbed areas.
6. **Stabilization Matting:** Jute matting, straw matting, or turf reinforcement matting may be used to stabilize slopes that could become exposed during installation of access roads, or to stabilize intermittent streams disturbed during construction of road crossings.
7. **Soil Binders and Tackifiers:** Soil binders and tackifiers may be used on exposed slopes to stabilize them until vegetation is established.
8. **Concrete Washout Area:** Concrete chutes and trucks will be washed out in dedicated areas near the turbine and solar panel support foundation construction areas. Concrete washout will be handled to prevent concrete washout water from leaving a

[31] MWPAMD4Doc3-4 Exhibits F - I, p. 88, 2017-11-22

localized area, and to ensure that the restored surface soil maintains positive infiltration.

9. **Stockpile Management:** Soil from excavations will be temporarily stockpiled and used as backfill at the completion of turbine footings. Stockpiled will have silt fencing as perimeter control and covered with a thick layer of mulch or plastic sheeting.

10. **Revegetation:** At the completion of land-disturbing activities for each phase of work, the site will be revegetated with an approved seed mix. The seed will be applied with mulch to protect the seeds as the grass establishes.

11. **Dams and Sediment Traps:** Check dams and sediment traps will be used during the construction of low-impact ford crossings or culvert installations to minimize downstream sedimentation during construction of the stream crossings.

12. **Pollutant Management:** During construction, source control measures will be implemented to reduce the potential of chemical pollution to surface water or groundwater during construction. Fuels and oils will be stored in a dedicated area, and construction vehicles will be fueled and maintained only in dedicated areas. The handling, storage, and disposal of materials will be consistent with federal, state, and local ordinances. Spill kits will be located on-site during construction and operation for use in the event of an accidental spill of hazardous materials.

13. **Topsoil Conservation:** High-value farmland soils will be protected and conserved in accordance with OAR 660-033-0130(37), as described in Exhibit K (Land Use). Where topsoil or other high-value farmland soils are present at the surface of road or trench excavations (particularly in irrigated agricultural areas), this material will be identified and segregated from the remainder of the soils to be excavated. Topsoil will be stockpiled separately from the additional excavation spoils (either adjacent to the trench or road, or hauled off to be stockpiled and stored elsewhere), and then placed back at the surface of trenches as the final stage of backfilling. NRCS policy and procedures on prime and unique farmlands are published in the *Federal Register*, Volume 43, Number 21, dated January 31, 1978.

14. **Runoff**: Pervious soils and gravel aprons will surround each turbine pedestal engine to minimize runoff. Any runoff will be directed to a roadside drainage ditch constructed with vegetative buffer strips, check dams, and other erosion control structures

15. **Soil Compaction**: Haul truck traffic will be kept to improved road surfaces to limit soil compaction and disturbance. Soil compaction will be mitigated by scarifying and reseeding affected areas after construction is completed.

16. **Dust Control**: Dust will be controlled during construction through water applications to disturbed ground, by graveling of permanent roadways, imposing construction and operation speed limits of 20 miles per hour, and rescheduling work around especially windy days. Additional measures to control dust are discussed in Exhibit K.

17. **Retirement**: Should the Facility be retired, structures will be removed to 3 feet below

the ground surface and soil surfaces will be reseeded (with the exception of the improved farm roads). Retirement requirements include strict implementation of erosion control measures when soil is exposed to prevent erosion. The retirement plan is described in Exhibit W.

In accordance with amended Condition 80, the certificate holder will conduct all construction work in compliance with the Erosion and Sediment Control Plan, which will include the BMPs listed above.

Potential Impacts Related to Spills

During construction and operation of Phase 2, small quantities of hazardous materials would be stored, used and generated onsite. If improperly handled, stored, or spilled, hazardous materials could adversely impact soils.

Existing Condition 55 requires the certificate holder to use any hazardous materials in a manner that is protective of human health and safety, safety and the environment and shall comply with all applicable local, state and federal environmental laws and regulations. The Department recommends that the Council amend Condition 55 to specify that storage of diesel fuel or gasoline shall not occur during facility operation, but should be allowed during construction. The Departments recommended amended Condition 55 language is as follows:

Recommended Amended Condition 55:

The certificate holder shall handle and transport hazardous materials used on the site in a manner that protects public health, safety and the environment and shall comply with all applicable local, state and federal environmental laws and regulations. The certificate holder shall not store diesel fuel or gasoline on the facility site during operations.

Condition 56 addresses the certificate holder's preparation for, and response to, spills and accidental releases of hazardous materials, and requires that spill kits be located on-site during construction and operation for the use in the event of an accidental spill of hazardous materials.[32]

Other Risks to Soils

If Design Scenario C is implemented, the certificate holder may occasionally wash the solar modules during facility operation. Water for solar panel washing is expected to be purchased from the City of Arlington or other permitted source. The applicant states that water used for washing would not contain cleaning solvents or detergents, and would not be heated. If used, the washwater would be allowed to evaporate and infiltrate into the ground, which is covered

[32] MWPAPPDoc157-5 MWPFinal Order 2010-09-10, p.59-60

by a WPCF 1700-B permit. The Certificate Holder's Exhibit E of the Amendment Request provides that "Montague's third-party contractor will conduct the washing activities and seek coverage under the WPCF-1700-B permit from DEQ following completion of construction and before initiating any washing activities."[33]

As discussed in section III.B. *Organizational Expertise*, the Department recommends that Council amend Condition 29, requiring the certificate holder to submit copies of all obtained third party permits, and also compliance recordkeeping as required by third-party permits normally governed by the site certificate. These requirements would be applied to a WPCF-1700-B permit, if one is required.

Monitoring Program

As stated above in the "Best Management Practices" section of the Soils analysis, the certificate holder has identified 17 BMP's that would be implemented to minimize impacts to soils. Existing Condition 80 will continue to ensure that the measures and BMP's described above are included in the ESCP and implemented in Phase 2 of the Montague facility.

Subject to compliance with existing conditions and the recommended amended conditions above, the Department recommends that the Council find the design, construction, and operation of the proposed amended facility would not be likely to result in a significant adverse impact to soils.

Conclusions of Law

Based on the foregoing recommended findings of fact and conclusions of law, and subject to compliance with the recommended site certificate conditions, the Department recommends that the Council find that the facility, with proposed changes, would comply with the Council's Soil Protection standard.

III.E. Land Use: OAR 345-022-0030

> *(1) To issue a site certificate, the Council must find that the proposed facility complies with the statewide planning goals adopted by the Land Conservation and Development Commission.*
>
> *(2) The Council shall find that a proposed facility complies with section (1) if:*
>
> > *(a) The certificate holder elects to obtain local land use approvals under ORS 469.504(1)(a) and the Council finds that the facility has received local land use*

[33] MWPAMD4Doc3-1 Exhibits A - E 2017-11-22, p. 135

approval under the acknowledged comprehensive plan and land use regulations of the affected local government; or

(b) The applicant elects to obtain a Council determination under ORS 469.504(1)(b) and the Council determines that:

(A) The proposed facility complies with applicable substantive criteria as described in section (3) and the facility complies with any Land Conservation and Development Commission administrative rules and goals and any land use statutes directly applicable to the facility under ORS 197.646(3);

(B) For a proposed facility that does not comply with one or more of the applicable substantive criteria as described in section (3), the facility otherwise complies with the statewide planning goals or an exception to any applicable statewide planning goal is justified under section (4); or

(C) For a proposed facility that the Council decides, under sections (3) or (6), to evaluate against the statewide planning goals, the proposed facility complies with the applicable statewide planning goals or that an exception to any applicable statewide planning goal is justified under section (4).

(3) As used in this rule, the "applicable substantive criteria" are criteria from the affected local government's acknowledged comprehensive plan and land use ordinances that are required by the statewide planning goals and that are in effect on the date the applicant submits the application. If the special advisory group recommends applicable substantive criteria, as described under OAR 345-021-0050, the Council shall apply them. If the special advisory group does not recommend applicable substantive criteria, the Council shall decide either to make its own determination of the applicable substantive criteria and apply them or to evaluate the proposed facility against the statewide planning goals.

(4) The Council may find goal compliance for a proposed facility that does not otherwise comply with one or more statewide planning goals by taking an exception to the applicable goal. Notwithstanding the requirements of ORS 197.732, the statewide planning goal pertaining to the exception process or any rules of the Land Conservation and Development Commission pertaining to the exception process, the Council may take an exception to a goal if the Council finds:

(a) The land subject to the exception is physically developed to the extent that the land is no longer available for uses allowed by the applicable goal;

(b) The land subject to the exception is irrevocably committed as described by the rules of the Land Conservation and Development Commission to uses not allowed by the applicable goal because existing adjacent uses and other relevant factors make uses allowed by the applicable goal impracticable; or

(c) The following standards are met:

(A) Reasons justify why the state policy embodied in the applicable goal should not apply;

(B) The significant environmental, economic, social and energy consequences anticipated as a result of the proposed facility have been identified and adverse impacts will be mitigated in accordance with rules of the Council applicable to the siting of the proposed facility; and

(C) The proposed facility is compatible with other adjacent uses or will be made compatible through measures designed to reduce adverse impacts.

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Findings of Fact

The Land Use standard requires the Council to find that a facility, with proposed changes, complies with the statewide planning goals adopted by the Land Conservation and Development Commission (LCDC). Under ORS 469.504(1)(b)(A), the Council may find compliance with statewide planning goals if the Council finds that a facility, with proposed changes, "complies with applicable substantive criteria from the affected local government's acknowledged comprehensive plan and land use regulations that are required by the statewide planning goals and in effect on the date the application is submitted." RFA4 was received on January 9, 2018.

The analysis area for potential land use impacts, as defined in the project order, is the area within and extending ½-mile from the proposed amended site boundary.
The facility, as approved and with proposed changes, is located within Gilliam County. Therefore, the governing body within Gilliam County is the Special Advisory Group (SAG).[34] Prior to previous approval of the site certificate, the Council appointed the Gilliam County Court as a SAG.

Proposed Facility Modifications

In RFA4, the certificate holder seeks flexibility to install any combination of wind and solar energy facility components as long as the total maximum output of Phase 2 would not exceed 202 MW. The certificate holder also requests to amend the site boundary and micrositing corridor, to include additional area and a separate micrositing corridor within the proposed amended site boundary for the proposed Phase 2 solar facility components.

Local Applicable Substantive Criteria

[34] Under ORS 469.480(1), the Council must designate as a Special Advisory Group the governing body of any local government within whose jurisdiction the facility is proposed or proposed changes of a facility would be located.

Under Oar 345-022-0030(2), the Council must apply the applicable substantive criteria recommended by the SAG. The applicable substantive criteria for which the certificate holder must comply are established in the Gilliam County Zoning and Land Development Ordinance (GCZO) and Gilliam County Comprehensive Plan (GCCP), as updated and amended in 2017. The application criteria from GCZO and goals and policies from GCCP are presented below in Table 1, *Gilliam County Applicable Substantive Criteria*.

Table 1: Gilliam County Applicable Substantive Criteria

Gilliam County Zoning and Land Development Ordinance (GCZO)	
Article 4 – Use Zones	
Section 4.020	Exclusive Farm Use
Section A	High Value Farmland
Section C	Planning Director Review
Section D	Conditional Uses Permitted
Section H	Specific Review Criteria
Section J	Property Development Standards
Article 7 – Conditional Uses	
Section 7.010	Authorization to Grant or Deny Conditional Uses
Section A	General Approval Criteria
Section 7.020	Standards Governing Conditional Uses
Section A	Conditional Uses, Generally
Section Q	Conditional Uses in Exclusive Farm Use Zones
Section T	Wind Power Generation Facility Siting Requirements
Article 8 – Supplementary Provisions	
Section 8.030	Clear Vision Areas
Section 8.040	Outdoor Lighting Standards
Section 8.050	Sign Regulations
Section 8.070	Projections from Buildings
Section 8.100	Off-Street Parking Requirements
Section A	Number of Parking Spaces Required
Section 8.140	Site Plan Review
Section A	Purpose
Section E	Detailed Plan

Table 1: Gilliam County Applicable Substantive Criteria

Section F	Outdoor Storage and Activities, if Permitted in the Zone
Section G	Topographic Information
Section H	Drainage Plan
Section I	Identification of Proposed Trash Storage Locations
Section J	Location of All Existing and Proposed Utilities
Section K	Elevation Drawings
Section L	Approval Standards
Section M	The Development Will Not Result In Traffic Volumes that Will Reduce the Performance Standard
Section N	The Development Will Not Adversely Affect Agricultural or Forestry Uses
Gilliam County Comprehensive Plan (GCCP)	
(Goal 2) Land Use Planning – Policy 7 (Goal 3) Agricultural Lands – Policy 3 (Goal 5) Natural Resources – Policies 2 and 12 (Goal 6) Air, Water, and Land Resources Quality – Policies 6 and 7 (Goal 8) Recreation – Policy 3 (Goal 12) Transportation – Policies 10 and 14 (Goal 13) Energy Conservation – Policy 3	

The analysis presented below includes the Department's evaluation of RFA4 Exhibit K and the certificate holder's compliance assessment with the applicable substantive criteria as presented above in Table 1*: Gilliam County Applicable Substantive Criteria*.

Gilliam County Zoning Ordinance

The certificate holder assesses the proposed Phase 2 facility components in Gilliam County as four separate land uses under the Gilliam County Zoning Ordinance (GCZO):

- Wind Power Generation Facilities (includes proposed Phase 2 wind turbines, power collection system, collector substation, SCADA system, meteorological towers, O&M building, transportation and access roads, temporary construction areas, battery storage system [proposed Phase 2 wind facility components])
- Commercial Utility Facilities for the Purpose of Generating Power for Public Use by Sale (includes proposed Phase 2 ~~solar~~ photovoltaic solar power generation facility including solar modules and other ~~and~~ accessory equipment like a battery storage system, trackers, posts, cabling, inverters, transformers, collection system, collection substation, ~~site~~ access ~~, private service~~ roads, perimeter fencing, and gates, and temporary construction areas ~~-~~[proposed Phase 2 solar facility components])
- Transportation Improvements on Rural Lands (includes proposed Phase 2 road construction and improvements associated with the solar array)

- Utility Facilities Necessary for Public Service (includes proposed Phase 2 230 kV transmission line segment)

The following analysis addresses the applicable substantive criteria identified in the GCZO for the land uses listed above.

GCZO Article 4 Use Zones

GCZO Section 4.020: EFU Exclusive Farm Use
In an EFU Zone, the following regulations shall apply:

A. High Value Farmland. Due to the limited amount of High Value Farmland in Gilliam County, the uses for High Value Farmland are not listed in this section. If a use permitted in Subsections B – G of this section is located on High Value Farmland, the requirements of this section and the requirements of OAR 660, Division 33, shall be used for the review.

GCZO Section 4.020(A) applies to permitted uses, as defined in GCZO Section 4.020(B) – (G), on high value farmland and requires compliance with applicable GCZO Section 4.020(B) – (G) and OAR 660-030-0130 provisions.

The certificate holder identifies that the proposed solar micrositing corridor includes 351.4 acres of high value farmland, pursuant to OAR 195.300(10)(f)(c), due to the Columbia Valley American Viticultural Area designation and certain elevation, slope, and aspect criteria. As described above, the proposed Phase 2 facility components are evaluated under four separate land uses, all of which are identified as permitted uses within EFU-zoned land pursuant to GCZO Section 4.020(C) and (D). Therefore, the Department recommends Council find that the requirements of GCZO Section 4.020(A) apply. The evaluation of compliance with GCZO Section 4.020(C) and (D) and OAR 660-030-0130 provisions is presented in this section of the order.

C. Planning Director Review. In the EFU zone, the following uses and their accessory uses may be permitted if determined by the Planning Director to satisfy the applicable criteria and provisions of law. Authorization of these uses does constitute a land use decision pursuant to ORS 197.015(10). Notice and an opportunity for a hearing must be provided in the manner described in Section 11.140. These uses may be referred to the Planning Commission for review if deemed appropriate by the Planning Director. (emphasis added)

23. Transportation improvements on rural lands allowed by OAR 660-012-0065.

GCZO Section 4.020(C)(23) authorizes transportation improvements on rural lands on high value farmland when the improvements meet an applicable OAR 660-012-0065 definition and demonstrates compliance with applicable OAR 660-012-0065 provisions.

As described in RFA4 Exhibit K, proposed Phase 2 facility components would include transportation improvements on both public and private roads in high value farmland. The certificate holder asserts that proposed public road improvements would meet the "accessory transportation improvements" definition under OAR 660-012-0065(2) as "transportation improvements that are incidental to a land use to provide safe and efficient access to the use." Pursuant to OAR 660-012-0065(4), accessory transportation improvements to a commercial utility facility necessary for public service shall be subject to the same procedures, standards and requirements applicable to the use to which they are the accessory. Based on this reasoning, the certificate holder applies the applicable substantive criteria for a commercial utility facility necessary for public service to the proposed public road improvements. As presented below, in the evaluation of GCZO Section 4.020(D), the Department recommends Council find that the proposed Phase 2 facility components considered under the commercial utility facility necessary for public service land use category (i.e. proposed Phase 2 solar facility components) satisfies the applicable substantive criteria.

The certificate holder asserts that based on the OAR 660-033-0130(37) definition of a wind power generation facility, which includes new or expanded private roads constructed to serve the facility, proposed private road improvements should be evaluated as an accessory use to the proposed Phase 2 wind energy generating components. Based on this reasoning, the certificate holder applies the applicable substantive criteria for a wind energy generating facility to proposed private road improvements. As presented below, in the evaluation of GCZO Section 4.020(D), the Department recommends Council find that the proposed Phase 2 facility components considered under the wind power generation facility land use category satisfies the applicable substantive criteria.

24. Utility facilities necessary for public service

GCZO Section 4.020(C)(24) authorizes utility facilities necessary for public service on high value farmland.

As described in RFA4 Exhibit K, proposed Phase 2 facility components would include an approximately 3-mile 230 kV transmission line segment that would connect the proposed Phase 2 collector substation to the Phase 1 substation, and ultimately to Bonneville Power Administration's (BPA) Slatt Substation. The Council has historically and consistently evaluated transmission lines associated with generation facilities as "utility facilities necessary for public service," a use permitted on EFU-zoned land pursuant to ORS 215.283(1)(c) subject only to either ORS 215.275 or 215.274 depending on the type of line. The certificate holder evaluates the proposed 3-mile 230 kV transmission line as an "associated transmission line" under ORS 215.274, as evaluated in Section III.E.2 below.

The Department recommends Council find that the proposed Phase 2 230 kV transmission line is a utility facility necessary for public service and that it is a permitted use in EFU-zoned land, subject to the evaluation criteria of ORS 215.274 presented below.

GCZO Section 4.020(D): Conditional Uses Permitted. In the EFU Zone, the following uses and their accessory uses may be permitted, either by a Type I or a Type II Conditional Use Permit to satisfy the applicable criteria and procedures set forth in Section 7.010. The appropriate review criteria are identified for each use.

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11. Commercial utility facilities for the purpose of generating power for public use by sale, not including wind power generating facilities. A power generation facility not located on high-value farmland shall not preclude more than 20 acres from use as a commercial agricultural enterprise. Approval of a use pursuant to this subsection is subject to the review criteria of Section 4.020.H, and any other applicable criteria or provisions of law.

GCZO Section 4.020(D)(11) identifies "commercial utility facilities for the purposes of generating power for public use by sale" (commercial utility facilities) as a permitted conditional use in an EFU zone. A commercial utility facility includes a photovoltaic solar power generation facility, which in turn includes solar modules and other accessory components as defined in OAR 660-033-130(38)(f): a photovoltaic solar power generation facility "includes, but is not limited to, * * * storage devices and other components." The battery storage system is an accessory component to the facility, whether it supports wind, wind/solar, or solar power generation and is permitted under GCZO 4.020(D)(11) and GCZO 4.020(D)(20) (below).

GCZO Section 4.020(D)(11) limits commercial utility facilities to be located on non-high value farmland from precluding more than 20 acres for use as a commercial agricultural enterprise; and, imposes GCZO Section 4.020(H) and Section 7.010 review criteria. ~~The proposed Phase 2 solar facility components are evaluated under the "commercial utility facilities for the purpose of generating power for public use by sale" land use category.~~ The proposed Phase 2 solar facility components could ~~would~~ preclude up to 351.3 acres of high value farmland from use as a commercial agricultural enterprise.[35] Therefore, because the proposed Phase 2 solar facility components may ~~would~~ preclude more than 12 ~~20~~ acres of high value farmland or 20 acres of arable land from use as a commercial agricultural enterprise, the certificate holder would not comply with the GCZO Section 4.020(D)(11) acreage limitation and a Goal 3 exception would be needed. In RFA4, the certificate holder requests Council review and approval of a Goal 3 exception, as evaluated in Section III.E.3 below.

The evaluation of GCZO Section 4.020(H) and Section 7.010, which apply per GCZO Section 4.020(D)(11), is presented under review of these criteria below.

20. Wind Power Generation Facilities as commercial utility facilities for the purpose of generating power for public use by sale.

[35] MWPAMD4. Certificate Holder Responses to Request for Additional Information – Batch 3. 2018-06-15.

GCZO Section 4.020(D)(20) identifies "wind power generation facilities.." as a permitted conditional use in an EFU zone and imposes GCZO Section 7.010 review criteria. Proposed Phase 2 facility components would include wind power generation facility components, consistent with the OAR 660-033-0130(37) definition. Proposed wind power generation facility components would include wind turbines, meteorological towers, electrical cable collection systems, new or expanded private roads, O&M building, temporary laydown areas and other necessary appurtenances. The certificate argues that the proposed battery storage system would not be built but for the facility and therefore should be considered a "necessary appurtenance," a term used in the OAR 660-033-0130(37) definition, to the proposed Phase 2 wind facility components. In the absence of a specific ~~more suitable~~ land use category for a battery storage system within the GCZO, the Department recommends Council consider the Phase 2 battery storage also as an accessory component or necessary appurtenance ~~apply the~~ under the land use and applicable criteria for wind power generation facilities ~~to the proposed Phase 2 battery storage~~.[36]

The evaluation of GCZO Section 7.010, which applies per GCZO Section 4.020(D)(20), is presented under review of this criteria below.

GCZO SECTION 4.020(H) EFU SPECIFIC REVIEW CRITERIA

1. *The use may be approved only where the County finds that the use will not:*

   a. *Force a significant change in accepted farm or forest practices on surrounding lands devoted to farm or forest use; or*
   b. *Significantly increase the cost of accepted farm or forest practices on surrounding lands devoted to farm or forest use.*

GCZO Section 4.020(H) establishes review criteria for specific conditional uses within EFU zoned land, including commercial utility facilities.[37] The review criteria include a demonstration that the proposed use would not force a significant change or significantly increase the cost of accepted farm or forest practices on surrounding lands devoted to farm or forest use.[38]

[36] Certificate holder maintains that a battery storage system may be permitted as a "utility facility necessary for public service" under GZCO 4.020(C)(24) like a substation. However, because the battery storage system will be a related or supporting facility, certificate holder seeks approval for the system as accessory to the wind components, the solar components, or both.

[37] GCZO Section 4.020(D)(20) *Wind Power Generation Facilities* does not identify GCZO Section 4.020(H) as applicable; therefore, GCZO Section 4.020(H) does not apply to the proposed Phase 2 wind facility components. However, as noted in RFA4 Exhibit K, GCZO Section 4.020(H) is mirrored in OAR 660-033-0130(37); therefore, the evaluation of potential impacts of proposed Phase 2 wind facility components is appropriately evaluated in Section III.E.2 of this order.

[38] GCZO Section 4.020(H) review criteria are taken directly from ORS 215.296. Pursuant to ORS 215.203(2)(a) "farm use" means "the current employment of land for the primary purpose of obtaining a profit in money by raising, harvesting and selling crops.."

As presented above, the proposed Phase 2 solar facility components are evaluated as a commercial utility facility and therefore GCZO Section 4.020(H) applies. Because the proposed amended site boundary is located entirely within EFU-zone, there would be no potential impacts to forest lands.

Accepted Farm Practices

In RFA4, the certificate holder defines the surrounding lands as the area within and extending ½-mile of the proposed amended site boundary. The Department notes that, typically, for GCZO Section 4.020(H), the evaluation of potential impacts to farm practices on surrounding lands applies to lands outside of the site boundary – as the impacts evaluated under GCZO Section 4.020(D)(11) apply to the area within the site boundary. The Department recommends Council evaluate the certificate holder's compliance with GCZO Section 4.020(H) based on potential impacts to lands extending ½-mile outside of the site boundary so as not to duplicate the evaluation under GCZO Section 4.020(D)(11).

The certificate holder describes that agricultural use on surrounding lands includes dryland wheat farming with limited irrigated farming and some grazing on rangeland (no facility components are proposed on irrigated farmland). Dryland wheat crop land is periodically left fallow (plowed but not planted) between seasons. Accepted farm practices on surrounding lands devoted to farm use, verified during Phase 2 surveys conducted between April 3, 2017, and May 31, 2017, include soil preparation in the spring and fall, sowing, fertilizing, pest and weed management, and harvesting.

Potential Impacts to Accepted Farm Practices

In RFA4, potential impacts to accepted farm practices from construction of the proposed Phase 2 solar facility components, as identified in RFA4 Exhibit K, ~~would~~ could include:

- Temporary, but minimal, crop yield interference from weed dispersal during ground disturbing activities
- Changes to access points for routes to farm fields to accommodate construction activities
- Delays in delivery of farm products or increased time to access farm fields due to increased truck traffic on Oregon Highway 19 (OR 19)
- Soil erosion and compaction from ground disturbance
- Decreased crop yield productivity if construction disturbance occurs prior to harvest

Potential impacts to accepted farm practices from operation of the proposed Phase 2 solar facility components, as identified in RFA4 Exhibit K, ~~would~~ could include:

- Permanent changes to access points or routes to farm fields

- Modified planting and harvest practices to avoid Phase 2 components
- Varying application of fertilizers and other products to crops

Council previously imposed several conditions that would minimize potential impacts to accepted farm practices within the surrounding area. Previously imposed conditions are summarized below:

- Condition 38 requires that, during construction and operation, the certificate holder consult with area landowners and lessees and implement measures to reduce or avoid adverse impacts to farm practices
- Condition 39 requires that the certificate holder design and construct the facility to minimize impacts to farm practices
- Condition 43 requires that, during construction and operation, a Weed Control Plan be implemented
- Condition 73 requires that, during construction, traffic control measures be implemented and notification of activities and schedule be provided to adjacent landowners
- Condition 74 requires that, during construction, County roads not be used for equipment and machinery parking
- Condition 80 requires that, during construction, erosion and sediment control measures be implemented to minimize erosion and sediment impacts to adjacent land use
- Condition 81 requires that, during construction, truck traffic be limited to improved road surfaces, to the extent practicable, to minimize unnecessary soil compaction
- Condition 82 requires that, during construction, best management practices (such as watering) be implemented for dust control
- Condition 92 requires that, following completion of construction, temporarily impacted agricultural areas be revegetated

The certificate holder proposes to amend Condition 38 and 39, as presented in RFA4 Exhibit K, to minimize potential adverse impacts to ongoing dryland agricultural operations. The Department recommends Council amend Conditions 38 and 39, based on the certificate holder's representations, but following the condition format outlined in Section II.B. *Recommended Site Certificate and Condition Format* of this order, as presented below:

Recommended Amended Condition 38: The certificate holder shall:

i. C~~c~~onsult with area landowners and lessees during construction and operation of Phase 1 of the facility and ~~shall~~ implement measures to reduce and avoid any adverse impacts to farm practices on surrounding lands and to avoid any increase in farming costs. [Final Order on ASC]

ii. Consult with area landowners and lessees during construction and operation of Phase 2 of the facility and implement measures to reduce and avoid any adverse impacts to ongoing farm practices on surrounding lands, including coordination with the landowner of the solar micrositing area to ensure that the final solar array layout

does not prevent the landowner from maximizing agricultural production on the land not occupied by the solar array.
[AMD4]

Recommended Amended Condition 39: The certificate holder shall design and construct~~:~~

~~i. Phase 1 of~~ the facility ~~using the minimum land area necessary for safe construction and operation. The certificate holder shall locate access roads and temporary construction laydown and staging areas to minimize disturbance of farming practices and, wherever feasible, shall place turbines and transmission interconnection lines along the margins of cultivated areas to reduce the potential for conflict with farm operations. [Final Order on ASC]~~

~~ii. Phase 2 of~~ the facility to minimize the permanent impacts to agricultural land, including to the extent practicable, using existing access roads, co-locating facilities, reducing road and transmission line/collector line lengths, and designing facility components to allow ongoing access to agricultural fields.
[AMD4]

The certificate holder argues that the proposed Phase 2 solar facility components would not force a significant change in accepted farming practices because it would not change or preclude access to farm operations on surrounding lands or landowners, would not necessitate relocating any existing access routes or farm infrastructure, and would not result in changes to the practices for planting, irrigating, fertilizing, or harvesting. The Department agrees that based on the impacts described above, which appear to be largely specific to the proposed solar micrositing corridor – area within the site boundary – that potential impacts to farm practices on surrounding lands would not likely be significant. Based on compliance with existing and recommended amended conditions, the Department recommends Council find that the certificate holder would satisfy the GCZO Section 4.020(H)(1)(a) review criteria.

Potential Impacts to Cost of Accepted Farm Practices

The proposed Phase 2 solar facility components would not require relocation of any access routes or farm infrastructure, and would not result in changes to the practices for planting, irrigating, fertilizing, or harvesting on surrounding land devoted to farm use. Therefore, the certificate holder argues that the proposed Phase 2 solar facility components would not significantly increase the cost of accepted farm practices on surrounding lands devoted to farm use. While the proposed Phase 2 solar facility components would preclude up to 1,189 acres of arable land from use as a commercial agricultural operation, it would not increase the cost of accepted farm practices. Therefore, the Department recommends Council find that the proposed Phase 2 solar facility components would satisfy the GCZO Section 4.020(H)(1)(b) review criteria.

GCZO SECTION 4.020(J): Property Development Standards

PROPERTY DEVELOPMENT STANDARDS. In the EFU Zone, the following standards apply to residential and nonresidential development.

1. Building Height. No limitations.

2. Setbacks

a. The front and rear yard setbacks from the property line shall be 25 feet.

b. The side yard setbacks from the property line shall be 25 feet.

GCZO Section 4.020(J) establishes setback standards for front, rear and side yards for residential and nonresidential development within EFU zoned land. As described in GCZO Article 4, nonresidential development includes new construction and substantial improvement of any commercial, industrial or other nonresidential structure.

Proposed Phase 2 facility components would include nonresidential structures – the proposed solar facility components, substation, O&M building and battery storage system. While the certificate holder references the Council's previous application of GCZO Section 4.020(J) to only the previously approved O&M building, the Department recommends Council apply GCZO Section 4.020(J) to the above described proposed Phase 2 facility components and amend Condition 42 as follows:

Recommended Amended Condition 42: The certificate holder shall construct all facility components in compliance with the following setback requirements:

(a) All facility components must be at least 3,520 feet from the property line of properties zoned residential use or designated in the Gilliam County Comprehensive Plan as residential.

(b) Where (a) does not apply, the certificate holder shall maintain a minimum distance of 110-percent of maximum blade tip height, measured from the centerline of the turbine tower to the nearest edge of any public road right-of-way. The certificate holder shall assume a minimum right-of-way width of 60 feet.

(c) Where (a) does not apply, the certificate holder shall maintain a minimum distance of 1,320 feet, measured from the centerline of the turbine tower to the center of the nearest residence existing at the time of tower construction.

(d) Where (a) does not apply, the certificate holder shall maintain a minimum distance of 110-percent of maximum blade tip height, measured from the centerline of the turbine tower to the nearest boundary of the certificate holder's lease area.

(e) The certificate holder shall maintain a minimum distance of 250 feet measured from the center line of each turbine tower to the nearest edge of any railroad right-of-way or electrical substation.

(f) The certificate holder shall maintain a minimum distance of 250 feet measured from the center line of each meteorological tower to the nearest edge of any public road right-of-way or railroad right-of-way, the nearest boundary of the certificate holder's lease area or the nearest electrical substation.

(g) The certificate holder shall maintain a minimum distance of 50 feet measured from any facility O&M building to the nearest edge of any public road right-of-way or railroad right-of-way or the nearest boundary of the certificate holder's lease area.

(h) The certificate holder shall maintain a minimum distance of 50 feet measured from any substation to the nearest edge of any public road right-of-way or railroad right-of-way or the nearest boundary of the certificate holder's electrical substation easement or, if there is no easement, the nearest boundary of the certificate holder's lease area.

(i) Where (a) does not apply, the certificate holder shall maintain a minimum of 110 percent of maximum blade tip height, measured from the centerline of the turbine tower from any overhead utility line. [Amendment #1]

(j) Where (a) does not apply, the certificate holder shall maintain a minimum of 150 percent of maximum turbine height from blade tip height, measured from the centerline of the turbine tower from federal transmission lines, unless the affected parties agree otherwise. [Amendment #1]

(k) The certificate holder shall maintain a minimum distance of 25 feet measured from the fence line of the solar array to the nearest property line. [AMD4]

(l) The certificate holder shall maintain a minimum distance of 25 feet measured from the front, rear and side yard of the battery storage system site to the nearest property line. [AMD4]

(m) For Phase 2 of the facility, all turbines must be setback a minimum distance of 656 feet (200 meters), measured from the centerline of the turbine tower to the nearest edge of the breaks of Rock Creek Canyon.

Based on compliance with recommended amended Condition 42, the Department recommends Council find that the proposed Phase 2 facility components, evaluated as nonresidential development, would satisfy the GCZO Section 4.020(J) property development standards.

Article 7: Conditional Uses

GCZO Section 7.010: Authorization to Grant or Deny Conditional Uses

GCZO Section 7.010 establishes general approval criteria and conditions that may be applied to conditional uses, regardless of the zone.

GCZO SECTION 7.010(A): GENERAL APPROVAL CRITERIA AND CONDITIONS

1. *In addition to criteria, standards and conditions that may be set forth in a specific Zone, this Article, or other regulations applicable to a specific Conditional Use shall not be approved or permitted unless the following criteria are met. A Conditional Use may be approved on the Condition or Conditions that the applicant obtain and maintain compliance with other permits and approvals required.*

    a. *The proposed use shall be in compliance with the applicable Comprehensive Plan designation and policies.*

GCZO Section 7.010(A)(1)(a) requires a demonstration that a proposed use would be in compliance with the applicable designations and policies of the GCCP. The evaluation of applicable GCCP goals and policies is presented below, where the Department recommends that the Council find that the proposed Phase 2 facility components would be consistent with the GCCP. Therefore, the Department recommends Council find that the proposed Phase 2 facility components would satisfy the GCZO 7.010(A)(1)(a) general approval criteria.

b. As applicable, sewage and/or solid waste disposal methods shall be provided in compliance with applicable local, State and Federal regulations.

GCZO Section 7.010(A)(1)(b) requires a demonstration that sewage and/or solid waste disposal methods of a proposed use would comply with applicable local, State and Federal regulations.

Construction and operation of the proposed Phase 2 facility components would generate sanitary and solid waste. As described in RFA4 Exhibit U, onsite sanitary and solid waste generated during construction and operation would be disposed of offsite by a licensed contractor. Council previously imposed Condition 28 requiring that the certificate holder and its contractors obtain all necessary federal, state and local permits. Therefore, the Department recommends that based on compliance with Condition 28, the certificate holder would satisfy the GCZO Section 7.010(A)(1)(b) general approval criteria.

c. Proposal shall be found to be in compliance or conditioned upon compliance with applicable air and noise pollution standards.

GCZO Section 7.010(A)(1)(c) requires a demonstration that a proposed use would comply, or with conditions would comply, with applicable air and noise pollution standards.

Applicable air and noise pollution standards are established in Oregon Department of Environmental Quality's (ODEQ) OAR 340-208-0210, *Visible Emissions and Nuisance Requirements* and 340-035-0035, *Noise Control Requirements*, respectively. ODEQ's visible emissions standard requires implementation of reasonable precautions to prevent particulate matter from becoming airborne; ODEQ's noise control regulation requires compliance with an ambient degradation and maximum allowable noise standard.

The proposed Phase 2 facility components would generate particulate matter (dust) emissions during ground disturbing construction activities. Council previously imposed Condition 82 requiring that, during construction, the certificate holder implement best management practices, such as watering roads and disturbed soil areas, to minimize visible emissions, consistent with OAR 340-208-0210. Condition 82 would continue to apply during construction of Phase 2 and would support OAR 340-208-0210 compliance. Because proposed Phase 2 operation would not include ground disturbing activities, particulate matter emissions would not be expected and therefore OAR 340-208-0210 would not apply.

The proposed Phase 2 facility components would generate noise during construction and operation. Construction related noise is exempt from OAR 340-035-0035. Operational noise and compliance with OAR 340-035-0035 is evaluated in Section III.Q.1. *Noise Control Regulation*, where the Department recommends Council find that the certificate holder would, based on compliance with recommended amended conditions, comply with OAR 340-035-0035.

Based on the analysis described above, the Department recommends Council find that the proposed Phase 2 facility components would satisfy the GCZO Section 7.010(A)(1)(c) general approval criteria.

> *d. Required access shall be legally established, available, and adequate to serve the proposed use or provisions to provide such evident.*

GCZO Section 7.010(A)(1)(d) requires a demonstration that access necessary to serve the proposed use be legally established, available and adequate. The Department interprets this condition of approval as applicable to: 1) proposed Phase 2 new and improved roads and 2) the site of proposed Phase 2 facility components, as access to both would be necessary to serve the proposed use.

Council previously imposed Conditions 70 and 71 requiring that, prior to construction, the certificate holder obtain all necessary permits and approval for road approach, crossing and modifications from Gilliam County Road Department and Oregon Department of Transportation. These conditions would apply to proposed Phase 2 new roads and road improvements.

Council previously imposed Condition 5, which mirrors OAR 345-025-0006(5), and requires the certificate holder to demonstrate that it is has obtained construction rights on all or parts of the site prior to construction.[39] This condition would apply to proposed Phase 2 wind and solar facility components.

Based on compliance with existing conditions, the Department recommends Council find that the certificate holder would satisfy the GCZO Section 7.010(A)(1)(d) general approval criteria.

> *e. Public services deemed necessary shall be available or provisions for such provided and no use shall be approved which is found to exceed the carrying capacities of affected public services unless there are provisions to bring such capacities up to the need.*

GCZO Section 7.010(A)(1)(e) requires a demonstration that a proposed use would not exceed the carrying capacities of public service necessary for the use. This general approval criteria

[39] OAR 345-025-0006(5) allows flexibility for wind facilities and authorizes construction, if prior to obtaining rights on all of the site, construction rights have only been obtained on parts of the sites.

aligns with the Council's Public Services standard at OAR 345-022-0110 and is evaluated in Section III.M. *Public Services* of this order.

As evaluated in Section III.M. *Public Services* of this order, the Department recommends Council find that construction and operation of the proposed Phase 2 facility components would not exceed the carry capacities of public service providers to provide services, including sewers and sewage treatment, water, storm water drainage, solid waste management, housing, traffic safety, police and fire protection, health care and schools. Therefore, the Department recommends Council find that the proposed Phase 2 facility components would satisfy the GCZO Section 7.010(A)(1)(e) general approval criteria.

f. Proposal shall be in compliance with the applicable standards and limitations of the primary and combining zone as may be applicable.

GCZO Section 7.010(A)(1)(f) requires a demonstration that a proposed use be in compliance with applicable standards and limitations of the applicable primary and combining zones. The certificate holder represents that the proposed amended site boundary would be entirely within EFU-zoned land and would not be located within a designated combining zone. As identified above, the proposed Phase 2 solar facility components would not satisfy GCZO Section 4.020(D)(11) or 4.020(H)(1)(a); however, the certificate holder requests Council review of a Goal 3 exception. As presented in Section III.E.3, the Department recommends Council grant a Goal 3 exception, which effectively provides an exception from Section 4.020(D)(11) and 4.020(H)(1)(a).

g. No use shall be approved which is found to have a significant adverse impact on resource-carrying capacities unless there are provisions for mitigating such impact.

GCZO Section 7.010(A)(1)(g) requires a demonstration that a proposed use would not have a significant adverse impact on carrying capacities of resources, such as air, soil, water supply and waterbodies. As presented in Sections III.D. *Soil Protection*, III.F. *Protected Areas*, III.H. *Fish and Wildlife Habitat*, and III.Q.3. *Water Rights*, proposed Phase 2 facility components would not result in significant adverse impacts to the carrying capacities of natural resources. Therefore, based on the analysis and reasoning presented in the referenced sections, the Department recommends Council find that the proposed Phase 2 facility components would satisfy the GCZO Section 7.010(A)(1)(g) general approval criteria.

h. No use shall be approved which is found to exceed the carrying capacities of affected public services and facilities.

GCZO Section 7.010(A)(1)(h) requires a demonstration that a proposed use would not exceed the carrying capacities of public services, such as police protection, fire protection, housing, schools, hospitals, traffic safety, stormwater infrastructure, wastewater treatment, water supply, necessary for the use. As presented in Sections III.M. *Public Services* of this order,

proposed Phase 2 facility components would not result in significant adverse impacts the carrying capacities of affected public services. Therefore, based on the analysis and reasoning presented in the referenced section, the Department recommends Council find that the proposed Phase 2 facility components would satisfy the GCZO Section 7.010(A)(1)(h) general approval criteria.

i. All required State and Federal permits or approvals have been obtained or will be as a condition of approval.

GCZO Section 7.010(A)(1)(i) requires a demonstration that all required State and Federal permits or approvals have been or will be obtained for the proposed use. RFA4 Exhibit E presents State and Federal permits and approval required for the construction and operation of proposed Phase 2 facility components. Council previously imposed Conditions 28 and 29 requiring that the certificate holder provide copies of all necessary permits, including third-party permits, prior to construction. Based on compliance with these conditions, the Department recommends Council find that the proposed Phase 2 facility components would satisfy the GCZO Section 7.010(A)(1)(i) general approval criteria.

2. In addition to specific standards and/or conditions set forth by the applicable zone, this article or some other applicable regulations, other conditions may be imposed that are determined necessary to avoid a detrimental impact, and to otherwise protect the best interests of the surrounding area and the County as a whole. Such conditions may include, but are not limited to, the following:

a. Limiting the manner in which the use is conducted including restricting the time an activity may take place and restraints to minimize such environmental effects as noise, vibration, air pollution, glare and odor.
b. Establishing a special setback or other open space or lot area or dimension.
c. Limiting the height, size or location of a building or other structure.
d. Designating the size, number, improvements, location and nature of vehicle access points and parking or loading areas.
e. Limiting or otherwise designating the number, size, location, height, and lighting of signs and outdoor lighting.
f. Requiring diking, screening, fencing, landscaping or another facility to protect adjacent or nearby property and designating standards for its installation and maintenance.
g. Protecting and preserving existing trees, vegetation, water resources, wildlife habitat or other significant natural resources.
h. Limiting the term of the Conditional Use Permit to a specific time.
i. Requiring necessary on-site or off-site improvements and maintenance.
j. Requiring the holder of a Conditional Use Permit to obtain review, renewal, or reapplication approval of the permit in the event that there is an increase in impact from the use on public facilities beyond that which was projected at the time of initial approval.

GCZO Section 7.010(A)(2) describes conditions that "may be imposed… [if] determined necessary to avoid a detrimental impact, and to otherwise protect the best interests of the surrounding area and the County as a whole." The ordinance lists discretionary conditions and does not contain substantive standards. During review of pRFA4, the Department consulted with the Gilliam County Planning Director and did not identify conditions that the County would consider "necessary to avoid a detrimental impact and to otherwise protect the best interests of the surrounding area and the County as a whole." Therefore, the Department recommends Council not impose additional conditions under GCZO Section 7.010(A)(2).

GCZO SECTION 7.020: STANDARDS GOVERNING CONDITIONAL USES

GCZO SECTION 7.020(A) Conditional Uses, Generally

1. Setback. Requirements are addressed in each individual zone.

GCZO Section 7.020(A) specifies that setback requirements are established for uses within specific zones. Therefore, compliance with applicable setback requirements is evaluated under GCZO Section 4.020(J) and 7.020(T)(5)(d).

GCZO SECTION 7.020(Q) Conditional Uses in Exclusive Farm Use Zones

1. *A Type I or Type II Conditional Use in an Exclusive Farm Use Zone may be approved only when the Planning Director or Hearings body finds that the use will not:*

    a. *Force a significant change in accepted farm or forest practices on surrounding lands devoted to farm or forest use; or*
    b. *Significantly increase the cost of accepted farm or forest practices on surrounding lands devoted to farm or forest use.*

GCZO Section 7.020(Q) establishes standards for Type 1 or Type 2 conditional uses within EFU zoned land.[40] The standards require a demonstration that the proposed use would not force a significant change or significantly increase the cost of accepted farm or forest practices on surrounding lands devoted to farm or forest use, which mirror the review criteria under GCZO Section 4.020(H) and OAR 660-033-0130(37). Because the evaluation under GCZO Section 7.020(Q) is identical to the evaluation under GCZO Section 4.020(H) and OAR 660-033-0130(37), it is not repeated. As presented under the evaluation of GCZO Section 4.020(H) and OAR 660-033-0130(37) in this section of the order, the Department recommended Council find that the

[40] GCZO Section 4.020(D)(20) *Wind Power Generation Facilities* does not identify GCZO Section 4.020(H) as applicable; therefore, GCZO Section 4.020(H) does not apply to the proposed Phase 2 wind facility components. However, as noted in RFA4 Exhibit K, GCZO Section 4.020(H) is mirrored in OAR 660-033-0130(37); therefore, the evaluation of potential impacts of proposed Phase 2 wind facility components is appropriately evaluated in Section III.E.2 of this order.

proposed Phase 2 facility components would not be likely to force a significant change in accepted farm practices or significantly increase the cost of accepted farm practices on surrounding lands, and therefore would satisfy the applicable standards.

GCZO SECTION 7.020(T): Wind Power Generation Facility Siting Requirements

1. *Purpose. The Gilliam County Facility Siting Requirements are intended to establish a local conditional use permitting process that is clear, timely, and predictable as well as encompasses important local issues such as the health, safety and welfare of citizens in Gilliam County.*

4. *Requirements under the Energy Facility Siting Council. If a holder of a Site Certificate issued by the Oregon Energy Facility Siting Council requests a conditional use permit for an energy facility as outlined under ORS 469.401(3) and pays the requisite fee, the Planning Director shall issue such conditional use permit. The conditional use permit shall incorporate only the standards and conditions in Gilliam County's land use and other ordinances as contained in the site certificate. Issuance of the Conditional Use Permit shall be done promptly, not taking more than four weeks once it has been determined that a valid Site Certificate has been issued, the applicant has submitted a complete application and the fee has been received.*

GCZO Section 7.020(T)(1) and (4) establish the local permit requirements for wind energy facilities requiring a site certificate or amended site certificate.

5. *Wind Power Generation Facility Siting Requirements.* The requirements set out in this section shall apply for the application and review of the siting of a Wind *Power Generation Facility and the issuance of a Gilliam County Facility Conditional Use Permit.*

    a. *The following information shall be provided as part of the application:*

        1. *A general description of the proposed Wind Power Generation Facility…*

GCZO Section 7.020(T)(5)(a)(1) establishes an informational requirement for wind power generation facilities seeking a site certificate or amended site certificate and establishes that, for the conditional use permit to be issued by the county, the certificate holder shall provide a general description of wind facility components, a tentative construction schedule, and map and description of facility location. RFA4 includes a general description of wind facility components, a tentative construction schedule, and map and description of facility location, which is also summarized in this order in Sections II.A. *Requested Amendment*, and III.A. *General Standard of Review*.

        2. *Identification of potential conflicts if any, with:*

a. *Accepted farming practices as defined in ORS 215.203(2)(c) on adjacent lands devoted to farm uses;*
b. *Other resource operations and practices on adjacent lands except for wind power generation facilities on such adjacent lands; and*
c. *The nature and extent of the proposed facility on the cost of accepted farm or forest practices on surrounding EFU land*

GCZO Section 7.020(T)(5)(a)(2) establishes an informational requirement for wind power generation facilities seeking a site certificate or amended site certificate and establishes that, for the conditional use permit to be issued by the county, potential conflicts with accepted farming practices, or other resource operations, and cost of accepted farm practices on adjacent lands must be identified. Potential conflicts with accepted practices and cost of accepted practices on adjacent lands is evaluated under GCZO Section 4.020(H) and OAR 660-033-0130(37) of this order.

3. A Transportation Plan, with proposed recommendations.

The certificate holder discusses traffic concerns of the proposed Phase 2 facility amendment in its RFA 4 Exhibit U. Council previously imposed Condition 73 requiring that the certificate holder implement measures to minimize traffic impact during construction. The requirements of this condition would continue to apply. The Department's review of compliance with the Public Services standard, which includes a review of potential traffic impacts, is included in Section III.M. Public Services of this order. As such, based on compliance with Condition 73, the Department recommends that the Council find that proposed Phase 2 facility components would satisfy this GCZO provision.

4. An avian impact monitoring plan.

The certificate holder discusses impacts to avian species in RFA 4 Exhibit P and Q. Furthermore, Condition 91 requires the certificate holder to complete post-construction monitoring for potential bird and bat fatalities from wind turbine collusion; this condition would continue to apply. As such, the Department recommends that, based on Compliance with Condition 91, the Council find that proposed Phase 2 facility components would satisfy this GCZO provision.

5. A covenant not to sue.

Condition 41 requires the certificate holder to file a covenant not to sue with regard to generally accepted farming practices on adjacent farmland. As such, the Department recommends that the Council find that proposed Phase 2 facility components would satisfy this GCZO provision.

6. A fire prevention and emergency response plan.

The certificate holder discusses a fire prevention and emergency response plan in RFA4 Exhibit U. The Department's review of compliance with the Public Services standard, which includes a review of potential impacts to fire protection service providers, is included in Section III.M. *Public Services* below. Condition 60 requires the certificate holder to develop and implement a fire safety plan, in consultation with the North Gilliam Country Rural Fire Protection District. Conditions 76 and 77 require the development of health and safety plans. As such, the Department recommends that the Council find that proposed Phase 2 facility would satisfy this GCZO provision.

7. An erosion control plan.

The certificate holder discusses an erosion and soil control plan in its RFA 4 Exhibit I. The Department's review of compliance with the Soil standard, which includes a review of potential erosion impacts, is included in Section III.D. *Soil Protection* above. Furthermore, Condition 80 requires that all construction work be completed in compliance with an Erosion and Sediment Control Plan (ESCP) that is approved by the Oregon Department of Environmental Quality. As such, the Department recommends that the Council find that proposed Phase 2 facility components would satisfy this GCZO provision.

8. A weed control plan.

The certificate holder discusses weed control in its RFA 4 Exhibit I. Furthermore, Condition 43 requires the certificate holder to implement a weed control plan, which is approved by the Gilliam County Weed Control Officer. As such, the Department recommends that the Council find that proposed Phase 2 facility would satisfy this GCZO provision.

9. A socioeconomic impact assessment of the Wind Power Generation Facility.

The certificate holder conducts a socioeconomic analysis below under GCZO 7.020(5)(a)(10) below. As such, the Department recommends that the Council find that proposed Phase 2 facility would satisfy this GCZO provision.

10. The requirements of OAR 660-033-0130(37) will be satisfied.

An evaluation of the certificate holder's ability to satisfy the requirements of the Oregon Land Conservation and Development District rules for wind energy generation facilities, at OAR 660-033-0130(37), is provided in this section.

11. Information pertaining to the impacts of the Wind Power Generation Facility on:

a. Wetlands;
b. Wildlife;
c. Wildlife Habitat;

d. Criminal activity (vandalism, theft, trespass, etc.) and proposed actions, if any, to avoid, minimize or mitigate negative impacts.

The certificate holder provided information relating to these subjects in its RFA4 Exhibit J, P, Q and U. Based on the analysis of these sections, as presented in Section III.H., *Fish and Wildlife Habitat*, III.I. *Threatened and Endangered Species*, and III.M. *Public Services*, the Department recommends that the Council find that proposed Phase 2 facility components would satisfy this GCZO provision.

12. A dismantling and decommissioning plan of all components of the Wind Power Generation Facility.

The certificate holder provided a retirement and decommissioning plan in RFA4 Exhibit W. Furthermore, Council previously imposed Condition 32 requiring that, prior to construction, the certificate holder provide a bond or letter of credit sufficient to decommission the facility, and obligates the certificate holder to return the land to a useful non-hazardous condition. As such, the Department recommends that the Council find that proposed Phase 2 facility would satisfy this GCZO provision.

GCZO SECTION 7.020(T)(5):

b. Gilliam County may impose clear and objective conditions in accordance with the County Comprehensive Plan, County Development Code and State law, which Gilliam County considers necessary to protect the best interests of the surrounding area, or Gilliam County as a whole.

This is not a substantive applicable criteria; the certificate holder acknowledges that the County may recommend additional conditions.

c. Prior to commencement of any construction, all other necessary permits shall be obtained, e.g., Gilliam County Zoning Permit, road access and other permits from the Gilliam County Road Department, and from the Oregon Department of Transportation.

As discussed above, Condition 28 requires the certificate holder to obtain all necessary federal, state, and local permits prior to construction. As such, the Department recommends that the Council find that proposed Phase 2 facility components could satisfy this GCZO provision.

d. The following setback requirements and restrictions apply to the siting of a facility:

The Wind Power Generation Facility shall be on property zoned EFU, and no portion of the facility shall be within 3,520 feet of properties zoned residential use or designated on the Comprehensive Plan as residential. (For clarification

purposes of this section, EFU Zones are not considered zoned for residential use.) Towers shall be set back at a minimum, 110% of maximum total turbine height from blade tip height, measured from the centerline of the turbine tower from:

(1) Any State, County or Federal right-of-way or the nearest edge of a State, County, or Federal roadway, whichever is closer;
(2) Any right of ingress or egress on the owner's property;
(3) Any overhead utility lines;
(4) All property lines; if adjacent landowner agrees in writing to a lesser distance, this requirement may be waived.
(5) Any existing guy wire, anchor, or small wind energy tower on the property.
(6) Any residence including those outside the project boundary. If a landowner agrees in writing to a lesser distance, this requirement may be waived.
(7) A minimum of 150% of the maximum total turbine height from blade tip height, measured from the centerline of the turbine tower, from federal transmission line. If affected parties agree in writing to a lesser distance, this requirement may be waived.

The certificate holder represents that no portion of the facility would be within the City of Arlington, or other areas that are zoned for residential use. Furthermore, Condition 42 of the site certificate requires the certificate holder to construct all facility components in compliance with the setbacks listed above, in addition to other setback requirements. As such, the Department recommends that the Council find that proposed Phase 2 facility components would satisfy this GCZO provision.

e. Reasonable efforts shall be made to blend the wind facility's towers with the natural surroundings in order to minimize impacts upon open space and the natural landscape.

Conditions 102 through 105 of the site certificate impose restrictions relating to visual impacts. In pertinent part, turbines must be mounted on smooth low-reflectivity structures, substations must be painted a low-reflectivity neutral color, and turbines and meteorological towers must maintain a distance of 1,000 feet to the Fourmile Canyon interpretive site (looking toward visible Oregon Trail ruts). As such, the Department recommends that the Council find that proposed Phase 2 facility would satisfy this GCZO provision.

f. Reasonable efforts shall be taken to protect and to preserve existing trees, vegetation, water resources, wildlife habitat or other significant natural resources.

The certificate holder discusses trees, vegetation, water resources, wildlife habitat, and other significant resources in its Exhibits J, L, O, P, and Q. Furthermore, Condition 43 requires the implementation of a weed control plan; Condition 44 requires that temporarily disturbed areas are revegetated after disturbance; Conditions 80 through 87 require the implementation of an

Erosion and Sediment Control Plan and best management practices and; Condition 91 requires the implementation of a Wildlife Monitoring and Mitigation Plan. As such, the Department recommends that the Council find that proposed Phase 2 facility would satisfy this GCZO provision.

g. *The turbine towers shall be designed and constructed to discourage bird nesting and wildlife attraction.*

Site certificate Conditions 95 through 100 relate to the preservation of avian species and bird habitat. As such, the Department recommends that the Council find that proposed Phase 2 facility would satisfy this GCZO provision.

h. *The turbine towers shall be of a size and design to help reduce noise or other detrimental effects.*

The certificate holder indicates that the turbines within proposed Phase 2 would be "of similar size and design" as turbines previously approved by the Council. Additionally, Condition 107 requires the certificate holder to provide the final facility design to the Department, which includes a noise analysis of facility components. As such, the Department recommends that the Council find that proposed Phase 2 facility would satisfy this GCZO provision.

i. *Private access roads shall be gated to protect the facility and property owners from illegal or unwarranted trespass, and illegal dumping and hunting.*

Site certificate Conditions 66 and 69 require that the Facility's turbine towers and collector substations be locked to prevent public entry. The certificate holder also represents that the O&M building and associated parking and storage area would also be locked, and that locked gates would be located at the entrance of access roads. If the landowner does not prefer gates, then the certificate holder would pursue a variance from Gilliam County. As such, the Department recommends that the Council find that proposed Phase 2 facility would satisfy this GCZO provision.

j. *Where practicable the electrical cable collector system shall be installed underground, at a minimum depth of 3 feet; elsewhere the cable collector system shall be installed to prevent adverse impacts on agriculture operations.*

Site certificate Condition 88 requires that the 34.5 kV collector system would be installed underground "to the extent practical," and would be installed to a depth of three feet. However, the certificate holder notes that "where site-specific conditions require, the collector system may be proposed aboveground;" siting aboveground would allow for passage over canyons and intermittent streams. As such, the Department recommends that the Council find that proposed Phase 2 facility would satisfy this GCZO provision.

k. Required permanent maintenance/operations buildings shall be located off-site in one of Gilliam County's appropriately zoned areas, except that such a building may be constructed on-site if:

(1) The building is designed and constructed generally consistent with the character of similar buildings used by commercial farmers or ranchers; and

The certificate holder indicates that it seeks flexibility to relocate one of the previously approved O&M buildings into the expanded site boundary; however, the relocated building would not differ from previously considered and would be "consistent with the character of similar buildings in the area." As such, the Department recommends that the Council find that proposed Phase 2 facility would satisfy this GCZO provision.

(2) The building will be removed or converted to farm use upon decommissioning of the Wind Power Generation Facility consistent with the provisions of this section.

Site certificate Condition 32 requires that the certificate holder obtain a bond or letter of credit, prior to construction, that would ensure that the facility is returned to a useful non-hazardous condition. This includes the requirement to return the land to a state that may be used for agricultural purposes. As such, the Department recommends that the Council find that proposed Phase 2 facility would satisfy this GCZO provision.

6. Decommissioning/Dismantling Process. The applicant's dismantling of incomplete construction and/or decommissioning plan for the Wind Power Generation Facility shall be completed and filed with the Planning Department prior to construction and shall include the following information:

a. A plan for dismantling and/or decommissioning that provides for completion of dismantling or decommissioning of the facility without significant delay and protects public health, safety and the environment in compliance with the restoration requirements of this section.

b. A description of actions the facility owner proposes take to restore the site to a useful, no hazardous condition, including options for post-dismantle or decommission land use, information on how impacts on fish, wildlife and the environment would be minimized during the dismantling or decommissioning process, and measures to protect the public against risk or danger resulting from post-decommissioning site conditions in compliance with the requirements of this section.

c. A current detailed cost estimate, a comparison of that estimate with present funds set aside for dismantling or decommissioning, and a plan for assuring the availability of adequate funds for completion of dismantling or decommissioning. The cost estimate will be reviewed and be updated by the facility owner/operator on a 5-year basis.

d. Restoration of the site shall consist of the following:

(1) Dismantle turbines, towers, pad-mounted transformers, meteorological towers and related aboveground equipment. All concrete turbine pads shall be removed to a depth of at least three feet below the surface grade.

(2) The underground collection and communication cables need not be removed if at a depth of three feet or greater. These cables at a depth of three feet or greater can be abandoned in place if they are deemed not a hazard or interfering with agricultural use or other consistent resource uses of the land.

(3) Gravel shall be removed from areas surrounding turbine pads.

(4) Access roads shall be removed by removing gravel and restoring the surface grade and soil.

(5) After removal of the structures and roads, the area shall be graded as close as reasonably possible to its original contours and the soils shall be restored to a condition compatible with farm uses or consistent with other resource uses. Re-vegetation shall include planting by applicant of native plant seed mixes, planting by applicant of plant species suited to the area, or planting by landowner of agricultural crops, as appropriate, and shall be consistent with the weed control plan approved by Gilliam County.

(6) Roads, cleared pads, fences, gates, and improvements may be left in place if a letter from the landowner is submitted to Gilliam County indicating said landowner will be responsible for, and will maintain said roads and/or facilities for farm or other purposes as permitted under applicable zoning.

e. The applicant (facility owner/operator) shall submit to Gilliam County a bond or letter of credit acceptable to the County, in the amount of the decommissioning fund naming Gilliam County and the landowner as beneficiary or payee.

(1) The calculation of present-year dollars shall be made using the U.S. Gross Domestic Product Implicit Price Deflator as published by the U.S. Department of Commerce, Bureau of Economic Analysis, or any successor agency (the "Index"). The amount of the bond or letter of credit account shall be increased at such time when the cumulative percentage increase in the Index exceeds 10 percent from the last change, and then the amount shall be increased by the cumulative percentage increase. If at any time the Index is no longer published, Gilliam County and the applicant shall select a comparable calculation of present-year dollars. The amount of the bond or letter of credit account shall be prorated within the year to the date of decommissioning.

(2) The decommissioning fund shall not be subject to revocation or reduction before decommissioning of the Wind Power Generation Facility.

(3) The facility owner/operator shall describe the status of the decommissioning fund in the annual report submitted to Gilliam County.

f. If any disputes arise between Gilliam County and the landowner on the expenditure of any proceeds from the bond or the letter of credit, either party may request nonbonding arbitration. Each party shall appoint an arbitrator, with

the two arbitrators choosing a third. The arbitration shall proceed according to the Oregon statutes governing arbitration. The cost of the arbitration (excluding attorney fees) shall be shared equally by the parties.

g. For projects sited by EFSC, compliance with EFSC's financial assurance and decommissioning standards shall be deemed to be in compliance with the dismantling and decommissioning requirements of this Section.

The certificate holder discusses facility retirement and decommissioning within RFA 4 Exhibit W. Furthermore, site certificate Condition 32 requires the certificate holder obtain a bond or letter of credit, prior to construction, that would ensure that the facility is returned to a useful non-hazardous condition. Section III.G. *Retirement and Financial Assurance* of this order recommends that the Council find that the certificate holder would be capable of obtaining a bond or letter of credit in an amount sufficient to decommission the facility and return the land to a useful, non-hazardous state. As such, the Department recommends that the Council find that proposed Phase 2 facility components would satisfy this GCZO provision.

7. Wind Power Generation Facility Siting Subsequent Requirements
a. A bond or letter of credit shall be established for the dismantling of uncompleted construction and/or decommissioning of the facility. For projects being sited by the State of Oregon's Energy Facility Siting Council (EFSC), the bond or letter of credit required by EFSC will be deemed to meet this requirement.

The certificate holder discusses facility retirement and decommissioning within RFA 4 Exhibit W. Furthermore, site certificate Condition 32 requires the certificate holder obtain a bond or letter of credit, prior to construction, that would ensure that the facility is returned to a useful non-hazardous condition. Section III.G. *Retirement and Financial Assurance* of this order recommends that the Council find that the certificate holder would be capable of obtaining a bond or letter of credit in an amount sufficient to decommission the facility and return the land to a useful, non-hazardous state. As such, the Department recommends that the Council find that proposed Phase 2 facility components would satisfy this GCZO provision.

b. The actual latitude and longitude location or State plane NAD 83(91) coordinates of each turbine tower, connecting lines, and transmission lines shall be provided to Gilliam County once commercial electrical production begins.

Site certificate Condition 45 requires the certificate holder to provide to the Department, and to Gilliam County, the "actual latitude and longitude or State plan NAD 83(91) coordinates" of each turbine tower, connecting lines, and transmission lines. As such, the Department recommends that the Council find that proposed Phase 2 facility would satisfy this GCZO provision.

c. A summary of as-built changes in the facility from the original plan, if any, shall be provided by the owner/operator.

Site certificate Condition 45 requires the certificate holder to provide a summary of "as-built" changes compared to the original plan. As such, the Department recommends that the Council find that proposed Phase 2 facility components would satisfy this GCZO provision.

d. Within 120 days after the end of each calendar year, the facility owner/operator shall provide Gilliam County an annual report including the following information:

(1) Energy production by month and year.

(2) Nonproprietary information about wind conditions (e.g., monthly averages, high wind events, bursts).

(3) A summary of changes to the facility that do not require facility requirement amendments.

(4) A summary of the avian monitoring program – bird injuries, casualties, positive impacts on area wildlife and any recommendations for changes in the monitoring program.

(5) Employment impacts to the community and Gilliam County during and after construction.

(6) Success or failures of weed control practices.

(7) Status of the decommissioning fund.

(8) Summary comments – any problems with the projects, any adjustments needed, or any suggestions.

(9) For facilities under EFSC jurisdiction and for which an annual report is required, the annual report to EFSC satisfies this requirement.

The annual report requirement may be discontinued or required at a less frequent schedule by the County. The reporting requirement and/or reporting schedule shall be reviewed, and possibly altered, at the request of the facility owner/operator.

Site certificate Condition 46 requires the certificate holder to submit its EFSC Annual Report, which is required under OAR 345-026-0080, to Gilliam County. Condition 21 of the site certificate indicates that the certificate holder must provide updates on all monitoring and mitigation activities. As such, the Department recommends that the Council find that proposed Phase 2 facility would satisfy this GCZO provision.

Article 8. Supplementary Provisions

GCZO SECTION 8.030 CLEAR VISION AREAS

A. In all zones, a clear-vision area shall be maintained on the corners of all property at the intersection of two roads, a road and a driveway, or a road and a railroad. A clear-vision area shall contain no planting, fence, wall, structure, or temporary or permanent obstruction exceeding three and one-half feet (3½) in height, measured from the established road center line grade, except for authorized road signs and cyclone or other open construction fences which permit clear vision through the triangular area. Trees

may be located in this area as long as all branches and foliage are removed to a height of eight (8) feet above the grade.

B. A clear-vision area shall consist of a triangular area, two sides of which are lot lines intersecting at the corner of the lot, and the third side of which is a line across the corner of the lot joining the non-intersection ends of the other two sides. For purposes of this section, lot lines shall be considered to be the edge of the right-of-way.

C. Any side of the triangular clear-vision area adjacent to a road, railroad, or access drive to a parking area shall be at least 30 feet. Any side of the clear-vision area adjacent to a residential driveway shall be at least 15 feet.

As described throughout RFA4, the certificate holder proposes four new locations to allow for access to the Phase 2 collector substation, O&M building, proposed solar array, and battery storage system. As indicated in Figures B-4, K-2A and K-2B, primary access is from Oregon State Highway 19, and secondary access is from either Bottemiller Lane, or the Columbia Basin Electric substation access road. The certificate holder represents that clear vision will be maintained at each point of junction with primary or secondary access locations, and a triangular "clear-vision area" would be maintained on either side of intersections with Oregon State Highway 19 and Bottemiller Lane; the certificate holder will consult with ODOT and the Gilliam County Public Works Department prior to construction relating to this provision. As such, the Department recommends that the Council find that proposed Phase 2 facility would satisfy this GCZO provision.

GCZO SECTION 8.040 – OUTDOOR LIGHTING STANDARDS

All outdoor lighting, including for accessory facilities and the lighting of commercial signs, shall comply with the following:

A. Any outdoor light shall be shielded to illuminate downward.
B. The outdoor light source (bulb or element) shall not be visible at or beyond the property line.
C. Outdoor lights shall not exceed the height limit of the zone where the light will be located.
D. Structures over 50 feet in height shall not be lighted unless required to be lighted by the Federal Aviation Administration (F.A.A.). Structures over 50 feet in height that are required to be lighted by F.A.A. shall be shielded to illuminate upward.

Site certificate condition 104 restricts the use of exterior lighting at nighttime, with the exception to accommodate: (a) minimum turbine tower lighting for FAA requirements; (b) security lighting at O&M buildings and substations, provided that the lighting is shielded or downward facing; (c) lighting necessary for repairs or emergencies and; (d) minimum light necessary for construction activities. As such, the Department recommends that the Council find that proposed Phase 2 facility would satisfy this GCZO provision.

GCZO SECTION 8.050 – SIGN REGULATIONS

> *The following regulations shall apply to any sign erected, moved, or altered after adoption of this Ordinance. Official traffic control signs and instruments of the state, county, or municipality are exempt from all provisions of this Section.*

The certificate holder represents that the expanded site boundary would include signage to identify access points to the facility, and represents that it would design signage in a manner consistent with GCZO 8.050. As such, the Department recommends that the Council find that proposed Phase 2 facility would satisfy this GCZO provision.

GCZO SECTION 8.070 – PROJECTIONS FROM BUILDINGS

> *Architectural features such as cornices, eaves, canopies, sun shades, gutters, chimneys, and flues shall not project more than three feet into a required yard.*

The certificate holder represents that this provision does not apply to the facility because the O&M building would not exhibit the architectural features listed above, and the O&M building would also not abut a neighboring yard. As such, the Department recommends that the Council find that proposed Phase 2 facility would satisfy this GCZO provision.

GCZO SECTION 8.100 – OFF-STREET PARKING REQUIREMENTS

> *At the time of construction, reconstruction, or enlargement of a structure, or at the time a use is changed in any zone, off-street parking spaces shall be provided as required.in accordance with standards required below:*
>
> *A. NUMBER OF PARKING SPACES REQUIRED*
>
> 1. *The minimum number of parking spaces required for various uses is shown in this section. Square feet specifications refer to the floor area of the building containing the use. In addition to these requirements, one space is required per employee working on the premises during the largest anticipated shift at peak season, including proprietors.*
> 2. *Parking requirements for uses not specified in (A) shall be based on the listed use that is most similar to the proposed use. If no use listed in (A) is similar to the proposed use, the applicant shall submit a parking study that includes an estimate of the parking demand based on recommendations of the Institute of Traffic Engineers or similar data.*
> 3. *Accessible (ADA) parking spaces shall be provided in accordance with current state Structural Specialty Code and ODOT adopted standards.*
> 4. *In the event several uses occupy a single structure or parcel of land, the number of required spaces shall be the total of the requirements for all of the uses.*

5. Uses that require more than ten parking spaces shall include an area designated for bicycle parking, with bike racks that will accommodate at least one bicycle for each ten vehicle parking spaces. The bicycle parking area may be in the same location as the vehicle parking spaces or may be located closer to the building entrance or use.

The certificate holder represents that the proposed Phase 2 O&M building would meet or exceed the minimum parking requirements imposed by GCZO 8.100(A)(1). As such, the Department recommends that the Council find that proposed Phase 2 facility would satisfy this GCZO provision.

GCZO SECTION 8.140 – SITE PLAN REVIEW

A.PURPOSE
The purpose of site plan review is to provide for administrative review of the design of certain developments and improvements in order to promote functional, safe, innovative, and attractive site development that is compatible with the natural and man-made environment and is consistent with applicable requirements of this Ordinance.

E. DETAILED PLAN for any required or proposed landscaping that shall clearly illustrate:
1. Plants and tree species, their initial sizes and other proposed landscaping materials.
2. The location and dimensions of all areas to be devoted to landscaping, and location of any automatic sprinkler systems.

The certificate holder represents that no landscaping would be associated with the proposed Phase 2 facility.

F. OUTDOOR STORAGE AND ACTIVITIES, IF PERMITTED IN THE ZONE: Type, location and height of screening devices.

The Council previously approved the use of temporary staging and laydown areas during construction. The certificate holder proposes to relocate some temporary staging and laydown areas into the expanded site boundary to accommodate Phase 2 construction. The certificate holder represents that outdoor storage may occur near the O&M building, and asserts that the staging areas would be similar to previously approved by the Council. Outdoor storage during construction would be temporary and only occur during construction. As such, the Department recommends that the Council find that proposed Phase 2 facility would satisfy this GCZO provision.

G. TOPOGRAPHIC INFORMATION for any area with slopes exceeding 10 percent. Contour intervals shall be ten feet or smaller.

The certificate holder provides topographic information in Figure B-4 through B-6. As such, the Department recommends that the Council find that proposed Phase 2 facility would satisfy this GCZO provision.

H. DRAINAGE PLAN, or evidence that stormwater runoff will be accommodated by an existing storm drainage system.

The certificate holder is required to include a drainage plan within its National Pollutant Discharge Elimination System (NPDES) 1200-C General Stormwater Discharge Permit, which is attached as I-1 within RFA 4. As such, the Department recommends that the Council find that proposed Phase 2 facility would satisfy this GCZO provision. As such, the Department recommends that the Council find that proposed Phase 2 facility would satisfy this GCZO provision.

I. IDENTIFICATION OF PROPOSED TRASH STORAGE LOCATIONS, including proposed enclosure design construction and access for pickup purposes.

The certificate holder describes its solid waste disposal plans within RFA4 Exhibit U. The Department's review of compliance with the Public Services standard, which includes a review of solid waste management, is included in Section III.M. *Public Services* of this order. The certificate holder indicates that construction related waste disposal would be provided by private contract through local commercial waste haulers, and attests that the waste quantities generated by proposed Phase 2 facility components would be similar to those previously considered by the Council; no new types of waste would be generated through proposed Phase 2 facility components. Lastly, site certificate Conditions 111 and 112 require the certificate holder to develop and implement a waste management plan. As such, the Department recommends that the Council find that proposed Phase 2 facility would satisfy this GCZO provision.

J. LOCATION OF ALL EXISTING AND PROPOSED UTILITIES and septic systems on or abutting the property.

The certificate holder indicates that it would receive electricity from PacifiCorp or the Columbia Basin Electric Co-op, and a septic system would be located onsite to service O&M domestic purposes. Water would be provide onsite through the use of an exempt well. As such, the Department recommends that the Council find that proposed Phase 2 facility would satisfy this GCZO provision.

K. ELEVATION DRAWINGS showing the exterior appearance of all proposed buildings.

The certificate holder represents that it would provide drawings that demonstrate the elevation of the O&M building at the time it files for building permits. As such, the Department recommends that the Council find that proposed Phase 2 facility would satisfy this GCZO provision.

L. APPROVAL STANDARDS:

1. All provisions of this zoning ordinance and other applicable regulations are complied with.
2. Elements of the site plan are arranged so that:
a. Traffic congestion is avoided.
b. Pedestrian and vehicular safety and welfare are protected.
c. Significant features and public amenities are preserved and maintained.
d. Surface drainage systems are designed so as not to adversely affect neighboring properties, roads, or surface and subsurface water quality.
e. Structures and facilities for storage, machinery and equipment, services (mail, refuse, utility wires, etc.), loading and parking and similar accessory areas shall be buffered or screened to minimize adverse impact on neighboring properties.

The certificate holder represents that proposed Phase 2 facility components would be consistent with GCZO 8.140(L) because it would not contribute to traffic "congestion" on nearby roads such as Oregon Highway 19, Bottemiller Lane, or Base Line Road, and would also not affect vehicular safety. There is no anticipated pedestrian traffic in proximity to Phase 2 components; the certificate holder's NPDES 1200-C General Stormwater Discharge permit includes a drainage plans; and the certificate holder will implement best management practices to minimize erosion and sedimentation. As such, the Department recommends that the Council find that proposed Phase 2 facility would satisfy this GCZO provision.

M. THE DEVELOPMENT WILL NOT RESULT IN TRAFFIC VOLUMES THAT WILL REDUCE THE PERFORMANCE STANDARD of a transportation facility below the minimum acceptable level identified in the Transportation System Plan (LOS C). This standard may be met through a condition of approval requiring improvements to the transportation facility.

The certificate holder discusses anticipated traffic volume in its RFA Exhibit 4; the Department recommends that the Council find that the proposed Phase 2 facility would not result in significant adverse impacts to traffic in Section <INSERT SECTION> within this Draft Proposed Order. As such, the Department recommends that the Council find that proposed Phase 2 facility would satisfy this GCZO provision.

N. THE DEVELOPMENT WILL NOT ADVERSELY AFFECT AGRICULTURAL OR FORESTRY USES.

As described above in Section GCZO 4.020(H), the Department recommends that the Council find that the proposed Phase 2 facility would not force a significant change in agricultural practices. As such, the Department recommends that the Council find that this provision of the GCZO is satisfied.

Gilliam County Comprehensive Plan

The Gilliam County Comprehensive Plan (GCCP) is modeled after, and is consistent with, Oregon's Statewide Planning Goals. Under GCZO 7.010(A)(1)(a), a conditional use must be in

compliance with the Comprehensive Plan. The relevant Comprehensive Plan provisions are discussed below:

Goal 3. Agricultural Lands

> *Goal: To preserve and maintain agricultural lands.*
>
> *The policies adopted in Goal Three of the Comprehensive Plan outline County policy with regard to agriculture and the preservation of agricultural lands. These policies are founded on the authority given a county to establish Exclusive Farm Use zones (ORS 215.203), to exercise its authority in these zones to protect the health, safety and welfare of the citizens (ORS 215.253{2}) and to review and regulate proposals for subdividing farm lands (ORS 215.263). The policies are intended to support the state's agricultural land use policy (ORS 215.243) and should be so interpreted and construed.*
>
> *Policies:*
>
> *In consideration of the above Findings, the Gilliam County Court adopts the following policies:*
>
> 1. *In order to preserve the maximum level of agriculture in the County, all "Agricultural Lands" shall be so designated and shall be zoned in accordance with the provisions of ORS 215.283. Further, those non-farm uses permitted by ORS 215.283(1) shall be permitted uses, and those non-farm uses permitted by ORS 215.283(2) may be allowed as conditional uses subject to ORS 215.296.*

This policy is implemented under GCZO Section 4.020. As noted by the certificate holder, the proposed solar array would not comply with the County's "Goal 3," because the array would exceed acreage thresholds contained within GCZO 4.020(D)(11) and would be required to obtain a goal exception under ORS 469.504(4)[41]. The Department recommends approval of the Goal Exception in the Section III.E.IV. Therefore, the Department recommends that the Council conclude that the proposed Phase 2 facility would be consistent with this policy.

Goal 5. Natural Resources, Scenic, and Historic Areas, and Open Spaces

> *Goal: To conserve open space and protect natural and scenic resources.*
>
> *Policies:*

[41] The solar micrositing corridor contains approximately 326.7 acres of high-value farmland; as such, the Department evaluates potential impacts of a solar facility assuming maximum impacts at 362.7 acres.

2. *The Department of Fish and Wildlife (ODFW) will be consulted when proposed land use actions may affect fish or wildlife habitats.*

This policy requires consultation with ODFW when proposed land use actions may affect fish or wildlife habitats within natural resources, scenic and historic areas, and open spaces. The certificate holder represents that it has consulted with ODFW relating to the proposed modifications within RFA4. Additionally, the Department consulted with ODFW during review of RFA4 and will continue to consult with ODFW for the life of the facility during review of pre-construction compliance requirements and ongoing annual reporting related to weed management, revegetation and wildlife surveys and mitigation. Furthermore, Conditions 91 through 101 also require further ODFW consultation (in pertinent part) relating to the Wildlife Monitoring and Mitigation Plan (WMPP), Revegetation Plan, Habitat Mitigation Plan, Washington Ground Squirrel surveys, and sensitive wildlife surveys. Therefore, the Department, recommends that the Council conclude that proposed Phase 2 facility components would be consistent with this policy.

12. *Gilliam County will continue to encourage the development of alternative sources of energy.*

This comprehensive plan policy is a directive to the County to encourage alternative energy development in its implementation of its plan. However, to the extent this policy is considered an "applicable substantive criteria," the proposed Montague facility expansion could be considered an "alternative" source of energy because it would produce electricity from wind and solar, and utilize a battery storage system. Therefore, the Department recommends that the Council conclude that the proposed Phase 2 facility would be consistent with this policy.

Goal 6. Air, Water and Land Resources Quality

Goal: To maintain and improve the quality of the air, water, and land resources of the state.

Policies:

6. All new industrial development should comply with DEQ air, noise and water quality standards.

7. The Department of Environmental Quality and other affected agencies should be notified of all proposals for industrial development or other uses which may affect environmental quality. Their comments should be considered in decisions concerning the proposal.

This policy requires that development comply with relevant air, water, and land standards. The certificate holder represents that it has notified DEQ of its proposal and has considered DEQ comments. Furthermore, existing site certificate Condition 80 requires the implementation of an Erosion and Sediment Control Plan (ESCP), which is satisfactory to DEQ; the certificate holder must comply with Condition 106 through 108, which emanate from DEQ noise standards. Therefore, the Department recommends that the Council conclude that the proposed Phase 2 facility would be consistent with this policy.

Goal 8. Recreation Needs

Goal: To satisfy the recreation needs of the citizens of the state and visitors and, where appropriate, to provide for the siting of necessary recreational facilities including destination resorts.

Policies:

3. *Private development should not be permitted if it would block access to or otherwise have a significant adverse impact on public open space lands.*

This policy prohibits private development if such development would block access to public open space lands, or otherwise have a significant adverse impact on public open space lands. Based on review of the impact evaluation included RFA 4 Exhibits L and T, the Department recommends that the Council conclude that the proposed Phase 2 facility would be consistent with this policy.

Goal 12. Transportation

Goal: To provide and encourage a safe, convenient, and economic transportation system.

Policies:

10. *Operation, maintenance, repair and preservation of existing transportation facilities shall be allowed without land use review, except where specifically regulated.*

14. *Gilliam County shall provide notice to ODOT of land use applications and development permits for properties that have frontage or access onto a state highway.*

This policy prohibits development from interfering with the operation, maintenance, repair and preservation of existing transportation facilities. The certificate holder represents that facility employees would access the facility through existing interstate, state, and county roads; no new public roads would be constructed as a result of the modifications proposed in RFA 4. The certificate holder notes that it may need to improve existing state and county public roads,

which includes Oregon Highway 19, Berthold Road, Bottemiller Lane, Weatherford Road, and Baseline (Ione) Rd, as well as other unnamed existing county roads.[42]

Existing site certificate Condition 71 provides, in pertinent part, that the certificate holder shall modify, as necessary: (1) County roads, within County road rights-of-way, and in conformity with County road design standards subject to Gilliam County Road Department approval and; (2) State roads, within State road rights-of-way, and in conformity with Oregon Department of Transportation (ODOT) and subject to ODOT approval. Existing site certificate Condition 75 provides, in pertinent part, that the certificate holder shall cooperate with the Gilliam County Road Department to ensure that any "unusual damage or wear" to County roads would be repaired by the certificate holder.

Based on the above described existing site certificate conditions, the Department recommends that the Council conclude that the proposed Phase 2 facility would be consistent with this policy.

Goal 13. Energy Conservation

Goal: To conserve energy.

Policies:

13. Applications for new energy generation facilities, whether public or private, should consider impacts on neighboring properties.

This policy establishes that impacts to neighboring properties should be considered during the review of applications for new energy generation facilities. The design of proposed Phase 2 facility components and compliance with the existing, recommended new and amended conditions, would reduce adverse impacts to neighboring properties. Therefore, the Department recommends that the Council conclude that the proposed Phase 2 facility components would be consistent with this policy.

III.E.2 Directly Applicable State Statutes and Administrative Rules

Oregon Revised Statutes

ORS 215.283(1)(c) and ORS 215.274 – Associated Transmission Lines Necessary for Public Service

Transmission lines that meet the definition of an "associated transmission line" must consider the requirements of ORS 215.274. If a utility facility necessary for public service is an

[42] MWPAMD4. Request for Amendment 4 Exhibit K Section K.7.1.2. 2019-04-05.

"associated transmission line" as defined in ORS 215.274 and ORS 469.300, the use may be established in EFU-zoned land pursuant to ORS 215.283(1)(c).

ORS 469.300(3) defines "associated transmission lines" as "new transmission lines constructed to connect an energy facility to the first point of junction of such transmission line or lines with either a power distribution system or an interconnected primary transmission system or both or to the Northwest Power Grid," and that definition is incorporated by reference in ORS 215.274. Associated transmission lines reviewed under ORS 215.274 are a subset of the transmission lines that could be evaluated as utility facilities necessary for public service under ORS 215.283(1)(c). The proposed 3-mile 230 kV transmission line would interconnect the proposed Phase 2 and Phase 1 collector substations, to transmit electricity to BPA's Slatt Substation.[43] As such, the proposed Phase 2 230 kV transmission line is an "associated transmission line."

Gilliam County has not adopted local code provisions to implement ORS 215.274. Therefore, the requirements of the statute apply directly to the proposed 230 kV transmission line and the applicable requirements are evaluated below.

ORS 215.274(2): An associated transmission line is necessary for public service if an applicant for approval under ORS 215.213 (Uses permitted in exclusive farm use zones in counties that adopted marginal lands system prior to 1993) (1)(c)(B) or 215.283 (Uses permitted in exclusive farm use zones in nonmarginal lands counties) (1)(c)(B) demonstrates to the governing body of a county or its designee that the associated transmission line meets:

(a) At least one of the requirements listed in subsection (3) of this section; or
(b) The requirements described in subsection (4) of this section.

ORS 215.274 requires that the certificate holder demonstrate that the associated transmission line meets the requirements of either ORS 215.274 (3) or (4). As discussed below, in the RFA the certificate holder provides evidence that the associated transmission line meets the requirements of paragraph (4); the certificate holder acknowledges that it does not meet the requirements of paragraph (3).

ORS 215.274(3): The governing body of a county or its designee shall approve an application under this section if an applicant demonstrates that the entire route of the associated transmission line meets at least one of the following requirements:

(a) The associated transmission line is not located on high-value farmland, as defined in ORS 195.300 (Definitions for ORS 195.300 to 195.336), or on arable land;

[43] MWPRFA4, Section B.5.5

(b) The associated transmission line is co-located with an existing transmission line;
(c) The associated transmission line parallels an existing transmission line corridor with the minimum separation necessary for safety; or
(d) The associated transmission line is located within an existing right of way for a linear facility, such as a transmission line, road or railroad, that is located above the surface of the ground.

As noted above, the certificate holder acknowledges that the proposed 230 kV transmission line would not meet the requirements of ORS 215.274(3).

ORS 215.274(4)(a): Except as provided in subsection (3) of this section, the governing body of a county or its designee shall approve an application under this section if, after an evaluation of reasonable alternatives, the applicant demonstrates that the entire route of the associated transmission line meets, subject to paragraphs (b) and (c) of this subsection, two or more of the following factors:

ORS 215.274(4)(a) requires an evaluation of reasonable alternatives to determine whether the associated transmission line may be sited on land other than EFU-zoned land. The evaluation of "reasonable alternatives" does not require an evaluation of all alternative EFU zoned routes on which the transmission line could be located. Rather, the certificate holder must consider reasonable alternatives and show that the transmission line must be sited on EFU-zoned land in order to provide the service. In RFA4 Exhibit K, the certificate holder describes and presents on Figure K-12 that five routes were considered - a primary route and four alternative routes, all of which would be located on EFU zoned land.

As presented in RFA4 Exhibit K, Figure K-3, the entire proposed amended site boundary would be located within EFU zoned land. Therefore, because the proposed 230 kV transmission line segment would initiate and terminate at proposed facility component locations within the proposed amended site boundary, there is no non-EFU zoned land between the transmission line and the interconnection point to provide an alternative route. The Department therefore recommends that the Council find that the certificate holder has evaluated reasonable alternatives and demonstrates that no reasonable alternatives that would avoid EFU land exist. However, note that ORS 215.274(4) requires both a demonstration that no reasonable alternatives that would avoid EFU land exist, and that two or more of the listed factors [ORS 215.274(a)(A) through (E)] be met, which is evaluated below.

ORS 215.274(4)(a)(A): Technical and engineering feasibility;

ORS 215.274(4)(a)(A) requires that the certificate holder demonstrate that the transmission line must be sited in an EFU zone due to technical and engineering feasibility constraints. The Department interprets this factor as requiring a demonstration that technical or engineering constraints, such as extreme topographic features, cannot be overcome but for facility engineering through EFU-zoned land. The certificate holder, in contrast, evaluates four alternative routes and compared the feasibility of constructing alternative routes compared to

the proposed route based on differences in impacts (i.e. number of structures, permanent disturbance, etc). All of the routes – the proposed and four alternative routes - would be located within EFU zoned lands; and, as described under the evaluation of ORS 215.274(4)(a) above, non EFU zoned land does not exist within or surrounding the proposed amended site boundary. Therefore, the Department recommends Council find that there are not technical or engineering constraints, such as extreme topographic features, that cannot be overcome but for siting the proposed 230 kV transmission line segment through EFU zoned land and therefore, ORS 215.274(4)(a)(A) would not be satisfied.

> *ORS 215.274(4)(a)(B): The associated transmission line is locationally dependent because the associated transmission line must cross high-value farmland, as defined in ORS 195.300 (Definitions for ORS 195.300 to 195.336), or arable land to achieve a reasonably direct route or to meet unique geographical needs that cannot be satisfied on other lands;*

ORS 215.274(4)(a)(B) requires that the certificate holder demonstrate that the transmission line must cross high value farmland or arable land to achieve a reasonably direct route and therefore is locationally dependent. As presented in RFA4 Figure K-7, the proposed 230 kV transmission line route is surrounded by interspersed areas of high-value farmland, pursuant to ORS 195.300, and arable land comprised of Class 3 and 4 soils. Because there is no reasonable route to interconnect the proposed Phase 2 facility collector substation to the approved Phase 1 collector substation without traversing high value farmland and arable land, the Department recommends Council find that the proposed 230 kV transmission line must cross high value farmland and arable land to achieve a reasonably direct route, and that the associated transmission line is therefore "locationally dependent" and would satisfy ORS 215.274(4)(a)(B).

> *ORS 215.274(4)(a)(C): Lack of an available existing right of way for a linear facility, such as a transmission line, road or railroad, that is located above the surface of the ground;*

ORS 215.274(4)(a)(C) requires that the certificate holder demonstrate a lack of available existing linear facility rights-of-way for which the transmission line could be located. To inform this criteria, the certificate holder evaluates the availability of existing rights-of-way along the proposed 230 kV transmission line route, specifically the existing OR 19 right-of way. The certificate holder describes that the existing OR 19 road right-of-way is not available for the proposed route because it contains an existing pipeline on the east side, and topographic constraints include ditches with steep rises to adjacent fields on both sides of OR 19, which eliminate usable space within the right of way and make it difficult to locate the poles within the right-of-way while also setback for traffic safety. Based on the reasoning provided above and evaluation of availability of the existing road right of way, as presented in RFA4 Exhibit K, the Department recommends the Council find that the proposed 230 kV transmission line route would satisfy ORS 215.274(4)(a)(C).

> *ORS 215.274(4)(a)(D): Public health and safety; or*

ORS 215.274(4)(a)(D) requires that the certificate holder demonstrate that the transmission line must be sited on EFU-zoned land to minimize potential impacts to public health and safety. As described under the evaluation of ORS 215.274(4)(a) above, non EFU zoned land does not exist within or surrounding the proposed amended site boundary. Therefore, while the proposed route is described as minimizing potential public health and safety impacts by selection of a route with the greatest distance from residences, the Department does not consider those facts to be applicable to the evaluation of ORS 215.274(a)(D) and recommends Council find that the proposed 230 kV transmission line would not satisfy ORS 215.274(4)(a)(D).

ORS 215.274(4)(a)(E): Other requirements of state or federal agencies.

ORS 215.274(4)(a)(E) requires that the certificate holder demonstrate that the transmission line must be sited in an EFU zone due to other state or federal requirements. The certificate holder does not accurately address ORS 215.274(4)(a)(E) to demonstrate compliance with ORS 215.274(4)(a).

ORS 215.274(4)(b): The applicant shall present findings to the governing body of the county or its designee on how the applicant will mitigate and minimize the impacts, if any, of the associated transmission line on surrounding lands devoted to farm use in order to prevent a significant change in accepted farm practices or a significant increase in the cost of farm practices on the surrounding farmland.

ORS 215.274(4)(b) requires that the certificate holder demonstrate that the transmission line would not result in a significant change in accepted farm practices or a significant increase in cost of farm practices on surrounding land. The certificate holder represents that transmission line support structures would impact approximately 0.03 acres of agricultural land and further argues that the proposed 230 kV transmission line route would minimize potential impacts to accepted farm practices by paralleling existing roads, be located on the perimeter of fields and would not result in permanent roads.

To ensure that potential impacts to farm practices and the cost of farm practices on surrounding lands is minimized during construction, Council previously imposed Conditions 38 and 39 requiring that the certificate holder design and construct the facility using the minimum land use necessary, and that the certificate holder consult with area landowners and lessees to identify and implement measures to reduce or avoid adverse impacts to farm practices and farming cost. Based on compliance with previously imposed conditions and the minimal amount of permanent impacts to EFU-zoned land, the Department recommends that the Council find that the proposed 230 kV transmission line would not result in a significant change to accepted farm practices or significantly increase costs of farm practices on surrounding land. Therefore, the Department recommends Council find that the proposed 230 kV transmission line would satisfy 215.274(4)(b).

ORS 215.274(4)(c): The governing body of a county or its designee may consider costs associated with any of the factors listed in paragraph (a) of this subsection, but

consideration of cost may not be the only consideration in determining whether the associated transmission line is necessary for public service.

ORS 215.274(4)(c) allows for consideration of costs in determining whether the associated transmission line is necessary for public service. The certificate holder indicates that, based on its review of four alternative routes and the increased length of those routes, construction costs would increase. Although this subsection does not require the consideration of costs, the Department acknowledges that if the transmission line were required to parallel existing rights of ways, the length of the transmission line would increase and the certificate holder would be required to obtain new land rights; these changes would increase costs associated with the transmission line.

For the above stated reasons, the Department recommends that the Council find that the certificate holder provides a sufficient alternative analysis required under ORS 215.274(4)(a), that the associated transmission line is locationally dependent under ORS 215.274(4)(a)(B) and that there is a lack of available existing right of way for a linear facility under ORS 215.274(4)(a)(C). As such, the Department recommends that the Council find that the associated transmission line is "necessary for public service."

Oregon Administrative Rules

OAR 660-033-0130(37~~8~~) states,

For purposes of this rule a wind power generation facility includes, but is not limited to, the following system components: all wind turbine towers and concrete pads, permanent meteorological towers and wind measurement devices, electrical cable collection systems connecting wind turbine towers with the relevant power substation, new or expanded private roads (whether temporary or permanent) constructed to serve the wind power generation facility, office and operation and maintenance buildings, temporary lay-down areas and all other necessary appurtenances. A proposal for a wind power generation facility shall be subject to the following provisions:

(a) For high-value farmland soils described at ORS 195.300(10), the governing body or its designate must find that all of the following are satisfied:

(A) Reasonable alternatives have been considered to show that siting the wind power generation facility or component thereof on high-value farmland soils is necessary for the facility or component to function properly or if a road system or turbine string must be placed on such soils to achieve a reasonably direct route considering the following factors:

i. Technical and engineering feasibility;

ii. Availability of existing rights of way; and

iii. The long term environmental, economic, social and energy consequences of siting the facility or component on alternative sites, as determined under OAR 660-331-0130(37)(a)(B).

The proposed Phase 2 facility would be located within the Columbia AVA region and the wind turbines would ~~be sited~~ in ~~on~~ a "worst case" scenario, be sited on~~f~~ 2.7 acres of high value farmland.[44] Therefore, the Phase 2 facility must meet the requirements imposed by OAR 660-033-0130(37)(a).

OAR 660-033-0130(37)(a)(A) requires the certificate holder to consider "reasonable alternatives" to building 81 turbines, or components of the facility, on high-value farmland. The certificate holder ~~applicant~~ must "show that siting the wind power generation facility or component thereof on high-value farmland soils is necessary for the facility or component to function properly." In the case of access roads and turbine strings, the ~~applicant~~ certificate holder must show that these components must be placed on high-value farmland soils "to achieve a reasonably direct route." To demonstrate the necessity of using high-value farmland for the facility to "function properly" or for a road or turbine string to "achieve a reasonably direct route," the certificate holder must consider technical and engineering feasibility and the availability of existing rights-of-way. The certificate holder must also consider the long term environmental, economic, social and energy consequences of siting the facility or component on alternative sites, as determined under OAR 660-033-0130(37)(a)(B).

i. Technical and Engineering Feasibility

The proposed Phase 2 wind facility components ~~would~~ could impact up to 2.7 acres of high value farmland. The Council previously found in the *Final Order on the ASC* that a "reasonable alternative" under OAR 660-033-0130(37)(a)(A) must enable the wind facility to make efficient use of a comparable wind resource compared to the proposed location. Specifically, the Council directed an analysis of whether the facility could "function properly" and whether turbine strings and roads could "achieve a reasonably direct route" if sited in an alternative location.[45] ~~Ostensibly, t~~The certificate holder argues that the Council's previous reasoning is still applicable to the proposed Phase 2 wind facility components. Namely, the certificate holder indicates that there are not large contiguous areas of high-value farmland located within the subject area, and because the areas of non-high-value farmland are interspersed with high-value farmland, the proposed turbine strings, access roads, and collector lines cannot be sited in a manner that achieves a "reasonably direct route" without affecting high-value farmland. The Department agrees that this reasoning is still valid, and confirms through Figure K-9 that areas of non-high-value farmland are interrupted by large swathes of high-value farmland. The proposed amended site boundary is interspersed with High Value Farmland. Because it is interspersed with High Value Farmland, it is not feasible from a technical and engineering perspective to

[44] MWPRFA4. Exhibit K, Table K-1. 2019-04.05.
[45] MWPAPP. *Final Order on the ASC,* p. 54

avoid high value farmland. however, potential impacts to high-value farmland are expected to be less than three acres, and therefore minimal.

iii. Long-Term Environmental, Economic, Social, and Energy Consequences

The long-term environmental, economic, social, and energy consequences from the proposed Phase 2 wind facility components are "not more significantly adverse than would typically result from the same proposal being located on other agricultural lands that do not include high-value farmland soils."[46]

The Department recommends that the Council find that the wind facility components associated with Phase 2 would satisfy this criteria because: (1) the Department recommends findings of compliance with the Soil Protection standard; Protected Areas standard; Recreation Standard; Scenic Resources standard; Fish and Wildlife Habitat standard; and the Threatened and Endangered Species standard; (2) the wind facility would result in direct payments to landowners and indirect benefits to local business and the County tax base; (3) the Department recommends findings of compliance with the Historic, Cultural and Archaeological Resources standard and; (4) the wind facility would produce renewable energy.

(C) Costs associated with any of the factors listed in paragraph (A) may be considered, but costs alone may not be the only consideration in determining that siting any component of a wind power generation facility on high-value farmland soils is necessary;

OAR 660-033-0130(37)(a)(C) provides that costs may be considered in the analysis but "may not be the only consideration in determining that siting any component of a wind power generation facility on high-value farmland soils is necessary." Considerations other than cost have been discussed above. The certificate holder noted that it does not rely on costs.

(*D) The owner of a wind power generation facility approved under subsection (a) shall be responsible for restoring, as nearly as possible, to its former condition any agricultural land and associated improvements that are damaged or otherwise disturbed by the siting, maintenance, repair or reconstruction of the facility. Nothing in this subsection shall prevent the owner of the facility from requiring a bond or other security from a contractor or otherwise imposing on a contractor the responsibility for restoration; and*

OAR 660-033-0130(37)(a)(D) requires the owner of a wind facility to restore agricultural land damaged by the wind power facility. Exhibit W of the application, addressed in Section IV.G of this Draft Proposed Order, and the Draft Revegetation Plan, describe the tasks the certificate holder would perform to restore areas disturbed by the construction, operation, or retirement

[46] The test is similar to that required under ORS 459.504(2)(c)(B) when the Council determines whether to grant a "reasons" exception to a statewide planning goal: "The significant environmental, economic, social and energy consequences anticipated as a result of the proposed facility have been identified and adverse impacts will be mitigated in accordance with rules of the Council applicable to the siting of the proposed facility.

of the facility. To ensure adequate restoration, Soil Protection Conditions 44 and 92 require the certificate holder to restore all areas according to the requirements of a final Revegetation Plan.

(D) Additional Criteria

Subsections (b), (c) and (d) of OAR 660-033-0130(37) provide additional criteria for wind power generation facilities located on "arable" or "nonarable" land. OAR 660-033-0130(37)(b) defines "arable land" as "lands that are cultivated or suitable for cultivation, including high-value farmland soils" and provides criteria for locating a facility on arable land. OAR 660-033-0130(37)(c) defines "nonarable land" as land "not suitable for cultivation" and provides that the criteria in subsection (b)(D) apply on nonarable land. Subsection (d) provides that when a proposed wind power generation facility is located on a combination of arable and nonarable lands, then all of the criteria in subsection (b) apply to the entire facility. Proposed Phase 2 wind facility components are proposed to be located on a combination of arable and nonarable lands. Accordingly, the criteria in subsection (b) apply to the entire facility. These criteria are discussed below.

(A) Impacts on Agricultural Operations

OAR 660-033-0130(37)(b)(A) provides that the proposed wind power facility must not "create unnecessary negative impacts on agricultural operations conducted on the subject property." The potential effects of the facility on agricultural operations and the measures proposed by the certificate holder to minimize the negative impacts on agricultural operations are discussed above in findings of compliance with GCZO 4.020(H). As described by the certificate holder, these measures (outlined in Exhibit K4) are intended to avoid unnecessary negative impacts on agricultural operations.

As shown on Figure K-7, proposed Phase 2 wind facility components would be located predominately on land comprising Class 3 soils with some scattered permanent impact to Class 4-Class 7 soils. The Council previously found that the facility impacted arable land suitable for cultivation under OAR 660-033-0020(1)(a)(A). The certificate holder proposes to site turbines and related or supporting facilities, including a battery storage system, onto arable lands. The majority of the land that is actively cultivated is dryland crop production. In total, under the worst case scenario, approximately 65.2 acres of arable land would be permanently impacted by the wind facility components of Phase 2.[47] In the *Final Order on the ASC*, the Council found that the requirements imposed by this subsection of OAR 660-033-0130(37) are substantially equivalent" to GCZO 4.020(H); the Department recommends that the Council find that the proposed Phase 2 facility would not force a significant change to accepted farming practices. As

[47] This estimate includes components associated with the wind facility and does not include impacts relating to the solar array.

such, the Department recommends that the Council find the proposed Phase 2 facility would comply with this OAR provision.

(B) Soil Erosion or Loss

OAR 660-033-0130(37)(b)(B) provides that "the presence of a proposed wind power facility" must not result in unnecessary soil erosion or loss that could limit agricultural productivity. Potential adverse impacts to soils and measures to avoid or control soil erosion and loss are addressed by the Council's Soil Protection standard, discussed in Section IV.D, Soil Protection of this Draft Proposed Order. The findings in that section indicate that construction and operation of the proposed Phase 2 facility would not result in unnecessary soil erosion or loss that would reduce the productivity of soil for crop production.

(C) Soil Compaction

OAR 660-033-0130(37)(b)(C) provides that facility construction or maintenance activities must not result in unnecessary soil compaction that reduces the productivity of soil for crop production. Potential adverse impacts to soils and measures to avoid or control soil compaction are addressed by the Council's Soil Protection standard, discussed in Section IV.D, Soil Protection of this Draft Proposed Order. The findings in that section indicate that construction and operation of the proposed Phase 2 facility would not result in unnecessary soil compaction that would reduce the productivity of soil for crop production.

(D) Weed Control

OAR 660-033-0130(37)(b)(D) provides that facility construction or maintenance activities must not result in the "unabated introduction or spread of noxious weeds and other undesirable weeds species." Site certificate Condition 43 requires the certificate holder to implement a weed control plan that is approved by the Gilliam County Weed Control Officer. As such, the proposed Phase 2 facility would not result in the unabated spread of noxious weeds.

OAR 660-033-0130-(38) – Standards for Approval for Photovoltaic Solar Power Generation Facility in Exclusive Farm Use Zones

(e) For high-value farmland described at ORS 195.300(10), a photovoltaic solar power generation facility shall not use, occupy, or cover more than 12 acres unless an exception is taken pursuant to ORS 197.732 and OAR chapter 660, division 4 or the requirements of paragraph (G) are met. The governing body or its designate must find that:

(A) The proposed photovoltaic solar power generation facility will not create unnecessary negative impacts on agricultural operations conducted on any portion of the subject property not occupied by project components. Negative impacts could include, but are not limited to, the unnecessary construction of roads dividing a field or multiple fields in such a way that creates small or

isolated pieces of property that are more difficult to farm, and placing photovoltaic solar power generation facility project components on lands in a manner that could disrupt common and accepted farming practices;

(B) The presence of a photovoltaic solar power generation facility will not result in unnecessary soil erosion or loss that could limit agricultural productivity on the subject property. This provision may be satisfied by the submittal and county approval of a soil and erosion control plan prepared by an adequately qualified individual, showing how unnecessary soil erosion will be avoided or remedied and how topsoil will be stripped, stockpiled and clearly marked. The approved plan shall be attached to the decision as a condition of approval;

(C) Construction or maintenance activities will not result in unnecessary soil compaction that reduces the productivity of soil for crop production. This provision may be satisfied by the submittal and county approval of a plan prepared by an adequately qualified individual, showing how unnecessary soil compaction will be avoided or remedied in a timely manner through deep soil decompaction or other appropriate practices. The approved plan shall be attached to the decision as a condition of approval;

(D) Construction or maintenance activities will not result in the unabated introduction or spread of noxious weeds and other undesirable weed species. This provision may be satisfied by the submittal and county approval of a weed control plan prepared by an adequately qualified individual that includes a long-term maintenance agreement. The approved plan shall be attached to the decision as a condition of approval;

(E) The project is not located on high-value farmland soils unless it can be demonstrated that:

(i) Non high-value farmland soils are not available on the subject tract;

(ii) Siting the project on non high-value farmland soils present on the subject tract would significantly reduce the project's ability to operate successfully; or

(iii) The proposed site is better suited to allow continuation of an existing commercial farm or ranching operation on the subject tract than other possible sites also located on the subject tract, including those comprised of non high-value farmland soils; and

(F) A study area consisting of lands zoned for exclusive farm use located within one mile measured from the center of the proposed project shall be established and:

(i) If fewer than 48 acres of photovoltaic solar power generation facilities have been constructed or received land use approvals and obtained building permits within the study area, no further action is necessary.

(ii) When at least 48 acres of photovoltaic solar power generation have been constructed or received land use approvals and obtained building permits, either as a single project or as multiple facilities within the study area, the local government or its designate must find that the photovoltaic solar energy generation facility will not materially alter the

> *stability of the overall land use pattern of the area. The stability of the land use pattern will be materially altered if the overall effect of existing and potential photovoltaic solar energy generation facilities will make it more difficult for the existing farms and ranches in the area to continue operation due to diminished opportunities to expand, purchase or lease farmland or acquire water rights, or will reduce the number of tracts or acreage in farm use in a manner that will destabilize the overall character of the study area.*

The Gilliam County Zoning Ordinance has not been updated to incorporate Oregon Administrative Rule 660-033-0130(38). OAR 660-033-0130(38)(h) establishes that, for projects that would be sited on 12 acres or more of high-value farmland, an exception is required pursuant to ORS 197.732 and OAR Chapter 660, division 4. The proposed solar array micrositing corridor contains approximately 326.7 acres of high-value farmland. However, as shown on Figure K-11 of Exhibit K, the high-value farmland is "scattered" across the micrositing corridor. As explained in this order, the land is only designated as high-value farmland because of its presence in the Columbia Valley AVA, and meets certain slope, elevation, and aspect criteria.

While the certificate holder seeks approval to site the solar array anywhere within the micrositing corridor, and it is theoretically possible that all the high-value farmland would be impacted by certain configurations of solar modules, it is very unlikely that the entirety of the designated high-value farmland would be affected by the proposed Phase 2 solar facility components. However, regardless of the specific configuration, it is likely that the proposed Phase 2 solar facility components would preclude more than 12 acres of high-value farmland, and as such, a Goal 3 exception is required.[48] The Department's assessment of the certificate holder's Goal 3 exception request is evaluated in Section III.E.4 below and recommends that the Council find that an exception to Goal 3 is justified. The other provisions of this OAR apply because the facility would affect land classified as high-value farmland.

OAR 660-033-0130(38)(f)(A):

OAR 660-033-0130(38)(f)(A) requires a demonstration that the proposed photovoltaic solar power generation facility would not create unnecessary negative impacts to agricultural operations, soil erosion or loss, soil compaction, or the unabated introduction or spread of noxious weeds.[49] The certificate holder asserts that the proposed energy facility would not impact or create unnecessary negative impacts on agricultural operations for the following reasons:

[48] MWPRFA4 Section K.4.3, p. K-11

[49] "Tract" is defined in LCDC rule as "one or more contiguous lots or parcels under the same ownership." OAR 660-033-0020(14).

The design and layout of the proposed solar array would not require relocation of any existing farm access routes or farm infrastructure, and would not result in changes to existing farm practices for planting, irrigation, fertilization, or harvesting on adjacent land.[50] A letter provided by Weedman Ranches confirmed that their agricultural practices would not be unnecessarily impacted.[51] The proposed solar array site would be located on land that is not currently irrigated (and has never been irrigated), nor are there water rights for the site, and the site has limited agricultural productivity.[52]

The solar micrositing area is proposed as a continuous "large block;" therefore, by definition, the solar array would preclude the use of land for agricultural purposes in areas where solar panels are constructed but the solar array would not otherwise alter the ability for Weedman Ranches to engage in agricultural operations adjacent to the solar facility. The battery storage system would be co-located with the collector substation to further minimize potential impacts to ongoing agricultural operations. The presence of the solar facility would not diminish the Weedman Ranch's ability to expand its agricultural operations in areas other than ~~from~~ the solar facility or ~~, and would not~~ otherwise affect its ability to acquire legal rights to lease farmland or water rights. Nor ~~, not~~ would the presence of a solar facility result in a destabilization of the overall character of the study area.

The Department agrees with the certificate holder's analysis and recommends that the Council conclude that the proposed solar array would not create unnecessary negative impacts on agricultural operations conducted on any portion of the subject property not occupied by facility components, and therefore satisfies the requirements under OAR 660-033-0130(38)(f)(A).

OAR 660-033-0130(38)(f)(B):

OAR 660-033-0130(38)(f)(B) requires the certificate holder to demonstrate that the proposed solar array would not "result in unnecessary soil erosion or loss that could limit agricultural productivity on the subject property" and states that the "provision may be satisfied by submittal and county approval of a soil and erosion control plan prepared by an adequately qualified individual, showing how unnecessary soil erosion will be avoided or remedied and how topsoil will be stripped, stockpiled and clearly marked."

As necessary, to satisfy this provision, the certificate holder must demonstrate compliance with the Council's Soil Protection standard; current Condition 80 of the Site Certificate requires the certificate holder to construct the facility in accordance with an Erosion and Sediment Control Plan, which must be approved by the Oregon Department of Environmental Quality (DEQ), and

[50] RFA 4, Section 4.020(H)
[51] MWPRFA4, Attachment K-4

a National Pollutant Discharge Elimination System (NPDES) Storm Water Discharge General Permit 1200-C. Furthermore, Condition 92 requires the Certificate Holder to comply with a Revegetation Plan. These plans include best management practices to be implemented during facility construction and operation, and are designed to reduce and minimize unnecessary soil erosion or loss that could limit agricultural productivity within the proposed facility site and on adjacent EFU zoned land.

The Department agrees with the certificate holder's analysis and recommends that the Council conclude that the proposed solar array would not result in unnecessary soil erosion or loss that could limit agricultural productivity, and therefore satisfies the requirements under OAR 660-033-0130(38)(f)(B).

OAR 660-033-0130(38)(f)(C):

OAR 660-033-0130(38)(f)(C) requires the Certificate Holder to demonstrate that the proposed solar array would not "result in unnecessary soil compaction that reduces the productivity of soil for crop production." Soil compaction would be limited by the certificate holder's use of existing or constructed access roads, which would limit potential impacts from driving across or through productive soils used for crop production; specifically, Condition 81 mandates that truck traffic be limited to the extent practicable to improved road surfaces to avoid compaction. The Council stated in the *Final Order on the ASC*, that the facility "will not result in unnecessary soil erosion." Although the certificate holder proposes new related or supporting facilities this would not alter the certificate holder's ability to comply with Conditions that require the minimization of soil compaction. As such, the Department recommends that the Council conclude that the proposed energy facility would not result in unnecessary soil compaction, and would satisfy the requirements under OAR 660-033-0130(38)(f)(C).

OAR 660-033-0130(38)(f)(D):

OAR 660-033-0130(38)(f)(D) requires the Certificate Holder to demonstrate that the proposed energy facility would not result in the "unabated introduction or spread of noxious weeds and other undesirable weed species." The certificate holder must comply with Condition 43, which requires that it implement a weed control plan, which must be approved by the Gilliam County Weed Control Officer. Based upon compliance with Condition 43, the Department recommends that the Council conclude that the proposed solar array would not result in unabated introduction or spread of noxious weeds or other undesirable weed species, and would satisfy the requirements under OAR 660-033-0130(38)(f)(D).

OAR 660-033-0130(38)(f)(E):

OAR 660-033-0130(38)(f)(E) requires the Certificate Holder to demonstrate that the proposed solar array is not located on high-value farmland soils, which are defined as Class I, II, prime

and unique soils. As described in Exhibit I and K, the proposed Phase 2 solar array would be sited on mostly Class III soils, and also includes Class IV, VI, and VII. As such, this criterion is met.

OAR 660-033-0130(38)(f)(F):

OAR 660-033-0130(38)(f)(F) requires the certificate holder to establish a 1-mile study area and evaluate the presence of other approved and developed solar facilities, and the OAR also identifies specific evaluative criteria in circumstances where at least 48 acres of land within the study area have been developed for solar facilities. The certificate holder asserts that there are no other solar facilities within the study area that have either been constructed or that have received land use approvals/building permits. Therefore, under OAR 660-033-0130(38)(f)(F)(i), no further action is necessary. The Department agrees with the certificate holder's assessment and recommends that Council conclude that the requirements under OAR 660-033-0130(38)(f)(F) would be satisfied.

As relevant to the proposed energy facility, OAR 660-033-0130(38) further provides that:

> *(g) For arable lands, a photovoltaic solar power generation facility shall not preclude more than 20 acres from use as a commercial agricultural enterprise unless an exception is taken pursuant to ORS 197.732 and OAR chapter 660, division 4. The governing body or its designate must find that:*
>
> *(A) The project is not located on high-value farmland soils or arable soils unless it can be demonstrated that:*
>
> *i. Nonarable soils are not available on the subject tract;*
>
> *ii. Siting the project on nonarable soils present on the subject tract would significantly reduce the project's ability to operate successfully; or*
>
> *iii. The proposed site is better suited to allow continuation of an existing commercial farm or ranching operation on the subject tract than other possible sites also located on the subject tract, including those comprised of nonarable soils;*
>
> *(B) No more than 12 acres of the project will be sited on high-value farmland soils described at ORS 195.300(10) unless an exception is taken pursuant to 197.732 and OAR chapter 660, division 4;*
>
> *(C) A study area consisting of lands zoned for exclusive farm use located within one mile measured from the center of the proposed project shall be established and:*
>
> *i. If fewer than 80 acres of photovoltaic solar power generation facilities have been constructed or received land use approvals and obtained building permits within the study area no further action is necessary.*
>
> *ii. When at least 80 acres of photovoltaic solar power generation have been constructed or received land use approvals and obtained building permits, either as a single project or as multiple facilities, within the study area the local government or its designate must find that the photovoltaic solar energy generation facility will not materially alter the stability of the overall land use pattern of the area. The stability of the land use pattern will be materially altered*

if the overall effect of existing and potential photovoltaic solar energy generation facilities will make it more difficult for the existing farms and ranches in the area to continue operation due to diminished opportunities to expand, purchase or lease farmland, acquire water rights or diminish the number of tracts or acreage in farm use in a manner that will destabilize the overall character of the study area; and

(D) The requirements of OAR 660-033-0130(38)(f)(A), (B), (C) and (D) are satisfied.

OAR 660-033-0130(38)(g)(A)

OAR 660-033-0130(38)(g)(A) requires the certificate holder to demonstrate that the proposed energy facility could not be located on high-value farmland soils or arable soils unless: 1) nonarable soils are not available on the subject tract; 2) siting the project on nonarable soils, if present, would significantly impact the project's ability to operate; or 3) the site is better suited than other possible sites because it would allow continued operation of existing farmland.[53]

The certificate holder indicates that the subject tract is predominantly composed of class 3 soils; however, approximately 1,286 acres of Class 6 and Class 7 soils exist within the subject tract, which represents approximately 16% of total tract acreage.[54] The certificate holder represents that these non-arable soils are "distributed throughout the periphery of the tract" and are located below plateaus and ridgelines dissected by small gullies. The soil classifications are provided within Figure K-7B, which confirms that Class 6 or 7 soils are predominantly located at the outer boundary of the analysis area, and are in irregular areas that parallel the Middle and Upper Rock Creek Roads. The Department agrees with the certificate holder that siting the solar array along these geographic features would not be conducive to a solar array.

Based on the above analysis, the Department recommends the Council conclude that because nonarable soils represent a small proportion of the total acreage on the on the subject tract, and because non-arable soils are located at the outer edges of the analysis area and along topographic features that would reduce efficiency of a solar facility; that siting the proposed energy facility on an alternate location within the tract would reduce the ability of the facility to operate successfully, and the proposed site is better suited to allow continuation of an existing commercial farm than other locations, the provisions of OAR 660-033-0130(g)(A) would be satisfied.

OAR 660-033-0130(38)(g)(B)

[53] As defined in OAR 660-033-0020, "tract" means one or more contiguous lots or parcels under the same ownership. The Department notes that because OAR 660-033-0130(38)(g)(A) requires an evaluation of soil conditions on the "subject tract," that such an evaluation may require the review of areas outside of the proposed site boundary area.

[54] MWPAMD4, Section OAR 660-033-0130(38)(g)(A)

OAR 660-033-0130(38)(g)(B) establishes that for projects that would be sited on 12 acres or more of high-value farmland, an exception is taken pursuant to ORS 197.732 and OAR Chapter 660, division 4.[55] The Department's assessment of the Applicant's Goal 3 exception request is evaluated in Section IV.E.4 below, and recommends that the Council find that an exception to Goal 3 is justified under ORS 469.504(2).

OAR 660-033-0130(38)(g)(C)

OAR 660-033-0130(38)(g)(C) requires the certificate holder to establish a 1-mile study area of EFU-zoned land and evaluate the presence of other approved and developed solar facilities, and identifies specific evaluation criteria in circumstances where at least 80 acres of land within the study area have been developed for solar facilities. The certificate holder asserts that there are no other solar facilities within the study area that are either constructed or that have received land use approvals/building permits; therefore under OAR 660-033-0130(38)(g)(C)(i), no further action is necessary. The Department agrees with the certificate holder's assessment and recommends that Council conclude that the requirements under OAR 660-033-0130(38)(g)(C) would be satisfied.

OAR 660-033-0130(38)(g)(D)

OAR 660-033-0130(38)(g)(D) requires the certificate holder to demonstrate that the provisions of OAR 660-033-0130(38)(f)(A)-(D) have been satisfied. Based on the analysis presented above, the Department recommends that Council conclude that OAR 660-033-0130(38)(f)(A)-(D) would be satisfied.

OAR 660-033-0130(38)(i)-(j)

Provisions (i) and (j) under OAR 660-033-0130(38) are also relevant to the proposed energy facility and provide that:

> *(i) The county governing body or its designate shall require as a condition of approval for a photovoltaic solar power generation facility, that the project owner sign and record in the deed records for the county a document binding the project owner and the project owner's successors in interest, prohibiting them from pursuing a claim for relief or cause of action alleging injury from farming or forest practices as defined in ORS 30.930(2) and (4).*
> *(j) Nothing in this section shall prevent a county from requiring a bond or other security from a developer or otherwise imposing on a developer the responsibility for retiring the photovoltaic solar power generation facility.*

[55] Note that for EFSC-jurisdictional facilities, Council statutes and rules govern the goal exception process, found at ORS 469.504(2) and OAR 345-022-0030(4).

OAR 660-033-0130(38)(i)

OAR 660-033-0130(38)(i) requires the governing body to impose a condition that the certificate holder sign and record in the deed records for the County a document binding the project owner and the project owner's successors in interest, prohibiting them from pursuing a claim for relief or cause of action alleging injury from farming. Current site certificate Condition 41 requires the certificate holder to record "in the real property records of Gilliam County a Covenant Not to Sue with regard to generally accepted farming practices on adjacent farmland." The certificate holder indicates that it will amend its "Covenant Not to Sue" that is currently recorded, to include land within the proposed site boundary expansion. Therefore, based on Condition 41 and the certificate holder's representation, the Department recommends that Council conclude the requirements under OAR 660-033-0130(38)(i) would be satisfied.

OAR 660-033-0130(38)(j)

OAR 660-033-0130(38)(j) allows for the governing body to require a bond or letter of credit for the amount necessary to retire the facility during decommissioning. Existing site certificate Condition 32 requires the certificate holder to obtain a bond or letter of credit, before beginning construction. Therefore, based upon existing Condition 32, in conjunction with the Department's recommended amendment to Condition 32 contained within Section III.G., *Retirement and Financial Assurance* of this order, the Department recommends that Council conclude that the requirements under OAR 660-033-0130(38)(j) would be satisfied.

III.E.3 Goal 3 Exception

The proposed Phase 2 solar facility components could ~~would~~ be sited on more than 12 acres of high-value farmland as defined in ORS 195.300(10), and ~~would~~ could preclude more than 12 acres of high value farmland and more than 20 acres of arable land from use as a commercial agricultural enterprise. Therefore, the proposed Phase 2 solar facility components would not comply with OAR 660-033-0130(38)(f) and (38)(g) unless a goal exception is taken. Pursuant to ORS 469.504(1)(b)(B), non-compliance with a statewide planning goal requires a determination by the Council that an exception to Goal 3 is warranted under ORS 469.504(2) and the implementing rule at OAR 345-022-0030(4).

Goal 2, under OAR 660-015-0020(2)(Part II), permits an "exception" to the requirement of a goal for "specific properties or situations." The text of Goal 2, part II, pertaining to exceptions is codified in ORS 197.732; however, for EFSC-jurisdictional facilities, ORS 469.504(2) establishes the requirements that must be met for the Council to take an exception to a land use planning goal, not the LCDC rule or statute. The requirements of ORS 469.504(2) are implemented through the Council's Land Use standard at OAR 345-022-0030(4), which states:

(4) The Council may find goal compliance for a proposed facility that does not otherwise comply with one or more statewide planning goals by taking an exception to the applicable goal. Notwithstanding the requirements of ORS 197.732 (emphasis added), the statewide planning goal pertaining to the exception process or any rules of the Land Conservation and Development Commission pertaining to the exception process goal, the Council may take an exception to a goal if the Council finds:

(a) The land subject to the exception is physically developed to the extent that the land is no longer available for uses allowed by the applicable goal;

(b) The land subject to the exception is irrevocably committed as described by the rules of the Land Conservation and Development Commission to uses not allowed by the applicable goal because existing adjacent uses and other relevant factors make uses allowed by the applicable goal impracticable; or

(c) The following standards are met:

(A) Reasons justify why the state policy embodied in the applicable goal should not apply;

(B) The significant environmental, economic, social and energy consequences anticipated as a result of the proposed facility have been identified and adverse impacts will be mitigated in accordance with rules of the Council applicable to the siting of the proposed facility; and

(C) The proposed facility is compatible with other adjacent uses or will be made compatible through measures designed to reduce adverse impacts.

The provisions of OAR 345-022-0030(4)(a) and (b) are not applicable to the proposed facility. The certificate holder submitted an assessment as to why a goal exception under OAR 345-022-0030(4)(c) is appropriate for the proposed facility; the Department agrees that a goal exception under OAR 345-022-0030(4)(c) is appropriate, and the Department's evaluation of the OAR 345-022-0030(4)(c) is provided below.

Reasons Supporting an Exception

Under OAR 345-022-0030(4)(c)(A) (and ORS 469.504(2)(c)(A)), in order for the Council to determine whether to grant an exception to a statewide planning goal, the certificate holder must provide reasons justifying why the state policy embodied in the applicable goal should not apply. The state policy embodied in Goal 3 is the preservation and maintenance of agricultural land for farm use. The certificate holder's arguments relating to "reasons supporting an exception" are discussed below.

Local Economic Benefits

The certificate holder asserts that the solar generation facility would promote rural economic development through job creation and by stimulating the Gilliam County tax base. The certificate holder represents that Gilliam County contains approximately 723,405 acres of farmland, and the solar array would remove a maximum of 1,189 acres from production.[56] The certificate holder asserts that the removal of 1,189 acres from 723,405 is "insignificant." Furthermore, the certificate holder notes that loss to agricultural fields is offset through lease payments to the landowners, and the solar array would result in economic benefits to the County. The certificate holder maintains a "Strategic Investment Plan" that would "provide the tax revenue directly to the County." Furthermore, facility construction and operation would create up to 24 new employment opportunities, which would indirectly benefit local business. The Department agrees that the proposed facility site would benefit the local economy through the stimulation of the local tax base, that payments would be directed the landowners, and that the solar array would create some new employment opportunities. The Department recommends the Council to conclude that this argument is a relevant "reason" justifying a Goal 3 exception.

Minimal Loss to Productive Agriculture

The certificate holder asserts that the proposed site would remove 1,189 acres of the total 8,276 acres contained within the Weedman Ranches. The solar micrositing area accounts for approximately 14.4% of the entire farming operation, and the solar array itself would remove 14.4% of land from the Weedman Ranch. The solar micrositing area is currently used for dryland wheat agriculture, and the landowner consented to the removal of dryland wheat farming operations in the solar micrositing area. As such, the Department considers this relevant information for the Council to consider when evaluating "reasons" that justify why a state policy embodied in the applicable goal should not apply, and the Department recommends the Council to conclude that this argument a relevant "reason" justifying a Goal 3 exception.

Lack of Water Rights on Proposed Solar Array

The certificate holder asserts that there are no agricultural irrigation water rights located in the solar micrositing area, nor is Weedman Ranch able to obtain new water rights after the expiration of water right No. G15187. The proposed solar array would be located within an area that was previously granted a water right (Permit G-15187).[57] However, as explained within the RFA 4 and from a letter provided by Weedman Ranches Inc., the water right is no longer valid

[56] Note that if only Scenario C was constructed as Phase 2, the battery storage system and collector substation would attributable to the permanent impacts from the solar power generation facility, thereby increase the acres removed from agricultural production from 1,189 acres to 1,207.64 acres or 1.5 percent increase, which the Department finds is di minimus.

[57] *See* Figure K-5: Location of Water Rights within the Proposed Expanded Site Boundary

and was never used by Weedman Ranches.[58] Thus, water is not available for agricultural use at the solar micrositing area. The land is currently used for dryland winter wheat agriculture, which can be grown without irrigation. However, the Department takes the position that a lack of water right is a relevant "reason" justifying a Goal 3 exception. In the Columbia Plateau region, the availability of water for irrigation is limited; but when available, irrigation typically leads to a substantial increase in the farming productivity of the land. As such, the Department considers this relevant information for the Council to consider when evaluating "reasons" that justify why a state policy embodied in the applicable goal should not apply, and the Department recommends the Council to conclude that this argument a relevant "reason" justifying a Goal 3 exception.

Proximity to Existing Infrastructure

It is relevant to the Goal 3 exception reasons to consider that the proposed Phase 2 solar facility components would be located in close proximity to existing infrastructure, "co-located" with the Phase 1 Montague facility currently under construction. As described elsewhere in this order and in the RFA4, the proposed Phase 2 230-kV transmission line would extend approximately three miles to connect the Phase 2 substation to the Phase 1 substation. Additionally, road access to the solar facility is available via existing state highway 19.

Arguments That Do Not Qualify As "Reasons" to Justify a Goal 3 Exception

The certificate holder asserts that it does not seek to permanently remove land from agricultural production, and that the land would be returned to agricultural purposes following retirement and restoration. The Department agrees that the site would be returned to agricultural purposes after facility retirement; however, the Department does not consider this argument relevant to "reasons supporting an exception." The site, as requested, would preclude agricultural use for 40 years, at least. While effects of the land removal may not "permanent" in a long time scale, such effects nonetheless sufficiently disturb land for an extended period of time. The Department therefore recommends that the Council conclude that the mere fact that the land may be returned for agricultural use, after its projected retirement after 40 years or more, is not a sufficient "reason" justifying a Goal 3 exception for the proposed facility.

The certificate holder asserts that the availability of reliable renewable energy relates to the ability to recruit and retain energy-dependent businesses, which may maintain renewable energy procurement policies. The certificate holder has not provided evidence of any specific companies that are considering to expand, or move business, because of renewable energy procurement policies. Therefore, the Department finds this argument to be attenuated and

[58] *See* Attachment K-4: Weedman Ranches Inc. Letter; Attachment K-5: Oregon Water Resources Department Correspondence

lacking specifics; therefore, the Department recommends that the Council conclude that this argument is not a sufficient reason justifying a Goal 3 exception.

The certificate holder indicates that it has an interconnection agreement with Bonneville Power Administration to transport electricity to the Slatt Substation. Furthermore, the certificate holder notes that the solar array would be sited in proximity to the Phase 2 collector substation, which is "comparatively convenient access to the regional grid." However, the Phase 2 substation is not constructed and is under review for approval as part of this RFA process.

The certificate holder asserts that the facility would further public and private policies, including but not limited to Oregon's Renewable Portfolio Standard (RPS), which requires utilities to provide 50% of its electricity from renewable sources by 2040. The Department agrees that energy generated by the proposed facility could apply towards the State's RPS requirements if RECs are generated and purchased by in-state utilities. However, there is no requirement in the state RPS requirements that renewable energy be procured from Oregon-based resources, nor direct facility development on agricultural lands, the Department does not consider abstract consistency with the State's RPS standard to be a sufficient "reason" justifying a Goal 3 exception for the Montague solar array, specifically. Additionally, Avangrid has not provided a power purchase agreement or other documentation that would demonstrate that the Phase 2 solar array would provide power to an Oregon utility in support of its RPS requirements. Therefore, the Department recommends that Council conclude that although the development of the proposed Phase 2 solar facility as a renewable energy source would further and advance the State's renewable energy resources policy, this is not considered a sufficient reason supporting or justifying a Goal 3 exception for the proposed facility.

Significant Environmental, Economic, Social and Energy Consequences

Under OAR 345-022-0030(4)(c)(B) and ORS 469.504(2)(c)(B), in order for the Council to determine whether to grant an exception to a statewide planning goal, the certificate holder must show that "the significant environmental, economic, social and energy consequences" of the proposed Phase 2 solar facility components have been identified and mitigated in accordance with Council standards.

Environmental Consequences

The proposed facility must satisfy the requirements of all applicable EFSC standards, rules and statutes. Applicable environmental EFSC standards include: General Standard of Review; Soil Protection standard; Protected Areas standard; Recreation Standard; Scenic Resources standard; Fish and Wildlife Habitat standard; and the Threatened and Endangered Species standard. The Department recommends that the Council find that the proposed facility has been designed to avoid impacts to soils, wetlands, fish and wildlife habitats, and threatened and endangered species. The land is already impacted by farming, and as described in Section III.H. *Fish and Wildlife Habitat*, is classified as Category 6 habitat, the lowest quality for wildlife.

Siting the solar facility on Category 6 habitat avoids impacts higher quality wildlife habitat that could result if the solar facility were sited elsewhere.

Based on the Department's recommended findings of fact, conclusions of law, and conditions of approval presented within this order, the Department recommends that Council find that the proposed Phase 2 solar facility, including mitigation, would not cause significant adverse environmental consequences or impacts.

Economic Consequences

The certificate holder represents that construction and operation of the proposed facility would result in beneficial economic consequences from job creation and subsequent tax revenue for the County, and the diversification of underlying landowner income sources. Although existing areas within the site boundary are used for agricultural purposes, the land proposed for use as a solar array is not irrigated and does not possess a water-right. Therefore, the Department recommends that the Council conclude that the proposed Phase 2 solar facility represents a net benefit compared to the site's existing uses and economic consequences.

Social Consequences

The certificate holder represents that the proposed facility would not result in significant adverse social consequences. The Department considers social consequences as impacts on a community from a proposed facility, such as impacts from facility visibility, noise, traffic or demand on providers of public services. As demonstrated in the applicable sections of this proposed order, the Department agrees that impacts to scenic resources, protected areas, and recreational opportunities would, considering the recommended conditions, not result in significant adverse impacts and would comply with the appropriate Council standards. The Department addresses potential adverse impacts to public services in Section IV.M, *Public Services*, and impacts to cultural resources in Section IV.K., *Historic, Cultural and Archaeological Resources*. The Department recommends that the Council find that the proposed Phase 2 solar facility would not result in significant adverse impacts to these areas.

The certificate holder also represents that, when fully inverted, the solar panels would not exceed 15 feet, and would not present a visual issue for automobile drivers. The certificate holder further represents that "modern photovoltaic solar modules use a sophisticated antireflective coating to nearly eliminate the reflection of sunlight off the module face and are not expected to generate significant reflective glare." While the Department is aware that "glare" may be considered a subjective concern, the Department recommends Council consider that modern solar photovoltaic technologies should not pose a significant glare impact. Based on the Department's recommended findings of fact and conclusions of law, and recommended conditions of compliance, as presented in the order, the proposed Phase 2 solar facility would not cause significant adverse social consequences.

Energy Consequences

The certificate holder represents that, because the proposed facility would produce renewable energy, the energy consequences would be beneficial and would be consistent with the State's Renewable Portfolio Standard and "Oregon's commitment to rural economic development." Although the Department notes that Oregon maintains an aggressive Renewable Portfolio Standard, the certificate holder has not provided evidence that the sale of energy derived from the solar array would contribute towards any specific Oregon utility's RPS requirements. However, whether the sale of energy from the solar array would be directly attributable to the Renewable Portfolio Standard is not a material consideration. The mere fact that the facility would generate renewable energy indicates that the solar array would not result in significant adverse energy consequences. Based upon the above analysis, the Department recommends the Council find that the proposed Phase 2 solar facility would meet the standard under OAR 345-022-0030(4)(c)(B).

Compatibility of Adjacent Uses

The Department agrees that the proposed Phase 2 facility would not force a significant change in accepted farm practices in its discussion of GCZO 4.020(H); the reasoning found in that discussion applies to whether the solar array is compatible with other adjacent uses, or whether the solar array would be made compatible through measures designed to reduce adverse impacts. Specifically, while the certificate holder states that the solar array could cause adverse impacts, these impacts are mitigated through the imposition of an Erosion and Sediment Control Plan and a Revegetation and Weed Control Plan; as well as implement best management practices to control construction-related dust; ensure that truck traffic would be limited to improved road surfaces and; provide notice to adjacent landowners relating to traffic impacts; employ flaggers, signage, and institute traffic control measures. Additionally, site certificate Condition 41 requires the certificate holder to record a "Covenant Not to Sue," relating to generally accepted farming practices on adjacent farmland, and the landowner attests that the solar array would not prevent continued farming operations.[59]

Goal 3 Conclusion of Law

Based on the foregoing findings and evidence in the record, the Department recommends that Council grant a Goal 3 exception for the portion of the proposed amended site boundary that will be occupied with solar facility components, whether it be a final layout with wind/solar/battery storage, or only solar or solar/battery storage, subject to compliance with the recommended amended and existing site certificate conditions.

[59] MWPAMD4. Request for Amendment 4 Exhibit K, Attachment K-4, Weedmans Ranches Inc. Letter. 2019-04-05.

Conclusions of Law

Based on the foregoing findings and the evidence in the record, and subject to compliance with the recommended amended and existing site certificate conditions, the Department recommends the Council finds ~~an exception to Goal 3 is justified under OAR 345-022-0030(4)(c) and ORS 469.504(2)(c); and that therefore the Department recommends that the Council find~~ that the facility, with proposed changes, ~~and its supporting facilities complies with the applicable statewide planning goal (Goal 3). As such, subject to the existing, new and amended conditions, the Department recommends the Council find that the facility, with proposed changes, and its supporting facilities~~ complies with the Council's Land Use standard.

III.F. Protected Areas: OAR 345-022-0040

(1) Except as provided in sections (2) and (3), the Council shall not issue a site certificate for a proposed facility located in the areas listed below. To issue a site certificate for a proposed facility located outside the areas listed below, the Council must find that, taking into account mitigation, the design, construction and operation of the facility are not likely to result in significant adverse impact to the areas listed below. References in this rule to protected areas designated under federal or state statutes or regulations are to the designations in effect as of May 11, 2007:

(a) National parks, including but not limited to Crater Lake National Park and Fort Clatsop National Memorial;

(b) National monuments, including but not limited to John Day Fossil Bed National Monument, Newberry National Volcanic Monument and Oregon Caves National Monument;

(c) Wilderness areas established pursuant to The Wilderness Act, 16 U.S.C. 1131 et seq. and areas recommended for designation as wilderness areas pursuant to 43 U.S.C. 1782;

(d) National and state wildlife refuges, including but not limited to Ankeny, Bandon Marsh, Baskett Slough, Bear Valley, Cape Meares, Cold Springs, Deer Flat, Hart Mountain, Julia Butler Hansen, Klamath Forest, Lewis and Clark, Lower Klamath, Malheur, McKay Creek, Oregon Islands, Sheldon, Three Arch Rocks, Umatilla, Upper Klamath, and William L. Finley;

(e) National coordination areas, including but not limited to Government Island, Ochoco and Summer Lake;

(f) National and state fish hatcheries, including but not limited to Eagle Creek and Warm Springs;

(g) National recreation and scenic areas, including but not limited to Oregon Dunes National Recreation Area, Hell's Canyon National Recreation Area, and the Oregon Cascades Recreation Area, and Columbia River Gorge National Scenic Area;

(h) State parks and waysides as listed by the Oregon Department of Parks and Recreation and the Willamette River Greenway;

(i) State natural heritage areas listed in the Oregon Register of Natural Heritage Areas pursuant to ORS 273.581;

(j) State estuarine sanctuaries, including but not limited to South Slough Estuarine Sanctuary, OAR Chapter 142;

(k) Scenic waterways designated pursuant to ORS 390.826, wild or scenic rivers designated pursuant to 16 U.S.C. 1271 et seq., and those waterways and rivers listed as potentials for designation;

(l) Experimental areas established by the Rangeland Resources Program, College of Agriculture, Oregon State University: the Prineville site, the Burns (Squaw Butte) site, the Starkey site and the Union site;

(m) Agricultural experimental stations established by the College of Agriculture, Oregon State University, including but not limited to: Coastal Oregon Marine Experiment Station, Astoria Mid-Columbia Agriculture Research and Extension Center, Hood River Agriculture Research and Extension Center, Hermiston Columbia Basin Agriculture Research Center, Pendleton Columbia Basin Agriculture Research Center, Moro North Willamette Research and Extension Center, Aurora East Oregon Agriculture Research Center, Union Malheur Experiment Station, Ontario Eastern Oregon Agriculture Research Center, Burns Eastern Oregon Agriculture Research Center, Squaw Butte Central Oregon Experiment Station, Madras Central Oregon Experiment Station, Powell Butte Central Oregon Experiment Station, Redmond Central Station, Corvallis Coastal Oregon Marine Experiment Station, Newport Southern Oregon Experiment Station, Medford Klamath Experiment Station, Klamath Falls;

(n) Research forests established by the College of Forestry, Oregon State University, including but not limited to McDonald Forest, Paul M. Dunn Forest, the Blodgett Tract in Columbia County, the Spaulding Tract in the Mary's Peak area and the Marchel Tract;

(o) Bureau of Land Management areas of critical environmental concern, outstanding natural areas and research natural areas;

(p) State wildlife areas and management areas identified in OAR chapter 635, Division 8.

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(3) The provisions of section (1) do not apply to transmission lines or natural gas pipelines routed within 500 feet of an existing utility right-of-way containing at least one transmission line with a voltage rating of 115 kilovolts or higher or containing at least one natural gas pipeline of 8 inches or greater diameter that is operated at a pressure of 125 psig.

Findings of Fact

The Protected Areas standard requires the Council to find that, taking into account mitigation, the design, construction and operation of a proposed facility or facility, with proposed changes, are not likely to result in significant adverse impacts to any protected area as defined by OAR 345-022-0040.[60] The following potential impacts during construction and operation of the facility, with proposed changes, are evaluated: excessive noise, increased traffic, water use, wastewater disposal, visual impacts of facility structures or plumes, and visual impacts from air emissions.

The analysis area for protected areas is the area within and extending 20 miles from the proposed amended site boundary. In RFA4, thirteen protected areas were identified within the analysis area, as presented in Table 2, *Protected Areas within the Analysis Area and Distance from Proposed Amended Site Boundary*. Protected areas that are shaded in gray in the table were not identified in previous Council orders on the Montague facility.[61]

[60] OAR 345-001-0010(53) defines "Significant" as "…having an important consequence, either alone or in combination with other factors, based upon the magnitude and likelihood of the impact on the affected human population or natural resources, or on the importance of the natural resource affected, considering the context of the action or impact, its intensity and the degree to which possible impacts are caused by the proposed action. Nothing in this definition is intended to require a statistical analysis of the magnitude or likelihood of a particular impact."

[61] MWPAMD4 Exhibit L, p.L-3 2019-04-05. As shown in Table L-1 of RFA4, Crow Butte State Park is located across the Columbia River, approximately 20 miles north from the approved facility (Phase 1). The Department concludes that non-Oregon state parks are not identified as protected areas subject to the Council's Protected Areas standard. Under OAR 345-022-0040(h), protected areas include "State parks and waysides as listed by the Oregon Department of Parks and Recreation and the Willamette River Greenway." Being in Washington, Crow Butte State Park is not listed by the Oregon Department of Parks and Recreation and therefore would not qualify as a protected area under the Council's standard. However, even if Crow Butte State Park were considered to be a protected area, the facility would not cause a significant adverse impact to the park from noise or other impacts. The park is across the Columbia River and there are a number of other intervening development features including I-84, SR-14, railroad lines, existing transmission lines, and other features. As such, Crow Butte State Park is not further addressed in the draft proposed order.

Table 2: Protected Areas within the Analysis Area and Distance from Proposed Amended Site Boundary

Protected Area	Approximate Distance and Direction from Proposed Amended Site Boundary	Protected Area Designation Basis (OAR Reference)
Horn Butte Wildlife Area	0 miles northeast	345-022-0040(1)(o)
John Day Wildlife Refuge	5 miles west	345-022-0040(1)(d)
John Day Wild and Scenic River	5 miles west	345-022-0040(1)(k)
John Day State Scenic Waterway	5 miles west	345-022-0040(1)(k)
John Day (Hildebrand) State Park	5 miles west	345-022-0040(1)(h)
Cottonwood Canyon State Park[1]	6 miles southwest	345-022-0040(1)(h)
Willow Creek Wildlife Area	12 miles northeast	345-022-0040(1)(p)
Ferry Canyon ACEC	17 miles southwest	345-022-0040(1)(o)
Umatilla National Wildlife Refuge	20 miles northeast	345-022-0040(1)(d)
Lindsey Prairie Preserve	20 miles east	345-022-0040(1)(i)
Boardman Research Natural Area	20 miles east	345-022-0040(1)(o)

Notes:
1. RFA4 Exhibit L includes an evaluation of potential impacts to Cottonwood Canyon State Park, even though the State Park was not designated as a protected area until 2015. Potential impacts to this park were not previously evaluated by Council, as the standard applies to protected areas with designations that predate May 12, 2007.

As presented in Table 2, *Protected Areas within the Analysis Area and Distance from Proposed Amended Site Boundary,* the majority of the listed protected areas are located at least five miles from the proposed amended site boundary. The protected areas closest to the site boundary include the Horn Butte Wildlife Area (0 miles); and John Day Wildlife Refuge, John Day Wild and Scenic River, John Day State Scenic Waterway, and John Day (Hildebrand) State Park (5 miles, each). It is important to note that the Horn Butte Wildlife Area is adjacent to the Phase 1 previously-approved facility site boundary but is not adjacent to the Phase 2 site boundary. Potential adverse impacts to protected areas during construction and operation of the facility, with proposed changes, from noise, traffic, water use and wastewater disposal, and visual are discussed below.

Potential Noise Impacts

The significance of potential noise impacts to identified protected areas is based on the magnitude and likelihood of the impact on the affected human population or natural resources that uses the protected area.[62] The nearest protected area, Horn Butte Wildlife Area, is a 6,000 acre area managed by the Bureau of Land Management as an "Area of Critical Environmental Concern" (ACEC) to protect nesting habitat for the long-billed curlew. The protected area is adjacent to the Phase 1 site boundary as previously-approved by EFSC, but would be approximately 6 miles from the nearest components associated with Phase 2. Potential noise impacts from construction and operation of the facility, with proposed changes, are evaluated at the closest protected areas: Horn Butte Wildlife Area and John Day Wildlife Refuge, John Day Wild and Scenic River, and John Day State Scenic Waterway, to determine the likelihood of potential significant adverse impacts.

Construction

Construction of the facility, with proposed changes, would result in noise impacts. In RFA4, the certificate holder provides a qualitative analysis of potential construction-related noise, describing that construction related noise impacts would be similar to the impacts identified in the quantitative analysis included in the Final Order on ASC and ASC Exhibit X. The certificate holder previously represented that total composite equipment noise levels, based on equipment operating for each construction phase (i.e. clearing, excavation, foundation, erection, finishing) and a typical usage factor for each piece of equipment, would result in a maximum noise level of 90 A-weighted decibels (dBA) at 50 feet, and would attenuate to approximately 60 dBA at 1,500 feet based on an attenuation rate of 6 dBA per doubling of distance.[63] For reference, noise levels at 60 dBA are equivalent to a vacuum cleaner at 10 feet or a data processing center, with a moderately loud subjective impression.

Based on noise attenuation, construction related noise levels at the nearest protected areas, located approximately 6 miles from the Phase 2 components, would be approximately 30 dBA. Noise levels of 30 dBA are equivalent to a soft whisper at 5 feet, with a quiet subjective impression.[64] In addition, existing site certificate Condition 106 would reduce noise impacts during construction by requiring the use of exhaust mufflers on combustion engine-powered equipment, limiting the noisiest operation of heavy construction equipment to daylight hours, and requiring that the certificate holder establish a noise complaint response system. Based on potential noise levels at the nearest protected areas, and the fact that other protected areas

[62] The Protected Areas standard requires the Council to find that, taking into account mitigation, the design, construction and operation of a facility are not likely to result in significant adverse impacts to any protected area as defined by OAR 345-022-0040. OAR 345-001-0010(53) defines "significant" as: "having an important consequence, either alone or in combination with other factors, based upon the magnitude and likelihood of the impact on the affected human population or natural resources, or on the importance of the natural resources affected, considering the context of the action or impact, its intensity and the degree to which possible impacts are caused by the proposed action. Nothing in this definition is intended to require a statistical analysis of the magnitude or likelihood of a particular impact."

[63] MWPAPPDoc1. ASC Exhibit X. 2010-04-27.

[64] *Id.*

are located approximately 14 miles from proposed facility components and construction activities, the Department recommends that Council find that construction of the facility, with proposed changes, would not be likely to result in significant adverse noise impacts at any protected area within the analysis area.

Operation

The facility, with Phase 2 components, would generate noise during facility operation. To evaluate potential noise impacts at protected areas during facility operation, noise modeling was conducted based on the sources and maximum sound power levels as presented in Table 3, *Modeled Noise Sources* which includes the Phase 1 facility components and Phase 2 components for each design scenario.

Table 3: Modeled Noise Sources – Phase 1 and Phase 2 (A, B or C)

Noise Source	Phase 1	Phase 2 Scenarios			Maximum Sound Power Level at Source (dBA)[2]
		A	B	C	
	No. of Sources				
Wind Turbine[1]	2	-	-	-	110.5
	46	-	-	-	110.2
	-	-	48	-	110
	-	70	-	-	109.2
	3	-	-	-	108.1*
	-	11	-	-	107.7*
	5	-	-	-	107.5*
Substation Transformer	2	2	2	2	98
Battery Storage System[3] (Per 10 MW centroid)	-	10	10	10	102.2
Solar Array Inverter	-	-	-	102	95.5

Notes:
1. Maximum sound power levels include 2 dBA to account for uncertainty, consistent with manufacturer specifications.
2. Maximum sound power levels were provided to the Department under separate confidential cover under ORS 192.501(2).
3. Sounds levels of the battery storage system include noise generating sources such as HVAC and inverters.

*Includes noise reduction from serrated trailing edge blades.

Proposed Phase 2 facility components would be approximately 5 miles from the John Day River, the closest protected area. Noise data from RFA4 Exhibit X shows an expected decibel level of 36 dBA less than a mile beyond the site boundary. At 5 miles distance, noise generating during operation of proposed Phase 2 facility components would be unlikely to be audible and as such would not be likely to cause a significant adverse impact from noise.

Traffic Impacts

Traffic impacts will arise through construction and operation of Phase 2. Roads that will be used to access the facility are to remain the same for Phase 2 as Phase 1, and construction activities will occur in: areas south and west of the intersection of Oregon Highway 19 and Old Tree Road; areas east and north of Baseline and Lone Roads. Additional access to Phase 2 land will occur via Weatherford Road, Bottemiller Lane, and Middle Rock Creek Lane.

The closest road to any protected area is Fourmile Road, which passes within 2 miles the Horn Butte Wildlife Area. The effects of traffic to this road were previously considered by the Council. Traffic along the Fourmile road is estimated at between 59 and 119 trips per day during the 12 month Phase 2 construction period. During facility operation, it is expected that a permanent work force of approximately 10 to 30 staff will use the road system.

The Certificate holder asserts that any traffic effects will be further reduced through utilizing a "phased" construction approach. Phase 1 of the facility began in September 2017, and is expected to be completed by December 2019. The Certificate holder expects that construction of both Phase 1 and Phase 2 will require approximately 31,900 truck trips. In the Final Order on the ASC, Council considered the potential impacts resulting from the construction of two different design scenarios; the construction of 269 (1.5 MW) turbines, and the construction or 134 (3.0 MW) turbines. Moreover, the certificate holder provided approximate totals of construction truck trips per component, and estimated that the construction of either scenario would not exceed 31,920 truck trips, assuming a 12 month construction timeline, and 20 workdays per month.

Due to the fact that construction and operation traffic for Phase 2 will be located on roads that are at least 2 miles from the closest protected area; the Department recommends that the Council find that potential traffic-related impacts during construction of Phase 2 and operation of Phase 1 and 2 would not likely result in significant adverse impacts to any protected areas.

Water Use and Wastewater Disposal

No water used on the site would be discharged into streams, wetlands or other water bodies.[65] The Certificate holder anticipates that Phase 2 construction will consume approximately 18,200,000 gallons of water.[66] The Certificate holder intends to source the water from the City of Arlington; no water will be sourced from protected areas.

The certificate holder indicates that no cleaning solvents or other additives will be utilized for the solar array washwater. Water used to clean the solar array will be discharged to the ground for evaporation or infiltration. The Certificate holder indicates that it will obtain an Oregon general water pollution control facilities permit (WPCF-1700-B) to accommodate water

[65] App, Exhibit L, p. 8
[66] App, Exhibit L, p. 7.

discharge arising from the solar panels. Solar array cleaning will be limited to its immediate vicinity and would not affect protected areas.

The certificate holder indicates that it will not use more water for Phase 1 and Phase 2 than previously approved by the Council for Phase 1, and will purchase water from the same source initially approved. The certificate holder will minimize effects to protected areas by using water for dust control purposes. Furthermore, no water will be drawn or discharged to or from protected areas. Therefore, the Department recommends that the Council find that water use and disposal during construction and operation of the facility, as amended, would not affect water quantity or water quality within any protected area.

Potential Visual Impacts of Facility Structures

Proposed Phase 2 components, which could result in visual impacts at protected areas within the analysis area could include: wind turbines with a maximum blade tip height of 597 feet; a solar array of up to 1,189 acres including a 13-feet in height; battery storage systems extending 20-feet in height; and 230 kV transmission line structures.

To evaluate potential visual impacts of wind turbines at protected areas within the analysis area, the certificate holder provides a "zone of visual influence" analysis. To evaluate potential visual impacts from the proposed 230 kV transmission line structures, solar array, and battery storage systems, the certificate holder provides as a separate analysis a discussion of the existing viewshed. Table 4, *Proposed Phase 2 Visible Structures and Visual Impact Assessment Methodology*, presents proposed facility structures and the certificate holder's visual impact assessment methodology, per proposed design scenario.

Table 4: Proposed Phase 2 Visible Structures and Visual Impact Assessment Methodology

Proposed Phase 2 Components			Visual Assessment Methodology
Proposed Design Scenario	**Structures**	**Dimensions used in Visual Assessment**	
A and B	81 wind turbines (Scen. A) 40 wind turbines (Scen. B)	Blade tip height = 597 feet Rotor diameter = 492 feet	Zone of Visual Influence (ZVI) map
	230 kV transmission line structures	100 feet in height, spaced approximately 500 feet apart	Description of impacts to existing viewshed
	104 battery storage containers or warehouse	20 feet in height; 6.4 acres of permanent disturbance	
C	230 kV transmission line structures	100 feet in height	Description of impacts to existing viewshed
	104 battery storage containers	20 feet in height; 6.4 acres of permanent disturbance	
	Solar Array	15 feet in height ~~(security fence)~~	

Horn Butte Wildlife Area

The Horn Butte Wildlife Area (also known as the Horn Butte Curlew Area) is a 6,000 acre area managed by the Bureau of Land Management as an "Area of Critical Environmental Concern" (ACEC) to protect nesting habitat for the long-billed curlew. The Horn Butte Wildlife Area is a protected area under OAR 345-022-0040(1)(o). The protected area is adjacent to the Phase 1 site boundary, but in areas of site boundary where there are no facility components proposed.

Because the Horn Butte Wildlife Area is managed to protect nesting habitat for the long-billed curlew, and nesting habitat would not be impacted by changes in viewshed, visibility of proposed Phase 2 components under any proposed design scenario would not adversely impact the protected area. Additionally, Council found that the Phase 1 facility would not cause a significant adverse impact to the Horn Butte Wildlife Area, and as noted, Phase 1 site boundary is adjacent to the wildlife area. Therefore, the Department recommends Council continue to find that any potential visual impacts of the facility, with proposed changes, would not impact this protected area.

John Day Wildlife Refuge

The John Day Wildlife Refuge is a State wildlife refuge and is a protected area under OAR 345-022-0040(1)(d). The protected area is located approximately 5 miles east of the site boundary, and extends ¼- of a mile from the high-water flowline along the John Day River form the Columbia River, south to its junction with Thirty Mile Creek.[67]

The John Day Wildlife Refuge is designated a protected area due to its refuge qualities of mule deer, elk, and black bears, along with peregrine falcons, bald eagles and anadromous fish.[68] It is unlikely that Phase 2 components would be visible at the refuge, and if so, the refuge is approximately 5 miles from the site boundary. Visibility of proposed Phase 2 components under any design scenario would not adversely impact the protected area and its use by wildlife as a wildlife refuge. Therefore, the Department recommends Council continue to find that any potential visual impacts of the facility, with proposed changes, would not impact this protected area.

John Day River

The John Wild and Scenic River and John Day State Scenic Waterway, referred to as John Day River, are a designated wild or scenic river and scenic waterway identified as protected areas under 345-022-0040(1)(k). Both protected areas are located 5 miles east of the site boundary. Based on the revised ZVI analysis, some of the proposed turbines may be visible from limited

[67] ORS 501.425
[68] *The Bureau of Land Management*, https://www.blm.gov/visit/john-day-wild-scenic-river

vantage points in the canyon, and higher elevated areas. However, the revised ZVI supports Council's previous findings that during facility operations, wind turbines would not be visible from any viewpoints on the river. Furthermore, the certificate holder explains that any Phase 2 components under any proposed design scenario would not adversely impact either of the protected areas, because the distance of the components will be 5 miles or more from the river, and the visual impact of the components will be diminished. Based on this analysis, the Department recommends that the Council continue to find that any potential impacts of the facility, with proposed changes, would not impact these protected areas.

The protected areas associated with the John Day River (Wildlife Refuge, Wild and Scenic River, and Scenic Waterway) are the closest protected areas to both the proposed solar array and proposed battery storage system. These protected areas are located seven miles east of the solar array and battery storage system. The certificate holder explains that the solar array will "appear as a dark line" on the horizon, if viewed from a location with a similar elevation. If viewed from a higher elevation, the Certificate holder indicates that the solar array may be more visible than viewing from similar elevations.[69] However, the certificate holder explains that the solar array will incorporate anti-reflectivity technology that would minimize the potential for glare to less than that of natural bodies of water.

To minimize any visual impacts of the batter storage system to the nearest protected areas, the certificate holder states that the battery storage containers will be painted in a low-reflectivity, neutral color. Furthermore, the certificate holder claims that the visual impacts of the battery storage system would be similar to that of the already approved O&M building, and that based on topography, location, and height of the battery storage system, visibility of the battery storage system would be limited or nonexistent at the closest protected areas.

Cottonwood Canyon State Park[70]

Cottonwood Canyon State Park, a state park that was established by the Oregon Parks and Recreation Department in 2013, but not designated as a protected area until 2015. The state park is located approximately 6 miles southwest of the site boundary, and includes Cottonwood Bridge and J.S. Burres State Park, as well as additional acreage along the John Day River. As explained in greater detail in Section III.J., Scenic Resources, of this Order, turbines would only be visible from a few, higher elevation ridges in the park, south of Hay Creek. From these select locations, the nearest turbines would be located approximately 7.5 miles away.

[69] MWPAMD4Doc3-5 Exhibits L - O 2017-11-22, p. 12

[70] Cottonwood Canyon State Park was not designated as a protected area until 2015, and the standard applies to protected areas as of May 11, 2007. However, in anticipation of a 2019 Protected Areas rulemaking, the Department has evaluated Cottonwood Canyon State park as though it were a protected area per OAR 345-022-0040(1)(h). In Exhibit L of RFA4, the certificate holder did provide an evaluation of potential visual impacts of the facility, with proposed changes, at Cottonwood Canyon State Park.

The certificate holder represents in RFA Exhibit L, Table L-2 that "0-50" turbines could be visible from the Cottonwood Canyon State Park; however, due to distance, the views of turbines or other facility components would be diminished, and is not expected to have an adverse visual impact to the protected area. Phase 2 wind turbines or other facility components are not expected to be visible from the John Day River. Because the park's most important use area is the John Day River, and visibility of proposed Phase 2 components under any proposed design scenario would not adversely impact the protected area, the Department recommends Council find that any potential visual impacts of the facility, with proposed changes, would not impact this protected area.

Willow Creek Wildlife Area

The Willow Creek Wildlife Area is a state wildlife and management area designated as a protected area under OAR 345-022-0040(1(p), and is located is located along the Columbia River (approximately 12 miles northeast of the proposed amended site boundary).[71] The Willow Creek Wildlife Area is included within the Columbia Basin Wildlife Area, which is managed for "the conservation and recreation of fish and wildlife."[72] The Willow Creek Wildlife Area is bounded to the north by Interstate 84 and extends south to the confluence of the Willow Creek. The management plan for the Columbia Basin Wildlife Area indicates that the protected areas "play an important role for the Fall and Spring migrations of waterfowl in addition to resident upland game bird production" and "Goal 1" from the management plan is "to protect, enhance and manage wetland habitats to benefit native fish and wildlife and desired game species."[73] Recreational opportunities, including hunting, fishing, and trapping are allowed (where possible) within the Columbia basin Wildlife areas.[74]

The certificate holder represents in its Table L-2 that "0-50" turbines could be visible from the Willow Creek Wildlife Area; however, the Council previously found that the facility would not be visible from the Willow Creek Wildlife Area.[75] Assuming that turbines, or other facility components, could be visible from the Willow Creek Wildlife Area, such visual impacts would not result in a significant adverse impact to the protected area due to distance from the facility. Because the primary purpose of the Willow Creek Wildlife Area is to preserve wildlife habitat, visibility of proposed Phase 2 components under any proposed design scenario would not adversely impact the protected area. Therefore, the Department recommends Council continue to find that any potential visual impacts of the facility, with proposed changes, would not impact this protected area.

Other Protected Areas

[71] MWPRFA4, Figure L-1 2019-04-05
[72] Oregon Department of Fish and Wildlife, *Willow Creek Wildlife Area Visitor's Guide.* https://myodfw.com/willow-creek-wildlife-area-visitors-guide
[73] https://www.dfw.state.or.us/wildlife/management_plans/wildlife_areas/docs/columbia_basin.pdf at p. 1; p. 37.
[74] *Id.*
[75] MWPAPPDoc 157 MWP Final Order p. 64

Based on the existing viewshed, distance, and results of the revised ZVI analysis, the facility, with proposed changes, would not result in visual impacts at the following protected areas:

- John Day (Hilderband) State Park
- Ferry Canyon ACEC
- Lindsey Prairie Preserve
- Boardman Research Natural Area
- Umatilla National Wildlife Refuge

Conclusions of Law

Based on the foregoing findings, and subject to compliance with the recommended conditions of approval, the Department recommends the Council conclude that, taking into account mitigation, the design, construction and operation of the facility, with proposed changes, would not be likely to result in significant adverse impacts to any protected areas, in compliance with the Council's Protected Area standard.

III.G. Retirement and Financial Assurance: OAR 345-022-0050

> *To issue a site certificate, the Council must find that:*
>
> *(1) The site, taking into account mitigation, can be restored adequately to a useful, non-hazardous condition following permanent cessation of construction or operation of the facility.*
>
> *(2) The applicant has a reasonable likelihood of obtaining a bond or letter of credit in a form and amount satisfactory to the Council to restore the site to a useful, non-hazardous condition.*

Findings of Fact

The Retirement and Financial Assurance standard requires a finding that the facility site can be restored to a useful, non-hazardous condition at the end of the facility's useful life, should either the certificate holder stop construction or should the facility cease to operate. In addition, it requires a demonstration that the certificate holder can obtain a bond or letter of credit in a form and amount satisfactory to the Council to restore the site to a useful, non-hazardous condition.

Restoration of the Site Following Cessation of Construction or Operation

OAR 345-022-0050(1) requires the Council to find that the site of the facility, with proposed changes, can be restored to a useful non-hazardous condition at the end of the facility's useful life, or if construction of the facility were to be halted prior to completion. In RFA4, the

certificate holder estimates that the useful life of the facility, with proposed changes, would be 40 years.[76]

The certificate holder is obligated to retire the facility upon permanent cessation of construction or operation. The certificate holder states that proposed modifications under RFA4 would not alter the specific actions and tasks needed to restore the wind energy components of the site. For reference, though, and because RFA4 includes wind turbines, the Department provides tasks and actions previously identified as necessary for wind facility decommissioning.

Restoring the site to a useful, non-hazardous condition upon retirement would involve dismantling all aboveground structures. Nacelles and rotors would be removed, and the turbine towers would be dismantled. Pad-mounted transformers and related aboveground equipment would be removed. Concrete turbine tower and transformer pads and underground foundations would be removed to a minimum depth of three feet below grade. Gravel or crushed rock would be removed from adjacent turbine pad areas. All aboveground 230 kV and 34.5 kV transmission lines, SCADA lines, and support structures would be removed. Underground transmission lines and communication cables that are at least three feet below grade would be left in place. At a depth of three feet, underground components and foundations are not expected to interfere with farming practices or crop root growth. All excavated areas would be backfilled with topsoil. The surface would be graded. The affected areas, including areas temporarily disturbed during site restoration activities, would be replanted with native plant seed mixes or agricultural crops, as appropriate, based on the use of surrounding lands. Demolition waste material would be transported for disposal at authorized sites.

The certificate holder describes that the tasks and actions necessary to restore the site of the proposed photovoltaic solar array and battery storage system would include:

- Separating solar modules from the posts, directly loading the modules into a truck or roll-off container for offsite disposal or recycling, removing the posts from the ground, and recycling them as scrap metal;[77]
- Decommissioning the transformers and disposing them offsite;
- Underground electrical collector cables that are at least three feet below grade would be left in place;
- Fluids associated with the battery storage system would be drained and transported offsite for recycling, self-contained battery components would be removed and disposed of or recycled by a qualified vendor; and

[76] In the 2010 Final Order, Council determined that the facility, as approved, could have a useful life of at least 25-30 years, and that if the facility were to be "repowered" in the future, the facility's' useful life could be longer than 30 years.

[77] Although not explicitly stated in RFA4, and consistent with how the concrete turbine and transformer pads and underground foundations would be removed, the Department expects the certificate holder to remove solar module posts, including concrete foundations, to a minimum depth of three feet below grade.

- Access roads would be removed, and the entire footprint of the solar array and battery storage system would be reseeded.

The Council previously imposed several conditions to ensure the certificate holder could restore the site to a useful, nonhazardous condition in accordance with the Retirement and Financial Assurance standard, as summarized below: [78]

- Condition 7 requires that the certificate holder prevent the development of any conditions on site that would preclude restoration of the site to a useful, nonhazardous condition.
- Condition 8 requires the certificate holder to submit a bond or letter of credit to the State of Oregon, through the Council, in a form and amount satisfactory to the Council to restore the site to a useful nonhazardous condition. [the certificate holder has provided a bond for $7,705,000 (Q3 2018), in accordance with the site certificate, related to Phase 1 of the facility]
- Condition 9 requires the certificate holder to retire the facility in accordance with a Council-approved retirement plan.
- Condition 32 allow the certificate holder the ability to adjust the bond or letter of credit (required by Condition 8) based on the final design configuration of the facility.
- Condition 33 requires the certificate holder to ensure that the surety is obligated to comply with the requirements of applicable statutes, Council rules, and the site certificate when the surety exercises any legal or contractual right it may have to assume construction, operation, or retirement of the facility, if a bond is used to meet the requirements of Condition 32.

In Section III.B., *Organizational Expertise* of this order, the Department recommends Council find that the certificate holder has the organizational expertise to construct, operate, and retire the facility, with proposed changes, in compliance with the standard. In addition, the Department recommends Council finds that the certificate holder would continue to satisfy the requirements of the Soil Protection, Fish and Wildlife Habitat, and Waste Minimization standards (Sections III.D., III.H. and III.N. of this order, respectively). Each of those sections describes existing and recommended amended conditions designed to minimize adverse impacts on the surrounding land from construction and operation of the components proposed in the amendment request.

Subject to compliance with the conditions identified above, the Department recommends the Council find that the site of the facility, with proposed changes, could be restored adequately to a useful, non-hazardous condition following permanent cessation of construction or operation.

Estimated Cost of Site Restoration

[78] Conditions 7, 8, and 9 are mandatory conditions under OAR 345-026-0006.

OAR 345-022-0050(2) requires the Council to find that the certificate holder continues to have a reasonable likelihood of obtaining a bond or letter of credit in a form and amount necessary to restore the site of the facility, with proposed changes, to a useful non-hazardous condition.

The certificate holder prepared the decommissioning cost estimate for Phase 2 facility components. The certificate holder explains that the Department's former *Cost Estimating Worksheet* was utilized for proposed wind facility components, and that a unit cost per MW was derived for the proposed solar array and battery storage systems. The certificate holder also describes that the Phase 2 retirement cost estimate assumes components would be recycled to the maximum extent possible.

While the Department no longer recommends use of its former *Cost Estimating Worksheet* due to its latency in formal review and update, because the certificate holder inflated costs based on time of RFA preparation (3rd Quarter 2017) and because it is consistent with the methodology originally approved for the wind facility, at a time when the *Cost Estimating Worksheet* represented an acceptable methodology, the Department recommends Council consider that the *Cost Estimating Worksheet* with inflated unit rates is acceptable for adequately and accurately estimating retirement costs for the proposed Phase 2 wind facility components.

To support the Council's review of the retirement cost estimate methodology utilized for the proposed solar array and battery storage systems, the certificate holder describes the assumptions included in its per MW unit cost. The unit cost per MW includes labor, transportation costs, disposal costs, waste management, and site retirement and restoration costs, and the following general assumptions:

- Battery removal assumes recycling of materials and shipping of materials for recycling up to 100 miles from site.
- Demolition debris would be removed to a licensed landfill that would accept construction materials.
- Steel, concrete, and other components would be recycled to the extent possible.
- Underground material below 3 feet will be left in place. This includes concrete foundations and solar module posts at or below 3 feet underground.
- Inverters and transformers would be removed with oils in place.
- Bare ground portions would be reseeded in accordance with the *Revegetation Plan* (submitted as a supplement to Exhibit P on March 14, 2018) once retirement and restoration are complete.
- During retirement and restoration, care would be taken to minimize the disturbance to existing vegetation. To be conservative, this estimate assumes that the entire area occupied by the solar array and battery storage would be reseeded.
- The O&M facility would be removed, and the surrounding graveled area will be removed, regraded, and reseeded.
- The site perimeter fence, O&M fence, and substation fence would be removed and recycled.

- Internal services roads and access road would be removed, regraded, and reseeded as part of retirement and restoration activities.
- Salvage value of facility materials is not included, but should be considered if Council policy or rules change to allow credit for these values.
- The cost estimate includes a 10 percent administration and project management allowance and a 10 percent future developments contingency allowance.

In RFA4 Exhibit W, the certificate holder provides cost estimates for each of the three proposed design scenarios as Tables W-1A, -1B, and -1C. The certificate holder estimates that the retirement and restoration cost for Design Scenario A (81 Turbines and 100 MW of Battery Storage) would total $8,859,000 (3rd Qtr 2017 dollars). The cost estimate provided for Design Scenario B (48 Turbines and 100 MW of Battery Storage) totaled $7,564,000 (3rd Qtr 2017 dollars). The certificate holder's retirement cost estimate for Design Scenario C totaled $9.759 million (2nd Qtr 2019 dollars). Of the three Design Scenario's, the estimated cost of Phase 2 retirement and restoration of Design Scenario C ($9.759 million in 2nd Qtr 2019 dollars) was the largest if the three proposed configurations. For comparison, the bond amount for Phase 1 (56 wind turbines) is $7.9 million (Q3 2018).

The Department reviewed RFA4 Exhibit W and the above-described cost estimates and recommends Council adjust the retirement cost estimate by applying a 20 percent future development contingency to the retirement cost estimate for the proposed solar array and battery storage systems to account for additional uncertainties in scalability in the unit cost per MW approach and general assumptions (e.g. cost based on recycling of battery components versus landfill disposal cost; cost based on oil remaining within solar inverters and transformers versus drain and disposal cost). The Phase 2 retirement cost estimate, based on maximum impact (or Design Scenario C), with Department recommended adjustments is presented in Table 5, *Phase 2 Retirement Cost Estimate* below.

Table 5: Phase 2 Retirement Cost Estimate
(Photovoltaic Solar Array and Battery Storage)

Task or Action	Quantity	Unit Cost[1]	Unit	Estimate
Solar Array				
Disconnect electrical and ready for disassembly	1	$16,153	Each	$16,153
Remove solar generation equipment[1]	202	$2,333	MW	$471,266
Remove steel posts	202	$2,062	MW	$416,524
Remove pad transformer and foundation	202	$925	MW	$186,850
Restore module site	202	$18,135	MW	$3,663,270
Battery Storage - Zn-Fe Redox Flow technology				
Remove battery equipment	100	$2,847	MW	$284,681
Remove Fencing	100	$85	MW	$8,514
Remove pad transformer and foundation	100	$284	MW	$28,380
Restore module site	100	$568	MW	$56,800
Wind Turbines and Towers				

Table 5: Phase 2 Retirement Cost Estimate
(Photovoltaic Solar Array and Battery Storage)

Task or Action	Quantity	Unit Cost[1]	Unit	Estimate
Disconnect electrical and ready for disassembly	0	$924	Each	$0
Remove turbine blades, hubs, and nacelles	0	$4,910	Each	$0
Remove turbine towers	0	$63	Ton	$0
Foundation and Pad Areas				
Remove pad-mounted transformers and foundations	0	$2,199	Each	$0
Remove turbine foundations	0	$30	Cu. Yd	$0
Restore turbine pads and turnouts	0	$7,691	Acre	$0
Met Towers				
Dismantle and dispose of met towers	0	$7,833	Each	$0
Collector Substations				
Dismantle and dispose of collector substation	0	$123,775	Each	$0
Operations and Maintenance Facility(s)				
Dismantle and dispose of O&M Facility(s)	1	$42,222	Each	$42,222
Electrical System				
Remove 230 kV transmission line	3	$16,808	Mile	$50,424
Remove above-ground 34.5 kV collector	0	$4,671	Mile	$0
Remove below-ground junction boxes to 4' below grade	18.3	$1,246	Each	$22,802
Access Roads				
20-foot road removal, grading, and seeding	1.23	$7,911	Acre	$9,730.53
Improved existing road 14-foot road removal, grading, and	3.96	$7,911	Acre	$31,328
Temporary Areas				
Around access roads, turnouts and met towers	15.8	$5,275	Acre	$83,345
Around transmission lines and crane paths	15.1	$2,618	Acre	$39,531
Around turbine pads and disassembly areas	20.7	$2,618	Acre	$54,193
General Costs				
Permits, mobilization, engineering, overhead, utility disconnects	1	$418,617		$418,617
Subtotal				$6,008,430
Adjust to 2Q 2019 dollars				$8,033,271
Performance Bond		1	Percent	$80,333
Gross Cost				$8,113,604
Administration and Project Management		10	Percent	$811,360
Future Development Contingency		10/20	Percent	$1,504,399
Phase 2 Retirement and Restoration Cost (Q1 2019 Dollars) – Rounded to the Nearest $1,000 =				**$10,429,000**
Phase 1 Retirement and Restoration Cost (Q2 2019 Dollars) – (Final Design – 56 Wind Turbines) =				**$7,918,000**
Retirement and Restoration Cost – Facility, with Proposed Changes (Phase 1 and 2) =				**$18,347,000**

[1] Unit Costs per component did not vary between all three design scenario cost estimates. The unit costs of components previously evaluated by Council subsequent Orders also did not vary. Costs associated with Solar Generation were only included in the cost estimate of Design Scenario C.

Based on the recommended adjustments, the Department recommends Council find that the Phase 2 retirement cost estimate of $10.5 million (Q1 2019 dollars) is a reasonable estimate of an amount satisfactory to restore the site to a useful, nonhazardous condition.

Ability of the Certificate Holder to Obtain a Bond or Letter of Credit

OAR 345-022-0050(2) requires the Council to find that the certificate holder has a reasonable likelihood of obtaining a bond or letter of credit in a form and amount necessary to restore the facility site, with proposed changes, to a useful non-hazardous condition.

A bond or letter of credit provides a site restoration remedy to protect the state of Oregon and its citizens if the certificate holder fails to perform its obligation to restore the site. The bond or letter of credit must remain in force until the certificate holder has fully restored the site. OAR 345-025-0010(8) establishes a mandatory condition, imposed under Condition 8, which ensures compliance with this requirement. As described above, the amount necessary to restore the site of the proposed Phase 2 facility components to a useful, nonhazardous condition would be approximately $10.5 million (Q1 2019 dollars), adjusted annually as required per existing Condition 32.

To demonstrate its ability to receive an adequate bond or letter of credit, the certificate holder provides an October 19, 2017 letter from Liberty Mutual Insurance Company, a financial institution pre-approved by Council. The bank letter is intended solely to demonstrate that the certificate holder has a reasonable likelihood of obtaining a bond or letter of credit in the amount necessary for site restoration, as required prior to construction. The amount necessary for site restoration must be based on the methodology, as approved by Council in Final Order on ASC and any subsequent Final Order on amendments. Adjustments to the final site restoration bond or letter of credit amount may be made but are limited to final facility design adjustments (e.g. based on design scenario)

Based on the October 2017 bank letter, and the certificate holder's demonstrated ability to obtain and submit a bond through Phase 1 activities, the Department recommends Council considers that the certificate holder continues to demonstrate a reasonable likelihood of obtaining a bond or letter of credit in the amount necessary for site restoration. Additionally, as described above and in accordance with Condition 8, construction cannot begin on the facility until the Department receives a satisfactory bond or letter of credit.

To both accommodate the institution of a multi-phase development (Phase 1 and Phase 2), and the integration of new technology and components previously unevaluated by Council, the Department recommends that Council amend conditions 8 and 32 as follows:

> **Recommended Amended Condition 8:** OAR 345-025-0006~~027-0020~~ (8): Before beginning construction of the facility or a phase of the facility, the certificate holder shall submit to the State of Oregon, through the Council, a bond or letter of credit, in a

form and amount satisfactory to the Council to restore the site or a portion of the site to a useful, non-hazardous condition. The certificate holder shall maintain a bond or letter of credit in effect at all times until the facility or the phase of the facility has been retired. The Council may specify different amounts for the bond or letter of credit during construction and during operation of the facility or a phase of the facility. (See Condition 32.) [AMD4]

Recommended Amended Condition 32:

i. Before beginning construction of Phase 1 of the facility, the certificate holder shall submit to the State of Oregon through the Council a bond or letter of credit in the amount described herein naming the State of Oregon, acting by and through the Council, as beneficiary or payee. The initial bond or letter of credit is either $21.511 million (3rd Quarter 2010 dollars), to be adjusted to the date of issuance as described in (b), or the amount determined as described in (a). The certificate holder shall adjust the amount of the bond or letter of credit on an annual basis thereafter as described in (b).

   a. The certificate holder may adjust the amount of the bond or letter of credit based on the final design configuration of the facility and turbine types selected by applying the unit costs and general costs illustrated in Table 2 in the *Final Order on the Application* and calculating the financial assurance amount as described in that order, adjusted to the date of issuance as described in (b) and subject to approval by the Department.

      i. Adjust the Subtotal component of the bond or letter of credit amount (expressed in mid-2004 dollars) to present value, using the U.S. Gross Domestic Product Implicit Price Deflator, Chain-Weight, as published in the Oregon Department of Administrative Services' "Oregon Economic and Revenue Forecast" or by any successor agency (the "Index") and using the average of the 2nd Quarter and 3rd Quarter 2004 index values (to represent mid-2004 dollars) and the quarterly index value for the date of issuance of the new bond or letter of credit. If at any time the Index is no longer published, the Council shall select a comparable calculation to adjust mid-2004 dollars to present value.

      ii. Add 1 percent of the adjusted Subtotal (i) for the adjusted performance bond amount to determine the adjusted Gross Cost.

      iii. Add 10 percent of the adjusted Gross Cost (ii) for the adjusted administration and project management costs and 10 percent of the adjusted Gross Cost (ii) for the adjusted future developments contingency.

      iv. Add the adjusted Gross Cost (ii) to the sum of the percentages (iii) and round the resulting total to the nearest $1,000 to determine the adjusted financial assurance amount.

   b. The certificate holder shall adjust the amount of the bond or letter of credit, using the following calculation and subject to approval by the Department:

c. The certificate holder shall use a form of bond or letter of credit approved by the Council.
d. The certificate holder shall use an issuer of the bond or letter of credit approved by the Council.
e. The certificate holder shall describe the status of the bond or letter of credit in the annual report submitted to the Council under Condition 21.
f. The bond or letter of credit shall not be subject to revocation or reduction before retirement of the facility site.

ii. Before beginning construction of Phase 2 of the facility, the certificate holder shall submit to the State of Oregon through the Council a bond or letter of credit in the amount described herein naming the State of Oregon, acting by and through the Council, as beneficiary or payee. The bond or letter of credit will be issued for Phase 2 in an amount that is either $10.429 million (1st Quarter 2019 dollars), to be adjusted to the date of issuance as described in (b), or the amount determined as described in (a). The certificate holder shall adjust the amount of the bond or letter of credit on an annual basis thereafter as described in (b).
   a. The certificate holder may adjust the amount of the bond or letter of credit based on the final design configuration of the facility, and both the battery storage or turbine types selected by applying the unit costs and general costs illustrated in Table 5 of the *Final Order on Amendment 4* and calculating the financial assurance amount as described in that order, adjusted to the date of issuance as described in (b) and subject to approval by the Department. The certificate holder may adjust the amount of the bond or letter of credit under (a) if opting to construct only a portion of the facility.
   b. The certificate holder shall adjust the amount of the bond or letter of credit, using the following calculation and subject to approval by the Department:
      i. Adjust the Subtotal component of the bond or letter of credit amount (expressed in mid-2004 dollars) to present value, using the U.S. Gross Domestic Product Implicit Price Deflator, Chain-Weight, as published in the Oregon Department of Administrative Services' "Oregon Economic and Revenue Forecast" or by any successor agency (the "Index") and using the average of the 2nd Quarter and 3rd Quarter 2004 index values (to represent mid-2004 dollars) and the quarterly index value for the date of issuance of the new bond or letter of credit. If at any time the Index is no longer published, the Council shall select a comparable calculation to adjust mid-2004 dollars to present value.
      ii. Add 1 percent of the adjusted Subtotal (i) for the adjusted performance bond amount to determine the adjusted Gross Cost.
      iii. Add 10 percent of the adjusted Gross Cost (ii) for the adjusted administration and project management costs~~, add 20 percent of the adjusted Gross Cost of the Solar Generation and Battery Storage System (ii)~~ and 10 percent of the adjusted Gross Cost ~~of all other~~

~~facility components~~(ii) for the adjusted future developments contingency.

iv. Add the adjusted Gross Cost (ii) to the sum of the percentages (iii) and round the resulting total to the nearest $1,000 to determine the adjusted financial assurance amount.

c. The certificate holder shall use a form of bond or letter of credit approved by the Council.

d. The certificate holder shall use an issuer of the bond or letter of credit approved by the Council.

e. The certificate holder shall describe the status of the bond or letter of credit in the annual report submitted to the Council under Condition 21.

f. The bond or letter of credit shall not be subject to revocation or reduction before retirement of the facility site.

[AMD4]

The Department recommends Council find that the certificate holder has a reasonable likelihood of obtaining a bond or letter of credit in a form and amount satisfactory to the Council to restore the site to a useful, non-hazardous condition.

Conclusions of Law

Based on the foregoing findings of fact, and subject to compliance with the existing and recommended amended conditions, the Department recommends that the Council find that the facility, with proposed changes, would comply with the Council's Retirement and Financial Assurance standard.

III.H. Fish and Wildlife Habitat: OAR 345-022-0060

To issue a site certificate, the Council must find that the design, construction and operation of the facility, taking into account mitigation, are consistent with:

*(1) The general fish and wildlife habitat mitigation goals and standards of OAR 635-415-0025(1) through (6) in effect as of February 24, 2017****

Findings of Fact

The EFSC Fish and Wildlife Habitat standard requires the Council to find that the design, construction and operation of a facility is consistent with the Oregon Department of Fish and Wildlife's (ODFW) habitat mitigation goals and standards, as set forth in OAR 635-415-0025. This rule creates requirements to mitigate impacts to fish and wildlife habitat, based on the quantity and quality of the habitat as well as the nature, extent, and duration of the potential impacts to the habitat. The rule also establishes a habitat classification system based on value the habitat would provide to a species or group of species. There are six habitat categories; Category 1 being the most valuable and Category 6 the least valuable.

The analysis area for potential impacts to fish and wildlife habitat, as defined in the project order, is the area within and extending ½-mile from the site boundary.[79] To inform the evaluation of impacts under the Council's Fish and Wildlife Standard, both biological and botanical surveys were conducted including wetland delineation surveys, special-status plant surveys, raptor nest surveys, habitat mapping updates, and Washington ground squirrel (WGS) surveys, as further described below.

As discussed above in Section III.D. *Soil Protection,* Condition 44, requires the certificate holder to restore all areas temporarily disturbed by facility maintenance or repair activities using the same methods and monitoring procedures as described in the final Revegetation Plan. In Exhibit P of RFA4, the certificate holder recommends that Condition 44 be deleted. The certificate holder explains that Condition 44 is not required as a mandatory condition prescribed in OAR 345-027-0020 or 345-027-0023, and that it duplicates the language of Condition 92. The Department agrees that Condition 44 is not a mandatory condition, however, disagrees with the certificate holder's interpretation that the requirements of Condition 44 are duplicated in condition 92. Condition 44 is applicable during facility operations, whereas Condition 92 applies to areas temporarily disturbed by facility construction.

Habitat Types and Categories in the Analysis Area

As stated in the Final Order on the ASC, habitat within the analysis area of the approved facility was identified by the certificate holder's consultants, Northwest Wildlife Consultants (NWC) in

[79] MAPNOIDoc24 MWP NOI Project Order 2010-01-05, p.14

2009, and field verified the habitat types. As evidence in the record, the certificate holder also referenced habitat mapping that was conducted in 2010 in the Phase 2 site boundary by a previous owner of the facility. In 2017, the Certificate holder's consultant, CH2M, reviewed the previous habitat mapping information and conducted additional desktop and field surveys for areas that had not previously been surveyed (pursuant to OAR 635-415-0025) to identify habitat categories and subtypes within the analysis area of the proposed site boundary expansion. CH2M concurrently conducted the habitat mapping with WGS protocol surveying. As provided in RFA4, habitat mapping was updated for the Montague facility to include the Phase 2 analysis area.

Besides habitat mapping and WGS surveying, CH2M also conducted raptor nest surveying, special status plant surveying, and wetland delineation surveying in the spring and winter of 2017. The habitat mapping within the analysis area of the facility, with proposed changes indicates that Phase 2 includes Categories 1, 2, 3, 4, and 6 habitat, but with the vast majority of areas anticipated to be impacted by the Phase 2 facility are Category 6 habitat, active agriculture. The identified habitat subtypes within the analysis area of the facility include the following:

- Category 1

  Washington Ground Squirrel (WGS) Occupied: areas with suitable habitat that are within a 785-foot buffer of active WGS burrows.
  - Grassland
  - Shrub-steppe
  - Woodland
  - ~~Developed~~
- Category 2

  ~~WGS Potential Seasonal Home Range Shift and Dispersal Areas: 1500-meter buffer from active WGS burrow~~
  - Exposed Rock
  - Grassland
  - Shrub-steppe
  - Woodland
  - Developed
- Category 3
  - Developed
  - Grassland
  - Shrub-steppe
  - Woodland
- Category 4
  - Developed
  - Grassland
  - Shrub-steppe
- Category 6
  - Developed

The Council previously addressed the Fish and Wildlife Habitat standard in the *Final Order on the ASC*, *Final Order on Amendment 1, Final Order on Amendment 2*, and *Final Order on Amendment 3*. In each of the previous three orders, the Council made findings regarding on-site characteristics of the habitat subtypes within each habitat category within the Phase 1 site boundary. As proposed, Phase 2 consists of similar habitat subtypes as were originally described in the Final Order. The review of the habitat categorization, both what was provided on record and results of the 2017 surveying indicates that the proposed Phase 2 site boundary expansion does not contain any Category 5 habitat, and does not result in the identification of

any new habitat or species that were not previously evaluated by Council. Council previously found that subject to conditions imposed in the site certificate, the design, construction, and operation of the approved facility (Phase 1) would be consistent with ODFW's habitat mitigation goals and standards, and would comply with the Council's Fish and Wildlife Habitat Standard.

The certificate holder explains that Design Scenario C has the greatest total acreage of impacts, as the proposed solar array would permanently occupy a greater amount of land than the wind turbines of Design Scenario A (maximum turbine layout), but that the solar around would be sited entirely on Category 6 land, active agriculture. Additionally, the certificate holder explains that while Montague may choose to construct a smaller solar array within the solar micrositing corridor, for the purposes of estimating habitat impacts, a maximum layout of 1,189 acres was used for the proposed solar array. Furthermore, the certificate holder states that although the size of the proposed solar array may change, Montague will limit impacts of the solar array to Category 6 habitat.[80] By limiting the solar array to Category 6 habitat, the certificate holder states in Exhibit P that 99 percent of Design Scenario C total impacts will be to Category 6 habitat, whereas 94 percent of Design Scenario A habitat impact would be to Category 6 habitat.[81] The remaining 6 percent of potential habitat impact of Design Scenario A would primarily be to Grassland habitat, specifically Revegetated or Other Planted Grassland (DR). Table 6 below summarizes the estimated habitat impacts of Design Scenario A, by category and subtype, and the calculated habitat mitigation area (per Habitat Category) when applicable. Category 6 habitat is considered the least valuable to wildlife per ODFW policy, and impacts to Category 6 habitat do not require mitigation.

Potential Impacts to Fish and Wildlife Habitat

Depending on the design scenario chosen, construction and operation of the proposed Phase 2 facility components could result in temporary, temporal, and permanent habitat impacts to Category 2 (WGS Potential Seasonal Home Range Shift; Grasslands; and developed areas); Category 3 (Sagebrush steppe, grasslands, and developed areas); Category 4 (Grasslands); and Category 6 (Developed areas).[82]

As explained by the certificate holder in Exhibit P of RFA4, to calculate temporary, temporal and permanent habitat impacts of the proposed Phase 2, disturbances were calculated based on both the maximum wind turbine (81 2.5-MW turbines) Design Scenario A layout and the maximum solar array (up to 1,189 acres) Design Scenario C layout. Design Scenario C was

[80] MWPAMD4 Exhibit P, p.P-36
[81] MWPAMD4 Exhibit P, p.P-34
[82] Temporal loss refers to loss of habitat function and values from the time an impact occurs to the time when the restored habitat provides a pre-impact level of habitat function. Habitat subtypes identified within the site boundary, based on pre-construction estimates, including sagebrush steppe and broom snakeweed shrublands are reasonably expected to require a longer restoration timeframe (5+ years) and therefore would be expected to result in temporal loss requiring compensatory mitigation beyond the certificate holder's revegetation obligation.

evaluated, and found to be the least impactful to higher-rated habitat, out of the three proposed facility design layouts. As presented below in Table 6, *Estimated Maximum Temporary and Permanent Habitat Impacts (by Category and Subtype), for the Facility with Proposed Changes*, the proposed Phase 2 facility components represented in Design Scenario A, would temporarily disturb approximately 21.45, 8.06, and 0.76 acres of Category 2, 3 and 4

Table 6: Estimated Maximum Temporary and Permanent Habitat Impacts (by Category and Subtype), for the Facility with Proposed Changes

Habitat Category and Subtype	Temporary Impacts	Permanent Impacts	Calculated Mitigation Area (Temporal and Permanent impacts)
	Acres		
Facility, as Approved: "Phase 1"[1]			
Habitat Category 2	15.8	3.76	16.15
Habitat Category 3	19.64	5.31	
Habitat Category 4	11.21	2.33	
Habitat Category 6	610.90	67.19	
Proposed Changes: "Phase 2" Design Scenario A			
Habitat Category 2			
ESC – Exposed Rock on Slopes – Escarpment	0	0	4.6
DR - Revegetated or Other Planted Grassland	11.03	1	
GA - Exotic Annual Grassland	10.22	1.1	
GB - Native Perennial Grassland	0	0	
SSA - Basin Big Sagebrush Shrub-steppe	0.20	0	
SSB - Rabbitbrush/Snakeweed Shrub-steppe	0	0	
Woodland – Juniper	0	0	
Habitat Category 2 Total	**21.45**	**2.1**	
Habitat Category 3			
DC - Developed-CRP or Other Planted Grassland	0.14	0	0.53
DR - Developed-Revegetated or Other Planted Grassland	7.82	0.44	
GA – Exotic Annual Grassland	0	0	
GB - Native Perennial Grassland	0.01	0	
SSA - Basin Big Sagebrush Shrub-steppe	0.09	0	
SSB - Rabbitbrush/Snakeweed Shrub-steppe	0	0	
WJ – Woodland Juniper	0	0	
Habitat Category 3 Total	**8.06**	**0.44**	
Habitat Category 4			
DB- Developed-Old Field			0.09
DR - Developed-Revegetated or Other Planted Grassland	0	0	
GA - Exotic Annual Grassland	0.76	0.09	

GB – Native Perennial Grassland	0	0	
SSA – Shrub-steppe – Sagebrush (Big Sage)	0	0	
SSB - Rabbitbrush/Snakeweed Shrub-steppe	0	0	
Habitat Category 4 Total	**0.76**	**0.09**	
Habitat Category 6			
DW - Developed-Dryland Wheat	460.41	64.28	0.00
DI - Developed Irrigated Agriculture	5.98	0.85	
DX - Developed-Other	2.58	0.13	
Habitat Category 6 Total	**468.97**	**65.26**	
Grand Total: "Phase 2" Design Scenario A ("Worst Case Mitigation Obligation")	499.24	67.89	5.22
Estimated Size of Habitat Mitigation Area Summary			
Size of Habitat Mitigation Area: "Phase 1"			17.03
Size of Maximum Anticipated Habitat Mitigation Area for: "Phase 2" (rounded up to the nearest whole acre)			**6 (5.22) acres**

habitat, respectively, resulting in temporary and temporal habitat impacts. As proposed, Phase 2 facility components represented in Design Scenario A would permanently disturb approximately 2.1, 0.44, and 0.09 acres of Category 2, 3, and 4 habitat, respectively.[83] The certificate holder clarifies that although Design Scenario C represents the greatest total acreage of impacts due to the construction of the solar array, Design Scenario A would require the greatest amount of mitigation as it would have the greatest amount of impacts affecting higher-quality habitat.[84] Scenario B would have less impact than Scenario A, so it is not represented on the Table 6. The Phase 2 draft Habitat Mitigation Plan uses Design Scenario A habitat impact estimates as the basis for the calculation of the size of the Phase 2 mitigation Area. The solar array (Design Scenario C) would be exclusively sited in Category 6 habitat within the solar micrositing corridor. Because Category 6 does not require any mitigation resulting from impacts to habitat, only the related or supporting facility components sited on Category 2, 3, or 4 habitat would require habitat mitigation. As such, data for Scenario C is not shown on Table 6.

It is possible that related or supporting facility components associated with the Phase 2 facility that would be common between any design scenario may require habitat mitigation; however, the impacted acreage that would require compensatory mitigation would be less than that of Scenario A. As described elsewhere in this section, the Montague facility habitat mitigation area has sufficient available mitigation acreage to provide the quantity of mitigation necessary for Phase 2, under any design scenario.

[83] MWPAMD4Doc Exhibit P, Tables P-4 and P-5, 2019-04-05
[84] MWPAMD4Doc Exhibit P, p.P-36, 2019-04-05

~~Per~~ ODFW ~~policy and the EFSC Fish and Wildlife Habitat standard,~~recommends that compensatory mitigation ~~shall~~ be provided for temporary impacts to shrub-steppe habitat consistent with the mitigation obligation for permanent impacts to the same habitat type. Table 6 shows the anticipated required mitigation obligation per habitat type and habitat classification. The habitat mitigation plan (Attachment D) provides additional details. Temporary impacts must be restored in accordance with site certificate Condition 92. Mitigation must be provided for temporary impacts to shrub-steppe habitat as this habitat type is slow to recover to pre-disturbance state. Temporary impacts to grassland habitat types do not require compensatory mitigation as long as the disturbed areas are restored in accordance with the Revegetation Plan (Attachment E). It is noted that the obligation to provide mitigation for temporary impacts to shrub-steppe habitat with a sage component, consistent with the mitigation obligation for permanent impacts to the same habitat type is a change in ODFW ~~policy~~ recommendation since the EFSC review and approval of the Phase 1 facility. The requirements of Condition 95(a), which restrict construction of any facility components within areas of Category 1 habitat will continue to apply to the Phase 2 facility.

In Exhibit P of RFA4, the certificate holder explains that ODFW has indicated that habitat adjacent to a WGS "Colony" (as defined by ODFW as a "cluster of holes") is considered Category 2 habitat as an "area of potential [WGS] use" if it is of similar habitat type and quality as the area occupied by the WGS.[85] ~~The certificate holder references ODFW's September 29, 2008 Oregon Columbia Plateau Ecoregion Wind Energy Siting and Permitting Guidelines when discussing the consideration of Category 2 habitat at areas of potential WGS use.~~Scenario A would disturb about 2.63 acres of Category 2 habitat due to its proximity to WGS colonies; however, the turbine layout would not affect the connectivity between WGSs colonies and potentially suitable habitat. ~~Although the ODFW guidelines do not specifically identify distance parameters for the Category 2 habitat classification, ODFW has clarified that Category 2 WGS habitat include any suitable habitat within 1,500-meters of an active WGS burrow. As such, the Department recommends that the Final Habitat Mitigation Plan for Phase 2 shall include ODFW's recommended habitat categorization for any suitable WGS habitat within 1,500-meters of an active WGS burrow unless there is a break in the habitat that would pose as a barrier to WGS movements.~~

~~Much like the habitat categorization for suitable WGS habitat within 1,500-meters of an active WGS burrow,~~ ODFW considers mule deer winter range to be Category 2 habitat, unless it is active agriculture, which case the habitat remains as Category 6. In RFA4, the certificate holder explains that although mule deer range is mapped within portions of the proposed site boundary expansion, the facility, as proposed would not impact ODFW mule deer winter range. ODFW concurred with the certificate holder's claim, in a February 23, 2018 comment letter, and stated that the ODFW [mule deer] winter range boundary in that portion of Gilliam County is

[85] MWPAMD4. Exhibit P, p.P-14. 2019-04-05.

intended to be within the breaks of Rock Creek and not encompass any of the uplands above the breaks of the canyon.[86]

Council previously imposed Conditions 91, 92, and 95 Condition 95 of the site certificate requires the site certificate holder to conduct pre-construction plant surveys, wildlife surveys, avian use surveys, and raptor nest surveys. Because the requirements of Conditions 91, 92, and 95 would continue to apply to Phase 2, the Department recommends that Council administratively amend each of the conditions as presented in Attachment A of this order.

Proposed Habitat Mitigation

Depending on the design scenario chosen, construction and operation of the facility, with proposed changes could result in temporary, temporal and permanent habitat impacts to Category 2, Category 3, Category 4, and Category 6. Of these categories, impacts to Category 2, 3 and 4 habitat must be mitigated in accordance with the EFSC Fish and Wildlife Habitat standard and ODFW's Habitat Mitigation Policy, and would be mitigated as described in the Phase 2 Wildlife and Habitat Monitoring and Mitigation Plan (Phase 2 HMP) (Attachment D to this draft proposed order).[87]

The certificate holder proposes to mitigate temporal habitat impacts (i.e. loss of habitat function and values from the time an impact occurs to the time when the restored habitat provides a pre-impact level of habitat function) and permanent habitat impacts in the form of a permanent conservation easement on a habitat mitigation area (HMA). Specifically, for temporal habitat impacts, the certificate holder proposes to include in its HMA 2 acres for every 1 acre of Category 2 habitat temporarily disturbed (a 2:1 ratio), and 1 acres for every 1 acre of Category 3 and 4 habitat temporarily disturbed (a 1:1 ratio). Based on this proposed methodology, the HMA would include 0.4, and 0.09 acres, or approximately 0.49 acres, of Category 2, and 3 habitat, respectively, as mitigation for habitat loss associated with Design Scenario A.

To mitigate the permanent, and temporary habitat impacts, the Council previously imposed Condition 93 requiring the certificate holder to mitigate for temporary and permanent habitat impacts, according to the final design configuration, and as incorporated into the Habitat Mitigation Plan. The Department recommends that the Council amend Condition 93 to differentiate the habitat mitigation requirements and plans for each phase of the facility. Since the last amendment, ODFW habitat mitigation calculations for temporal impacts to Category 2, 3, and 4 Shrub-steppe habitat have changed. As such, the Department recommends that the new habitat impact calculations be used for the proposed Phase 2 components, and that an updated habitat mitigation area calculations be provided to the Department and ODFW for

[86] MWPAMD4 ODFW pRFA Comments and Transmittal 2018-02-28

[87] ODFW provided comments on the proposed Phase 2 Draft Habitat Mitigation Plan, to which the certificate holder responded to by amending the HMP to reflect ODFW's comments and suggestions.

review within 30 days of construction completion. The Departments recommended amended condition language for Condition 93 is provided below.

A draft Phase 2 HMP was prepared by the certificate holder and evaluated by both the Department and ODFW for RFA4. In the Phase 2 HMP, the certificate holder proposes to provide 2 acres for every 1 acre of Category 2 habitat permanently impacted (a 2:1 ratio to provide no net loss and a net benefit). Impacts to habitat Categories 3 and 4 will be mitigated by including 1 acre for every 1 acre that is permanently impacted within its HMA (a 1:1 ratio to provide no net loss). This approach is consistent with the ODFW Fish and Wildlife Habitat Mitigation Policy and the EFSC Fish and Wildlife Habitat standard.

In RFA4, the certificate holder proposes to mitigate Phase 2 impacts within the same 440-acre parcel of land that has already been approved by the Department and ODFW for use, in part, as a mitigation area for Montague Phase 1, the Leaning Juniper facility (both LJIIA and LJIIB), and other wind facilities in the region.[88] Within the 440-acre property, an 80 acre conservation easement has been executed for the Montague facility, and a 17-acre parcel was required to mitigate for Phase 1 habitat impacts. The remaining area within the Montague facility parcel of the 440-acre property remains relatively remote, and habitat protection and enhancement actions continue to remain feasible and sufficient for the mitigation of Phase 2 habitat impacts. The Department finds that the proposed HMA contains sufficient land to provide the required compensatory mitigation of the Phase 2 project.

As mentioned above, Council previously imposed Condition 93 requiring the certificate holder to prepare and provide the Department and ODFW with updated habitat impact and mitigation area calculations. To provide additional clarification on agency review and timing, the Department recommends that Council administratively amend Condition 93 as follows:

Recommended Amended Condition 93:
The certificate holder shall:

(a) Acquire the legal right to create, enhance, maintain and protect a habitat mitigation area as long as the site certificate is in effect by means of an outright purchase, conservation easement or similar conveyance and shall provide a copy of the documentation to the Department. Within the habitat mitigation area, the certificate holder shall improve the habitat quality as described in the final Habitat Mitigation Plans for each phase of the facility, as approved by the Department in consultation with ODFW. The final Habitat Mitigation Plans shall be based on the draft plan included as Attachment G to the Final Order on Request for Amendment #3 and updated based on Condition 31. The final Habitat Mitigation Plans may be amended from time to time. [Amendment #3, AMD4]

[88] MWPAPPDoc157 MWP Final Order, p.110

(b) Prior to construction of Phase 2 components, the certificate holder shall finalize and implement the Habitat Mitigation Plan (HMP) included as Attachment D to Final Order, as approved by ODOE in consultation with ODFW. Provision 93(c) regarding impacted acreage calculations shall be completed and submitted to the department after construction is complete as described in the condition below.

(c) Within ~~30~~ 90 days of completion of construction, the certificate holder shall submit to the Department and ODFW updated habitat impact and mitigation area calculations. [AMD4]

State Sensitive Species within the Analysis Area

In order to identify State Sensitive species that could occur within the analysis area, the certificate holder's consultants, CH2M, conducted an updated desktop survey for state sensitive species that may occur within the site boundary or within a 5-miles of the site boundary (Survey Area). CH2M used the U.S. Fish and Wildlife Services (USFWS) county lists of *Federally Listed and Proposed Endangered and Threatened Species, Candidate Species and Species of Concern for* Gilliam County, the Oregon Department of Agriculture (ODA) Oregon Listed Plants by County (ODA, 2017), and the Oregon Biodiversity Information Center (ORBIC) database to identify special status species known to occur or potential to occur within 5 miles of the facility site boundary.

Previous surveys for special- status wildlife species were conducted in portions of the Phase 1 site boundary by NWC in Spring 2006, and Spring 2009. NWC also conducted a full year of avian use surveys at five plots within the Phase 1 site boundary, from September 4, 2008 to August 7, 2009. Special-status plant and wildlife field surveys were conducted in 2008 and 2010, and were updated in 2017 for areas within Phase 2 that were not previously surveyed. Avian use surveys were conducted from fall 2009 through spring 2010, and raptor nest surveys were conducted in 2010, and updated in 2017.[89]

Based on this Desktop review, which included and review of prior surveys conducted within the Phase 1 and Phase 2 site boundaries, Ch2M identified state sensitive species with either a known occurrence or have the potential to occur within the site boundary (both Phase 1 and Phase 2), or within 5 miles of the site boundary. Of the 52 plant and wildlife species identified in Table P-2, suitable habitat within the Survey Area for: 17 state-sensitive species (including 4 mammals, 1 reptile, and 7 avian species) either have suitable habitat within the site boundary, or were observed within the site boundary while surveying. The table below, Table 7, *State Sensitive Species Observed or Potential to Occur within the Analysis Area*, lists the observed State Sensitive Species or State Sensitive Species with potential to occur, based on presence of suitable habitat, within the analysis area.

[89] MWPAMD4 Exhibit P, p.P-5 2019-04-05

Table 7: State Sensitive Species Observed or Potential to Occur within Analysis Area

Species	State Status
Birds	
Ferruginous hawk *(Buteo regalis)*	Sensitive – Critical (SC)
Western burrowing owl *(Athene cunicularia)*	SC
Grasshopper sparrow *(Ammodramus savannarum)*	Sensitive - Vulnerable (SV)
Loggerhead shrike *(Lanius ludovicianus)*	SV
Long-billed curlew *(Numenius americanus)*	SV
Sage sparrow *(Amphispiza belli)*	SC
Swainson's hawk *(Buteo swainsoni)*	SV
Mammals	
Fringed myotis *(M. thysanodes)*	SV
Pallid bat *(Antrozus pallidis)*	SV
Silver-haired bat *(Lasionycteris noctivagans)*	SV
White-tailed jackrabbit *(Lepus townsendii)*	SV
Reptiles	
Northern sagebrush lizard *(Sceloparus graciosus graciosus)*	SV

Potential Impacts to State Sensitive Species

Potential impacts to State Sensitive wildlife species during facility construction and operation facility impacts, as evaluated in the Final Order on ASC, could include increased morality of bird and bat species from wind turbine collision; grassland bird displacement from habitat loss; mortality risk from vehicle and equipment collision; and, noise-related disturbances during critical life stages (breeding and nesting). In RFA4, the certificate holder explains that Phase 2 facility components would be sited mostly on Category 6 habitat, the lowest quality for wildlife species.

The certificate holder requests to administratively amend Conditions 91, 92, 95, 96, and 97 as presented in Attachment A of this order. Based on the administrative nature of these condition

amendments, the proposed changes are not presented in this section. The Department recommends that the Council find that the requested condition amendments would not substantially change the intent of the previously imposed conditions and the conditions as requested.

Additional conditions imposed under the Council's Soil Protection and Threatened and Endangered Species standards, as described in Section III.ID., *Soil Protection* and III.I. *Threatened and Endangered Species* of this order, would also minimize potential impacts to State Sensitive species during construction and operation of the proposed Phase 2 facility.

As discussed above in Section III.D. *Soil Protection,* Condition 44, requires the certificate holder to restore all areas temporarily disturbed by facility maintenance or repair activities using the same methods and monitoring procedures as described in the final Revegetation Plan. In Exhibit P of RFA4, the certificate holder recommends that Condition 44 be deleted. The certificate holder explains that Condition 44 is not required as a mandatory condition prescribed in OAR 345-027-0020 or 345-027-0023, and that it duplicates the language of Condition 92. The Department agrees that Condition 44 is not a mandatory condition, however, disagrees with the certificate holder's interpretation that the requirements of Condition 44 are duplicated in condition 92. Condition 44 is applicable during facility operations, whereas Condition 92 applies to areas temporarily disturbed by facility construction.

Council previously imposed the following conditions under the Fish and Wildlife Habitat standard that would apply during construction and operation of the proposed Phase 2 facility, requiring that the certificate holder implement measures and practices to avoid and minimize potential impacts to State Sensitive species. Previously imposed conditions are summarized below:

- Condition 94 requires that the certificate conduct pre-construction Washington ground squirrel surveys, and requires that survey results be provided to the Department and ODFW for review and coordination to ensure adequate protection of the species
- Conditions 95 require the certificate holder to conduct pre-construction plant surveys, wildlife surveys, avian use surveys, and raptor nest surveys
- Condition 96 requires avoidance of construction impacts to raptors during the nesting season
- Condition 97 requires avoidance of construction impacts to the BLM Horn Butte Wildlife Area during the nesting season of the long-billed curlew
- Condition 98 restricts the location of construction activities
- Condition 99 addresses facility design measures to reduce potential adverse effects to avian species
- Condition 100 requires the certificate holder to instruct personnel about sensitive species, exclusion areas, permit requirements and other environmental issues

Mammals

In Exhibit P of RFA4, based upon acoustic bat surveys completed in 2010, three special-status bat species could be impacted by facility construction or operation. The certificate holder explains that these bat species occupy forested habitats during breeding season, and that there is little forested habitat in the region, and that while bats were observed during the 2010 surveying, the Phase 2 site boundary does not contain any forested habitat. Phase 2 construction is not expected to result in significant adverse impacts on the three bat species listed above in Table 7, as suitable foraging habitat and water sources are limited within the Phase 2 site boundary, and because construction activities generally occur during daylight hours, when bats are generally absent.[90]

The certificate holder explains that the primary impact to bats during Phase 2 facility operation will be direct mortality from turbine collision. Furthermore, construction of the solar array and other related and supporting facility components are not expected to pose a risk to bats, due to their lower overall heights and stationary nature. As proposed, the larger wind turbines considered for use at Phase 2 could result in an increased risk of bats colliding with wind turbines compared to Phase 1 turbines currently being installed, however, the certificate holder explains that any change to potential impacts is difficult to estimate because little is known about the flight heights of the observed special-status bat species. Plus, if the larger turbine models are chosen at Phase 2, it is anticipated there will be fewer turbines to collide with, which may reduce exposure. It is expected that any differences in bat impacts as a result of the proposed turbine model changes may be undetectable compared to the assessment conducted for the Phase 1 facility, previously approved by Council.

In the Final Order on the ASC, Council explains that facility operation could have an adverse impact on bat species, due to interaction with wind turbines, guy-wires, and transmission lines (or other vehicles or other equipment) and imposed conditions to mitigate for any potential operational impacts to bats. Council imposed condition 91 requiring the certificate holder to conduct both short term and long term wildlife monitoring, as described in the Wildlife Monitoring and Mitigation Plan (WMMP), during facility operation. In RFA4, the certificate holder proposes additional mitigation to minimize potential impacts to the three observed special-status bat species. In RFA4, the certificate holder states that Phase 2 turbines would be sited at least 656 feet (200 meters) from the breaks of Rock Creek canyon, in an effort to reduce potential bat mortality. The Department recommends amending Condition 42 that requires the certificate holder to comply with setback requirements, specifically: ~~following recommended condition the Department recommends Council impose would apply to any final design or configuration in which the certificate holder proposes to construct Phase 2 wind turbines. The recommended condition, Condition 119 is as follows~~:

Recommended Amended Condition 42~~119~~:

[90] MWPAMD4 Exhibit P, p.P-42 and P-43 2019-04-05

The certificate holders shall construct facility components in compliance with the following setback requirements:

(m) For Phase 2 of the facility, all turbines must be setback ~~For any Phase 2 final facility design in which the certificate holder proposes to construct wind turbines within the Phase 2 site boundary expansion, the certificate holder shall maintain a~~ a minimum distance of 656 feet (200 meters), measured from the centerline of the turbine tower to the nearest edge of the breaks of Rock Creek Canyon. ~~Prior to construction, the certificate holder shall provide the Department and ODFW evidence of compliance with this condition in the form of a map. The Department, in consultation with ODFW, shall review and approve compliance with this condition prior to beginning construction of any Phase 2 design scenario which includes wind turbines.~~

While the white-tailed jackrabbit was observed during the 2010 special-status wildlife surveying, the certificate holder explains that there is a low risk of potential impacts to the white-tailed jackrabbit. Suitable habitat for the white-tailed jackrabbits includes high-quality grasslands and shrub-step. The Phase 2 facility would impact very few acres of this habitat type, if any. If impacts to such habitat occur, mitigation is required consistent with the HMP and the EFSC Fish and Wildlife Habitat standard.

Avian Species

The certificate holder states that there are a number of state-sensitive bird species with potential to occur in the site boundary, or within 5 miles of the site boundary. Seven state-sensitive avian species were observed during the certificate holder's avian use surveys (conducted from 2008-2010), Special-Status wildlife surveys in March 2008, or during field surveys conducted in 2009, and 2010 in the Phase 2 site boundary by a previous owner of the facility. The seven state-sensitive avian species identified are as follows: ferruginous hawk, western burrowing owl, grasshopper sparrow, loggerhead shrike, long-billed curlew, sagebrush sparrow, and the Swainson's hawk.

Facility construction could impact nesting habitat for ground-nesting species, and foraging habitat for all avian species. As mentioned above, the Council previously imposed Condition 91, which requires the certificate holder to adhere to the requirements of a Wildlife Monitoring and Mitigation Plan (WMMP). In RFA4, the certificate holder submitted a draft WMMP for the proposed Phase 2 of the facility, which was provided to ODFW for comment and review. The Phase 2 WMMP was based on the approved Phase 1 WMMP, which was prepared in consultation with ODFW. Council also previously imposed Condition 96, which requires the certificate holder to avoid construction activities within a 1,300-foot buffer around potentially active nest sites of raptors during the nesting season. Considering the generally low quality of habitat to be impacted by the facility (Category 6), significant adverse impacts to state sensitive avian species would not be expected. In accordance with the Council's Fish and Wildlife Habitat standard and the ODFW Fish and Wildlife Mitigation Policy, the certificate holder will provide compensatory mitigation for impacted habitat according to a Habitat Mitigation Plan; as attached to this order as Attachment D.

Reptiles

In RFA4, the certificate holder identified one state-sensitive reptile species, the Northern sagebrush lizard, with the potential to occur within the facility site boundary. The certificate holder indicates that while suitable habitat may occur within the facility site boundary (Woodland Juniper), Table P-3 of RFA4 states that no Woodland Juniper habitat is present in the proposed site boundary expansion for Phase 2. Furthermore, no Northern sagebrush lizards have been documented within the site boundary during previous wildlife surveys, and that potential impacts to the Northern sagebrush lizard would be mitigated by shifting facility components out of higher-quality habitat, and into Category 6 habitat.

Plants

While the Oregon Department of Agriculture does not classify plant species as "sensitive," it does classify plant species as "threatened," "endangered," or "candidate" for listing. Potential facility impacts to threatened or endangered plant species is included in Section III.I below. Based on the literature review conducted as part of RFA4, there were candidate plant species identified that could occur within the Phase 2 analysis area; however, no such species were identified during field surveys, and the facility would be sited almost exclusively on Category 6 land, active agriculture, which would not be expected to provide habitat for rare plant species.

The Department recommends that the Council continue to find that subject to the previously imposed and amended plants, wildlife and habitat protection conditions, as well as additional recommended conditions, impacts from the construction and operation of Phase 2 would be mitigated consistent with the EFSC Fish and Wildlife Habitat standard and ODFW's Fish and Wildlife Habitat mitigation policy; and that the facility, with proposed changes, continues to comply with the EFSC Fish and Wildlife Habitat standard.

Conclusions of Law

Based on the foregoing findings of fact and conclusions, and subject to compliance with the recommended site certificate conditions, the Department recommends the Council find that facility, with proposed changes, complies with the Council's Fish and Wildlife Habitat standard.

III.I. Threatened and Endangered Species: OAR 345-022-0070

To issue a site certificate, the Council, after consultation with appropriate state agencies, must find that:

(1) For plant species that the Oregon Department of Agriculture has listed as threatened or endangered under ORS 564.105(2), the design, construction and operation of the proposed facility, taking into account mitigation:

(a) Are consistent with the protection and conservation program, if any, that the Oregon Department of Agriculture has adopted under ORS 564.105(3); or

(b) If the Oregon Department of Agriculture has not adopted a protection and conservation program, are not likely to cause a significant reduction in the likelihood of survival or recovery of the species; and

(2) For wildlife species that the Oregon Fish and Wildlife Commission has listed as threatened or endangered under ORS 496.172(2), the design, construction and operation of the proposed facility, taking into account mitigation, are not likely to cause a significant reduction in the likelihood of survival or recovery of the species.

Findings of Fact

The Threatened and Endangered Species standard requires the Council to find that the design, construction, and operation of the proposed facility are not likely to cause a significant reduction in the likelihood of survival or recovery of a fish, wildlife, or plant species listed as threatened or endangered by Oregon Department of Fish and Wildlife (ODFW) or Oregon Department of Agriculture (ODA). For threatened and endangered plant species, the Council must also find that the proposed facility is consistent with an adopted protection and conservation program from ODA. Threatened and endangered species are those listed under ORS 564.105(2) for plant species and ORS 496.172(2) for fish and wildlife species. For the purposes of this standard, threatened and endangered species are those identified as such by either the Oregon Department of Agriculture or the Oregon Fish and Wildlife Commission.[91]

The analysis area for threatened or endangered plant and wildlife species is the area within and extending five miles from the site boundary.

Surveys and Results

In order to identify endangered and threatened species that could occur within the analysis area, the certificate holder conducted searches of the Oregon Biodiversity Information Center (ORBIC) and U.S. Fish and Wildlife Service database records of threatened and endangered plant and wildlife species within the analysis area. The certificate holder also consulted with ODFW regarding potential occurrences of threatened and endangered species in the analysis area. Based on the database and literature review and consultation with ODFW, the certificate holder identified six state threatened and endangered species with the potential to occur with the analysis area. [92]

From this list, the certificate holder assessed whether there was potentially suitable habitat with the site boundary and analysis area for these species, and determined that habitat for only two state-listed threatened or endangered species has the potential to occur in the site

[91] Although the Council's standard does not address federally-listed threatened or endangered species, certificate holders must comply with all applicable federal laws, including laws protecting those species, independent of the site certificate.

[92] MWPAMD4. ASC Exhibit Q, p. Q-4, Q-5.

boundary – Washington ground squirrel, and Laurent's milk-vetch. As part of the request for amendment, the certificate holder conducted field surveys for habitat and occurrences of these two species. The certificate holder also conducted field surveys for two plant species that are currently candidates for listed as threatened or endangered, but are not currently listed as such. These are the sessile mousetail and dwarf evening primrose. There are no state-listed threatened or endangered avian species with the potential to occur within the analysis area. [93]

Field surveys were conducted by the certificate holder for the three plant species in May 2017 in areas of the site boundary with potential habitat for the species where facility components are planned to be located. Surveys were not conducted in active agriculture land, which is not potential habitat and which is considered Category 6 habitat. The proposed solar array and battery storage system are both proposed entirely on active agriculture land. The surveys were timed appropriately for the bloom period of the species. No evidence of the three species, Laurent's milk-vetch, sessile mousetail, or dwarf evening primrose was found during the field surveys. As evidence in the record, the certificate holder also referenced field surveys for rare plants species conducted in 2006, 2009, and 2010 in the Phase 2 site boundary by a previous owner of the facility; those surveys also did not identified rare plants.[94]

Protocol-level field surveys were conducted by the certificate holder for Washington ground squirrel, the only state-listed threatened or endangered wildlife species with the potential to occur in the site boundary, in spring 2017 in areas of the site boundary with potential habitat for Washington ground squirrel and where facility components are planned to be located. As with rare plants, the certificate holder submitted evidence in the record of additional field surveys for Washington ground squirrel conducted by the previous Phase 2 project developer, conducted in 2008 and 2010.[95]

As reported in Exhibit Q, field surveys document Washington ground squirrel habitat in the northern portion of the Phase 1 site boundary, very near to the Phase 2 site boundary. As such, the facility was redesigned to remove facility components from that area in order to avoid Washington ground squirrel habitat. Field surveys of the remainder of the site boundary did not document active Washington ground squirrel habitat.[96]

The site boundary and surrounding area is highly fragmented, consisting mostly of active agriculture as well as roads and other development features including the Phase 1 facility construction, and there is limited connectivity between areas of actual and potential Washington ground squirrel habitat that is not interrupted by development features such as roads or active agriculture, which forms a barrier to movement of the species and a "break" in habitat.

[93] MWPAMD4. ASC Exhibit Q, p. Q-8.
[94] MWPAMD4. ASC Exhibit Q, p. Q-8, Q-9.
[95] MWPAMD4. ASC Exhibit Q, p. Q-10.
[96] Id.

Potential Impacts to Identified Threatened and Endangered Species

Wildlife – Washington Ground Squirrel

As described above, the only state-listed threatened or endangered wildlife species with the potential to occur in the Phase 2 site boundary is Washington ground squirrel. Based on 2017 protocol surveys for Washington ground squirrel, the Phase 2 facility was redesigned to avoid active Washington ground squirrel colonies and Category 1 habitat. As such, the Phase 2 facility is not expected to impact Washington ground squirrels or their habitats. It is noted in Exhibit Q that Design Scenario A is anticipated to permanently disturb approximately 2.63 acres of non-active agriculture; and while this area is not currently known to support Washington ground squirrel, it has the potential to be colonized by the species.[97] Existing site certificate Condition 94 requires pre-construction protocol surveys for Washington ground squirrels. As the majority of the Phase 2 site boundary and areas where facility components are planned to be located is active agriculture (Category 6 habitat), it is not anticipated that Washington ground squirrels will be found, but if so, Condition 94 and 95 require that all areas of Category 1 habitat are avoided. Finally, the Wildlife Monitoring and Mitigation Plan (WMMP) for the Montague facility requires post-construction monitoring and reporting of Washington ground squirrel in areas of the facility site boundary near identified colonies.

Additionally, while there is known use of the Phase 2 and Phase 1 facility areas by Washington ground squirrel, it is important to note that, based on pre-construction field surveys for the Phase 1 site required by site certificate Conditions 94 and 95, the Phase 1 facility was redesigned prior to beginning construction because of the presence of active Washington ground squirrel colonies. Both conditions 95 and 95 will continue to apply to the Phase 2 facility, and if Washington ground squirrel is found during the pre-construction surveys, the facility would need to be designed to avoid Category 1 habitat and comply with the Threatened and Endangered Species standard.

Plants

As described above, no evidence of Laurent's milk-vetch, sessile mousetail, or dwarf evening primrose was found during Phase 2 2017 field surveys. The Department notes that the sessile mousetail and dwarf evening primrose are listed as candidates, but are not formally listed as threatened or endangered, and as such the EFSC Threatened and Endangered Species standard does not apply to those two plants.

Existing site certificate Condition 95(b) requires that the certificate holder conduct a pre-construction field survey for threatened and endangered species, which will include the Laurent's milk-vetch. If presence of the species is found, the certificate holder must consult with the Department, as well as the Oregon Department of Agriculture, to ensure continued

[97] MWPAPP4. ASC Exhibit Q, p. Q-10, Q-13.

compliance with the EFSC Threatened and Endangered Species standard which could include avoidance of the species or other types of mitigation.

Subject to compliance with existing site certificate conditions, and based on the analysis presented here and the information in the record, the Department recommends that the Council find that the Phase 2 facility is unlikely to adversely affect threatened or endangered wildlife or plant species, and that the design, construction, and operation of the facility are not likely to cause a significant reduction in the likelihood of survival or recovery of threatened or endangered wildlife or plant species

Conclusions of Law

Based on the foregoing findings of fact and conclusions, and subject to compliance with the existing site certificate conditions, the Department recommends that the Council find that the facility, with proposed changes, complies with the Council's Threatened and Endangered Species standard.

III.J. Scenic Resources: OAR 345-022-0080

(1) Except for facilities described in section (2), to issue a site certificate, the Council must find that the design, construction and operation of the facility, taking into account mitigation, are not likely to result in significant adverse impact to scenic resources and values identified as significant or important in local land use plans, tribal land management plans and federal land management plans for any lands located within the analysis area described in the project order.

Findings of Fact

OAR 345-022-0080 requires the Council to determine that the design, construction and operation of the proposed facility are not likely to have a "significant adverse impact" to any significant or important scenic resources and values within the analysis area. In applying the standard set forth in OAR 345-022-0080(1), the Council assesses visual impacts of facility structures on significant or important scenic resources described in "local land use plans, tribal land management plans and federal land management plans for any lands located within the analysis area described in the project order." For purposes of this rule, "local land use plans" includes applicable state land use and management plans.

The analysis area for the Scenic Resources standard, is the area within and extending 10-miles from the site boundary. Because RFA 4 includes a proposed site boundary expansion for Phase 2, the analysis area for the facility, with proposed changes is larger than previously analyzed. The expanded analysis area is mainly to the south and southwest of the facility. The land use and management plans that the certificate holder reviewed in Exhibit R of RFA4 are represented in Table R-1 of Exhibit R. There are no scenic resources protected by tribal plans within the analysis area.[98]

The proposed solar array and battery storage system are not expected to be visible from any designated Scenic Resource, and as such are not further discussed in this section. Further discussion of potential impacts from the solar arrays along state Highway 19 is included in Section III.M. *Public Services* of this order.

In order to reduce potential visual impacts, including impacts to Scenic Resources, Council previously imposed Conditions 102 through 105; these conditions will continue to apply to Phase 2.

Condition 102 was imposed to minimize visual impacts from facility component finish, vegetative clearing and facility signage; Condition 103 to minimize visual impacts from the substation and O&M buildings; Condition 104 to minimize visual impacts from nighttime lighting. In RFA4, the certificate holder represented that it would implement the same measures for the proposed Phase 2 facility components. In RFA4, the certificate holder suggests amending Condition 103 to include the proposed substation and buildings/containers associated with the battery storage system. The Department agrees with the proposed amended condition language, and recommends that Council amend Condition 103 as follows:

> **Recommended amended Condition 103:** The certificate holder shall design and construct the O&M buildings, substation, and buildings and containers associated with battery storage to be generally consistent with the character of similar buildings used by

[98] MWPAAMD4Doc Exhibit R, p. R-6

commercial farmers or ranchers in the area and shall paint the building in a low-reflectivity, neutral color to blend with the surrounding landscape.

Applicable Land Use Plans

The EFSC Scenic Resources standard requires an analysis of the proposed facility's potential visual impact to "scenic resources and values identified as significant or important in local land use plans, tribal land management plans and federal land management plans for any lands located within the analysis area described in the project order." The analysis area of 10 miles includes parts of three Oregon counties (Gilliam, Sherman, and Morrow), one Washington County (Klickitat), two Oregon municipalities (Arlington and Ione), land administered by the Oregon Department of Transportation (ODOT), land administered by the Oregon Parks and Recreation Department, and land administered by the Bureau of Land Management and U.S. Fish & Wildlife Service. The analysis area includes both the existing Phase 1 site boundary and the proposed Phase 2 site boundary. The Klickitat County is approximately 9 miles from the closest point of the Phase 2 site boundary and across the Columbia River, and as such impacts to Scenic Resources in that county from the Phase 2 facility are unlikely, however, the analysis is included in this section. The city of Arlington is approximately 7 miles, and Sherman County border is approximately 6 miles, from the closest point of the Phase 2 site boundary. The certificate holder evaluated the following land use and management plans to determine whether scenic resources were identified as significant or important:

- Gilliam County Comprehensive Plan and County Zoning and Land Development Ordinance (Amended 2017)
- Morrow County Comprehensive Land Use Plan (Amended 2013)
- Sherman County Comprehensive Land Use Plan (Amended 2007)
- Klickitat County Comprehensive Plan (Amended 1979)
- Klickitat County Energy Overlay Zone Ordinance: Natural Resources/Energy Comprehensive Plan (Amended 2005)
- Roosevelt Community Subarea Plan (1990)
- City of Arlington Comprehensive Plan, June 2003 (amended 2015)
- City of Ione Comprehensive Plan (1987)
- Cottonwood Canyon State Park Comprehensive Plan (OPRD, 2011)
- Columbia Basin Wildlife Areas Management Plan
- Omnibus Oregon Wild and Scenic Rivers Act of 1988 (WSA, 1988); Public Law 100-557, 102 STAT. 2782; 16 *United States Code* 1271.
- John Day River Basin Record of Decision and Resource Management Plan (2015)
- Oregon Trail Comprehensive and Management Use Plan, Oregon National Historic Trail (1999)
- Lewis and Clark National Historic Trail, Comprehensive Plan for Management and Use (NPS, 1982)

In RFA4, the certificate holder explains that the proposed site boundary expansion results in an expansion of the analysis area to the southwest, consequently the analysis area includes one

new resource not previously evaluated in the Montague original final order or subsequent amendments, Cottonwood Canyon State Park. The park is approximately 6 miles from the Phase 2 site boundary.

The certificate holder did not identify an applicable land use and management plan for the Blue Mountain Scenic Byway in RFA4. However, the *1999 Oregon Highway Plan: Including Amendments November 1999 through May 2015 (ODOT),* would apply to the byway, and as such, was relied upon in the Department's evaluation below.

The Council previously evaluated the impacts to scenic resources in the Final Order on the ASC, Final Order on Amendment 1, Final Order on Amendment 2, and Final Order on Amendment 3. These Final Orders discussed the potential visual impacts to resources in the City of Arlington (OR), the City of Ione (OR), Gilliam County (OR), Morrow County (OR), Sherman County (OR), Klickitat County (WA), the John Day River Wildlife Refuge, Willow Creek Wildlife Area, John Day River, Horn Butte Wildlife Area, Oregon National Historic Trail, and the Lewis and Clark National Historic Trail. These resources are again evaluated in Phase 2. As noted above, most of these Scenic Resources are north of, and closer to, the Phase 1 facility site boundary, but are none the less included in the evaluation of the proposed Phase 2 facility components below.

Visual Features of the Phase 2 facility

As proposed, Phase 2 components could result in visual impacts to scenic resources and values within the analysis area. The proposed components include: wind turbines with a maximum blade tip height of 597 feet; Up to approximately 1,189 acres of permanent vegetation disturbance from the construction and operation of the proposed solar array (Design Scenario C) which includes solar array structures with a maximum tilt height of 15 feet; battery storage systems extending 20-feet in height; and 230 kV transmission line structures with a maximum height of 100 feet. The wind turbines, at nearly 600 feet, would be the most prominent visual feature on the landscape of the proposed facility.

When Council previously evaluated the Scenic Resources Standard in the Final Order on the ASC, and subsequent Amendment requests (AMD1 through AMD3), the tallest component of the facility were the wind towers. In the Final Order on the ASC, Council approved wind turbines with a maximum blade tip height ranging from 389 feet up to 492 feet tall. The turbines currently being installed at the Phase 1 facility are approximately 492 feet in height.

The tallest components proposed in RFA4 are also the turbine towers, which would be up to a maximum blade tip height of 597 feet. Within the Phase 2 proposed site boundary expansion, the certificate holder's maximum turbine layout (Design Scenario A) includes the construction of up to 81 wind turbine towers. As mentioned above, the certificate holder's Design Scenario B request would use turbines up to 597 feet tall, but if these taller turbines are used, fewer turbines are proposed to be constructed.

While it is possible that the solar array and battery storage system will be visible from identified Scenic Resources, nearly every Scenic Resource is to the north of the Phase 2 site boundary. Phase 1 is under construction, and when complete, will consist of 56 wind turbines each approximately 492 feet in height. In order to see the solar array and battery storage, a viewer from the Scenic Resource locations that are north of the Phase 2 facility would need to "look through" the Phase 1 facility wind turbines and other facility components, including the 230 kV gen-tie transmission line. Cottonwood Canyon State Park is the one Scenic Resource located closer to the Phase 2 facility site boundary than Phase 1, but as described further below, the solar array and battery system components are very low profile compared to wind turbines and are unlikely to be visible from the park.

Loss of Vegetation

Construction of the Phase 2 facility would result in temporary and permanent vegetation loss. Temporary vegetation loss would be restored through the certificate holder's implementation of a final, Phase 2 Habitat Mitigation and Revegetation Plan, to be reviewed and approved by the Department prior to Phase 2 construction, in accordance with recommended amended Condition 93. Operation of the facility, with proposed changes, would result in permanent vegetation loss from the footprint of facility components. Based on compliance with Conditions 93 and 105, and the distance of proposed facility components from the nearest identified scenic resource, the Department recommends that the Council find that visual impacts from temporary and permanent vegetation loss would not be likely to result in a significant adverse impact at the significant or important scenic resources identified within the analysis area.

Facility Structures

To evaluate potential visual impacts of the wind turbines and the 230 kV transmission line structures at scenic resources identified as significant or important within the analysis area, the certificate holder provided a "zone of visual influence" analysis. The results of turbine ZVI were presented in Figures R-1 through R-3 of the RFA. The results of the transmission line ZVI were presented in Figure R-4. The proposed solar array and battery storage system are not expected to be visible from any designated Scenic Resource, and as such are not further discussed in this section. The ZVI conducted by the certificate holder in November 2018, included both Phase 1 and Phase 2 wind turbines. The certificate holder assessed a design configuration that combines the maximum turbine layout of Design Scenario A with the proposed maximum turbine heights of Design Scenario B that would result in the greatest visual impact. This scenario presents a "greater than worst case," as the number of turbines (up to 81) proposed under Design Scenario A would not be built using Design Scenario B turbines (up to 597 feet height).

The ZVI modeling conducted does not account for screening from vegetation or structures that might block the line-of-sight between a viewpoint and the turbine towers. The model also does not account for factors such as weather conditions, haze or background landscape that might obscure visibility. The analysis considers a turbine to be "visible" if any part of a turbine or

transmission structure is within a line-of-sight, based on the maximum blade tip or transmission structure height. The results of the analysis are illustrated by color-coded maps, showing the approximate density of turbine towers or structures visible from any angle in the landscape within the 10 mile analysis area.

Based on review of the above-referenced land use and management plans, the certificate holder identified rock outcroppings in Gilliam County, rock outcroppings and trees in Sherman County, the John Day River and corridor, City of Arlington comprehensive plan components including "scenic views and vast open space," Cottonwood Canyon State Park, Blue Mountain Scenic Byway, and two sites (Fourmile Canyon Interpretive Site and the McDonald/John Day River Crossing) of the Oregon National Historic Trail as potentially significant or important scenic resources within the analysis area of the Phase 1 and Phase 2 facility components.

Gilliam and Sherman Counties

Rock outcroppings in both Gilliam and Sherman County, identified as important features and characteristics within each of their respective counties comprehensive plans, would not directly be impacted by Phase 2. Based on review of the Gilliam County Comprehensive Plan and County Zoning and Land Development Ordinance (Amended 2017), and the Sherman County Comprehensive Land Use Plan (Amended 2007), only the rock outcroppings marking the "rim and walls of steep canyon slopes" were characterized as important features of the County's landscape, but no specific rim or wall of steep canyon slope is identified. The nearest rock outcroppings marking the rim of the steep canyon slopes of Gilliam County are approximately 7 miles from the proposed amended site boundary. Rock outcroppings in Sherman County are even further removed from the amended site boundary, and are located more than 7 miles away. Based on distance from the proposed Phase 2 components, the Department recommends that the Council find that the facility including both Phase 1 and 2 facility components, is not likely to have a significant impact on viewing rock outcroppings in Gilliam and Sherman County's, and would not result in a significant adverse effect on the identified scenic resources. Gilliam County submitted a comment letter in support of the Phase 2 facility and did not mention adverse visual impacts to rock outcroppings.[99] Sherman County did not comment on the record of the Phase 2 facility.

Morrow County and City of Ione

The Phase 2 facility boundary is approximately 5.5 miles from Morrow County and 14 miles to Ione. Neither the Morrow County Comprehensive Plan or the Ione comprehensive plan identify specific scenic resources or values. The Morrow County Comprehensive Plan specifically states that the "the county has not designated any sites or areas as being particularly high in scenic-resource value." As such, no additional analysis is necessary.[100]

City of Arlington

Arlington is approximately 7 miles from the closest point of the Phase 2 site boundary. In Exhibit R of RFA4, the certificate holder confirms that there have been no changes in the City of Arlington's policies regarding scenic resources since the last Council review of the Montague facility. The scenic resources addressed in the Goal 5 discussion of the city's comprehensive plan remain the Open Space, Scenic and Historic Areas, and Natural resources, specifically identifying the "Horse Heaven Hills on the Washington side of the Columbia River, and vast areas of open space within sight of almost every house in the town… [and] the views outside the City of Arlington to the east, west, and north […].". The Council previously evaluated the impacts of the facility in the Final Order on the ASC, and determined that the scenic views identified in the Comprehensive Plan are the views towards the Columbia River and away from the Montague facility site (to the east, west, and north). Because the Phase 2 facility site boundary expansion would be even further removed from the City of Arlington (proposed expansion is southwest of the approved facility site boundary), and based on the fact that

[99] MWPAMD4DocXX Special Advisory Group GCo Comments 2019-02-20
[100] MWPAPPDocXX. RFA Exhibit R, R-9.

Council previously found that the approved facility was not likely to have a significant adverse effect on the identified scenic resources in Arlington, the Department recommends that Council find that the design, construction, and operation of the facility, with proposed changes, is not likely to result in a significant adverse impact to the Scenic resources and values identified as significant or important in the City of Arlington Comprehensive Plan (2015).

John Day River and Corridor

The John Day River and associated river canyon are approximately 5.5 miles from the Phase 2 site boundary. Based on the analysis presented in RFA 4, no Phase 2 facility components would be visible from the river. The ZVI analysis suggests that it is possible that a small, limited area along the canyon wall and rim may have some visibility of Phase 2 turbines, but these areas are distant from the facility, and not readily accessible by the public. As such, the Department recommends that Council find that the design, construction, and operation of the facility, with proposed changes, is not likely to result in a significant adverse impact to John Day River and River Corridor.[101]

Cottonwood Canyon State Park

Cottonwood Canyon State Park is a state park located on the John Day River, previously unevaluated by Council during its review of the original ASC or subsequent amendments. As mentioned above, Phase 2 components would be located closer to the Park than the approved Phase 1 components. The park is located approximately 6 miles from the closest point of the Phase 2 site boundary. The park's management plan has a stated goal of preserving and enhancing the scenic character of Cottonwood Canyon. No Phase 2 facility components will be visible from the John Day River or other important areas of the park. Based on the ZVI analysis, some turbines may be visible at higher elevations on ridges of the park, but it is not clear if these areas are accessible to the public, and regardless, the areas are approximately 7.5 miles from the nearest potential turbine location. As such, the Department recommends that Council find that the design, construction, and operation of the facility, with proposed changes, is not likely to result in a significant adverse impact to John Day River and River Corridor.[102]

The Blue Mountain Scenic Byway

The Blue Mountain Scenic Byway is an approximately 130-mile designation along State Route 74 that traverses through the Blue Mountains of Northeastern Oregon. The certificate holder explains that the Blue Mountain Scenic Byway was designated by the U.S. Forest Service in 1989 as a National Forest Scenic Byway, and designated by the Oregon Department of Transportation (ODOT) as an Oregon State Scenic Byway in 1997.[103] At its closest point, the Blue Mountain Scenic Byway is approximately 3 miles to the west of the approved Phase 1 facility, and approximately 5 miles from the proposed Phase 2 Site Boundary expansion. The certificate holder's revised ZVI analysis for the proposed Phase 2 wind turbines indicates that the

[101] MWPAPP. RFA Exhibit R, R-12 to R-14 2019-04-05
[102] MWPAMD4 Exhibit R, R-11 2019-04-05
[103] MWPAMD4 Exhibit R, R-14 2019-04-05

proposed wind turbines will be visible from a short segment, less than 1 mile in length, at a location that is approximately 12 miles away from the closest proposed turbine. Not only is this section of the byway outside of the scenic resources analysis area, but considering the distance of the proposed Phase 2 components from the highway, and the fact that the views of the facility, with proposed changes would be limited, the Department recommends that the Council find that the construction and operation of the facility, with proposed changes would not result in any significant adverse impacts to the Blue Mountain Scenic Byway.[104]

Oregon National Historic Trail

The Oregon National Historic Trail (ONHT) passes through six states and covers 2,130 miles. The applicable federal land management plan is the *Comprehensive Management and Use Plan* (CMP) adopted by the National Park Service in 1999. The certificate holder identified two sites along the ONHT, within the scenic resource analysis area, that are managed for their historical significance. The two sites; Fourmile Canyon Interpretive Site, and the McDonald/John Day River Crossing. Of the two identified sites, the Fourmile Canyon Interpretive site is the closest in proximity to the facility, with proposed changes. Because the Fourmile Canyon Interpretive site is located less than a mile from the approved site boundary, and because the site directs viewers towards the southernmost trail segment extending up an adjacent foothill located to the west, Council imposed condition 105 in the Final Order on the ASC. As imposed, Condition 105 restricts the certificate holder's ability to site turbine and meteorological towers within a minimum of 1,000 feet from the centerline of the line-of-sight of the Fourmile interpretive site. The certificate holder explains that no proposed Phase 2 components will be closer to the Fourmile interpretive site than components Council has previously approved, and that existing Condition 105 will continue to apply to the proposed Phase 2 components. The facility, with proposed changes is not expected to result in significant adverse impacts to the Fourmile Canyon Interpretive site.[105]

The second identified site along the ONHT, within the scenic resources analysis area is the McDonald/John Day River Crossing. The McDonald/John Day River Crossing is located approximately 5 miles to the west of the proposed Site Boundary Expansion, within the river canyon on the John Day River. Phase 2 facility is unlikely to be visible at the McDonald/John Day River Crossing.[106]

Based on the analysis presented here and the information in the record, the Department recommends that the Council find that the design, construction, and operation of the facility, with proposed changes, is not likely to result in a significant adverse impact to the Scenic resources and values identified as significant or important in local land use plans, tribal land management plans and federal land management plans for any lands located within the analysis area described in the project order.

[104] Id.
[105] MWPAMD4 Exhibit R, p.R-14 through R-15 2019-04-05
[106] Id.

Conclusion of Law

Based on the foregoing findings of fact and conclusions of law, the Department recommends that the Council find that the facility, with proposed changes, complies with the Council's Scenic Resources standard.

III.K. Historic, Cultural, and Archaeological Resources: OAR 345-022-0090

(1) Except for facilities described in sections (2) and (3), to issue a site certificate, the Council must find that the construction and operation of the facility, taking into account mitigation, are not likely to result in significant adverse impacts to:

(a) Historic, cultural or archaeological resources that have been listed on, or would likely be listed on the National Register of Historic Places;

(b) For a facility on private land, archaeological objects, as defined in ORS 358.905(1)(a), or archaeological sites, as defined in ORS 358.905(1)(c); and

(c) For a facility on public land, archaeological sites, as defined in ORS 358.905(1)(c).

(2) The Council may issue a site certificate for a facility that would produce power from wind, solar or geothermal energy without making the findings described in section (1). However, the Council may apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.

** * **

Findings of Fact

Section (1) of the Historic, Cultural and Archaeological Resources standard generally requires the Council to find that a proposed facility or facility, with proposed changes, is not likely to result in significant adverse impacts to identified historic, cultural, or archaeological resources. Under Section (2), the Council may issue a site certificate for a wind or solar power facility without making findings of compliance with this section. However, the Council may impose site certificate conditions based on the requirements of this standard.[107]

The analysis area for the Historic, Cultural and Archaeological Resources standard includes the area within the proposed amended site boundary. The analysis area is within the ceded lands and traditional use area of the Confederated Tribes of the Warm Springs Indian Reservation and the Confederated Tribes of the Umatilla Indian Reservation (CTUIR).

[107] The site boundary does not encompass public lands; therefore, OAR 345-022-0090(1)(c) is not applicable.

Description of Discovery Measures

The certificate holder conducted desktop and field surveys, and provided funding to the CTUIR for a traditional use survey, to inform the proposed Phase 2 impact assessment under the Council's Historic, Cultural and Archaeological Resources standard. In RFA4, the certificate holder also incorporates by reference previous desktop and fieldwork conducted for the Baseline Wind Project, a withdrawn EFSC facility with leased area adjacent to the previously approved Montague Wind Power facility site boundary proposed for inclusion within the amended site boundary, and previous Council proceedings for the Montague Wind Power Facility site certificate and subsequent site certificate amendments.

In October 2018, the certificate holder's consultant, CH2M Hill Engineers, Inc. (CH2M), reviewed the Oregon State Historic Preservation Office's (SHPO) Archeological Records Remote Access (OARRA) database to identify previously recorded cultural resources and previous cultural resource investigations conducted within and extending 1-mile of the proposed amended site boundary. Four cartographic reviews were conducted from 2010 through 2017, including review of General Land Office (GLO), historical U.S. Geological Survey (USGS) quad maps, and Metsker maps prior to fieldwork. Seven separate field surveys were conducted within (parts of) the analysis area from 2010 through 2018, including two field surveys each in 2017 and 2018.

The proposed Phase 2 micrositing corridor includes approximately 8,981 acres, as represented in Figure 3, *Site Boundary and Micrositing Corridor* in Section II.A. *Requested Amendment* of this order. Pedestrian surveys were conducted for the area within the proposed amended micrositing corridor. In 2017 and 2018, the certificate holder conducted pedestrian surveys encompassing 1,138 acres within the previously approved and proposed micrositing corridor. In 2011, pedestrian surveys were conducted to inform the proposed Baseline Wind Project ASC, but that encompassed approximately 8,113 acres of the proposed micrositing corridor, which the certificate holder incorporates and relies upon. The field surveys were generally conducted within 500 feet of planned and alternate wind turbine locations, within 500 feet of the proposed 230 kV transmission line route (i.e., 1,000-foot corridor), and within 150 feet of roads and electrical collector lines (i.e., 300-foot corridor). Each pedestrian field survey used linear transects spaced between 20- and 30-meter (66- and 98-foot) intervals. Surveys were guided by the use of Trimble Geo 7x handheld Global Positioning System devices (or equivalent) loaded with facility GIS data to identify the survey areas.

Results of Discovery Measures – Historic and Cultural Resources; Archeological Sites

Desktop survey identified 15 previous cultural resource investigations within 1-mile of the analysis area, 2 of which cross the site boundary. Thirty-two cultural resources were previously recorded within 1-mile of the analysis area, comprising 14 isolates, 10 archaeological sites, 5 built environment properties, 1 National Registry of Historic Places (NRHP)-eligible Historic Property of Religious and Cultural Significance to Indian Tribes (HPRCSIT), and two potentially

NRHP-eligible HPRCSITs. Within the analysis area, 9 resources were identified including 1 archaeological site (35GM306), 5 built environment properties and 3 HPRCSITs.

The cartographic review identified that with the exception of several roads, no Donation Land Claims, homes, or other improvements were shown on any of the GLO maps pertaining to the analysis area. No information could be located concerning the other roads. The 1916 USGS Arlington, Oregon 1:125,000 quad map identified several roads and structures evident on Shutler Flats. Historical Metsker maps were also reviewed for the analysis area and identified several ranches including the J. Bottemiller Ranch, L. W. Childs Ranch, and A. M. Cannon Ranch within the analysis area.

In addition to the 9 identified resources described above, the Department incorporates by reference the certificate holder's previous identification of the presumed alignment of the Oregon National Historic Trail (ONHT) as an archeological site within the analysis area, including two visually intact remnants and one historic site.[108]

National Registry of Historic Places – Eligibility Status

Archeological Site

The archeological site (35GM306) is a historic debris scatter within the analysis area, previously identified and evaluated by the certificate holder. The certificate holder recommended that the archeological site not be eligible for NRHP listing. In 2012, SHPO concurred with the recommendation. Therefore, because the site is not NRHP eligible or likely NRHP eligible under the standard, this archeological site and potential impacts are not further discussed in this order.

The ONHT is the emigrant route used from 1841 to about 1869 from Independence, Missouri to the Oregon Territory, with sections of the approximate route that intersect the previously approved site boundary. Most visible remnants of the ONHT have been destroyed by agriculture or overlain with modern transportation facilities. Two discontiguous, visually intact remnants were recorded within the Phase 1 site boundary, where wagon ruts may be seen. The ONHT is NRHP eligible. Therefore, potential impacts from proposed Phase 2 facility construction and operation are evaluated in this order.

Built Environment Properties

The 5 built environment properties include: Weatherford Barn; 68040 Highway 19 farmstead; 69180 Weatherford Road farmstead; 69064 Weatherford Road property; and 69398 Berthold Road farmstead.

[108] MWPAPPDoc1. ASC Exhibit S.

The Weatherford Barn is a single structure located in an agricultural field north of Bottemiller Road and west of Oregon Highway 19. It was constructed in 1880 and is reportedly the oldest barn in the county. In a March 1, 2019 letter, SHPO concurred that the Weatherford Barn was eligible for NRHP listing based on the historic significance of its association with agriculture and the integrity of the property, including location, setting, design, materials, workmanship, feeling and association, to convey the historic significance. Therefore potential impacts from proposed Phase 2 facility construction and operation are evaluated in this order.

The farmstead complex located at 68040 Highway 19 includes two residential buildings, a garage, a shed, three storage buildings, a collection of silos, and three Quonset huts. One residence dates to the early twentieth century and the other is a mid-century ranch-style house. In RFA4 Exhibit S, the certificate holder recommended that this built environment property not be NRHP eligible. In a March 1, 2019 comment letter, SHPO concurred that this farmstead complex is not NRHP-eligible. Therefore, because the site is not NRHP eligible or likely NRHP eligible under the standard, this built environment property and potential impacts are not further discussed in this order.

The farmstead complex located at 69180 Weatherford Road consists of six buildings and structures: a mobile home, three silos, a Quonset hut, and a small shed located on the west side of Weatherford Road. The county assessor provides dates of construction for the silos as 1926, 1931, and 1991, and the Quonset hut dates to 1971. In RFA4 Exhibit S, the certificate holder recommended that this built environment property not be NRHP eligible. In a March 1, 2019 comment letter, SHPO concurred that this farmstead complex is not NRHP-eligible. Therefore, because the site is not NRHP eligible or likely NRHP eligible under the standard, this built environment property and potential impacts are not further discussed in this order.

The property at 69064 Weatherford Road consists of a collection of farm buildings with no residence. The complex includes a barn, grain elevator, and associated grain silos, three outbuildings, and a chicken coop. County assessor records identify the barn and grain elevator as constructed in 1941, and the largest outbuilding, an equipment storage shed, as built in 1971. Two of the silos were constructed in 1936 and one in 1981. In RFA4 Exhibit S, the certificate holder recommended that this built environment property not be NRHP eligible. In a March 1, 2019 comment letter, SHPO concurred that this farmstead complex is not NRHP-eligible. Therefore, because the site is not NRHP eligible or likely NRHP eligible under the standard, this built environment property and potential impacts are not further discussed in this order.

The farmstead complex located at 69398 Berthold Road consists of a collection of farm buildings, including a residence, a detached garage, a grain elevator and silo, an outbuilding, a barn, and a shed. The property was originally documented in 2010 as a part of the Baseline surveys (Ragsdale et al., 2011). The form was updated in 2013; however, it was not submitted to SHPO. According to county assessor's records, the oldest resource on the property is a silo constructed in 1925. The residence reportedly dates to 1962, but appears older. The outbuildings date to the 1940s and 1950s. In RFA4 Exhibit S, the certificate holder

recommended that this built environment property not be NRHP eligible. In a March 1, 2019 comment letter, SHPO indicated that because a sufficient comparative analysis of other agricultural properties in the region was not provided, the agency was unable to concur with the certificate holder's recommendation and recommended that the farmstead complex be considered likely NRHP-eligible. However, SHPO further clarified that proposed Phase 2 facility components would not have a significant adverse impact on the farmstead complex based on proposed Phase 2 facility component location and distance to the built environment property.

Historic Property of Religious and Cultural Significance to Indian Tribes

Tiqaxtiqax is a 56,573 acre HPRCSIT within the analysis area that includes contributing sites of shrub-steppe environments related to cultural practices deemed significant by the CTUIR. In August 2015, the United State Department of the Interior determined this HPRCSIT NRHP-eligible. The district includes contributing sites related to the seasonal round of the CTUIR and is home to the First Foods gathering areas essential to both the culture and religion of CTUIR. ~~It is where the people held ceremonies to welcome the early-season roots back, to thank both the Creator and the plants for returning, and serves as an essential part in upholding the cultural law of *tamanwit*. In August 2015, the United State Department of the Interior determined this HPRCSIT NRHP-eligible.~~ As described in RFA4, the location and character of the HPRCSIT are not disclosed in this order.[109] However, potential impacts from proposed Phase 2 facility construction and operation to this property are evaluated in this order.

CTUIR also identified two HPRCSIT's, *Alaɔála* and *Ulíkš,* within the analysis area that the CTUIR considers likely NHRP eligible.[110] The certificate holder describes that, as of July 2018, information about these two HPRSCIT's was not available in SHPO's OARRA database. The certificate holder, however, reviewed CTUIR's placename atlas *Čáw Pawá Láakni: They Are Not Forgotten* and confirmed that the two HPRCSIT's recommended by CTUIR as likely NRHP-eligible would overlap areas within the proposed Phase 2 site boundary~~, and were noted as staging areas and basecamps for root gathering. In a March 29, 2019 comment letter, CTUIR commented on *Alaɔála* and *Ulíkš* and describes that these HPRCSITs were seasonal camps used by CTUIR to access adjacent plant harvesting and hunting areas, and that the HPRCSITs are linked together, physically, by a network of trails.~~ As described in RFA4, the location and character of the HPRCSITs are not disclosed in this order. However, potential impacts from proposed Phase 2 facility construction and operation to this property are evaluated in this order.

Potential Impacts to Historic and Cultural Resources; Archeological Sites

Potential impacts are evaluated for the resources described above as NRHP-listed or likely eligible for NRHP listing, including the ONHT intact remnants, the Weatherford Barn and 3

[109] MWPAMD4. Request for Amendment 4 Exhibit S. 2019-04-05.
[110] MWPAMD4. RFA4 Tribal Gov Comment. CTUIR 2019-03-26.

HPRCSITs within the analysis area. Potential impacts include direct and indirect impacts. Direct impacts could include temporary and permanent disturbance to the resource; indirect impacts could include impacts from facility noise and visibility to integrity of the resource – integrity aspects include location, setting, design, materials, workmanship, feeling, and association.[111]

Based on review of RFA4 Exhibit S, the certificate holder proposes to avoid direct impacts to ONHT intact remnants and the Weatherford Barn through facility design and not siting proposed Phase 2 facility components directly on or near these resources. Previously imposed conditions, Condition 46 and 47, require that the certificate holder impose a 200-foot buffer and flagging for any historic, cultural or archeological resources; and, ensure that construction personnel avoid presumed alignments of the ONHT and not locate any facility components on visible remnants of the ONHT. The requirements of these conditions would continue to apply to proposed Phase 2 facility components and the historic and cultural resources identified in RFA4.

Impact Evaluation for the Weatherford Barn

Proposed Phase 2 facility components could result in impacts to the integrity aspects of the Weatherford Barn, including setting, feeling and association. As described above, SHPO confirmed that the Weatherford Barn currently retains integrity of location, design, setting, materials, and association. Based on the location of the Weatherford Barn, the closest proposed Phase 2 facility components to the resource would include the proposed solar array, located 300-feet south, and the proposed collector substation, located 550-feet east. In addition, the proposed solar array would occupy up to 1,189 acres and would be approximately 1-mile wide.[112]

Based on the proximity of proposed Phase 2 facility components and size of the area to be occupied by the proposed solar array, SHPO considers that the integrity aspects of the Weatherford Barn would be greatly altered by proposed Phase 2 facility components. Specifically, SHPO describes that the location and presence of proposed Phase 2 facility components would result in a significant adverse impact to the setting (physical environment of the property), feeling (historic sense of the property) and association (link with agriculture) of the Weatherford Barn.[113]

SHPO recommended three mitigation options the agency considered acceptable to reduce impacts below a level of significance, including a requirement that the certificate holder: conduct a reconnaissance level survey of barns in Gilliam County or neighboring counties; partner with a third-party to fund a barn rehabilitation grant for the community; or, partner with a local historic society to develop a historic barn exhibit. In RFA4 Exhibit S, the certificate holder accepts the recommended mitigation options and provides a draft Historical Resource

[111] National Register Bulletin: How to Apply the National Register Criteria for Evaluation
[112] MWPAMD4. RFA 4 Exhibit S. Attachment S-9.
[113] MWPAMD4. RFA Reviewing Agency Comment SHPO. 2019-03-01.

Mitigation Plan (HRMP) provided as Attachment G of this order, which includes a proposed scope for each of the recommended mitigation options. The draft HRMP proposes an additional mitigation option of an alternative layout for the facility components within proximity to the Weatherford Barn – where, if agreed upon through consultation with SHPO and the Department, a setback restriction could also reduce potential adverse impacts below a level of significance. Based on SHPO's recommended mitigation and the certificate holders draft HRMP, the Department recommends Council amend Condition 47 as follows:

> **Recommended Amended Condition 47:** Before beginning construction, the certificate holder shall:
>
> (a) Label all identified historic, cultural or archeological resource sites on construction maps and drawings as "no entry" areas. If construction activities will occur within 200 feet of an identified site, the certificate holder shall flag a 30-meter no entry buffer around the site. The certificate holder may use existing private roads within the buffer areas but may not widen or improve private roads within the buffer areas. The no-entry restriction does not apply to public road rights-of-way within the buffer areas or to operational farmsteads. [Final Order on ASC]
>
> (b) Finalize the Phase 2 Historical Resource Mitigation Plan, provided in Attachment H of the Final Order on Request for Amendment 4, including selection of mitigation option and confirmation of implementation schedule. [AMD4]

~~–~~*Impact Evaluation for HPRCSITs*

Potential impacts from proposed Phase 2 facility components to the HPRCSITs described above could include direct and indirect impacts. ~~While an impact assessment is typically provided by a certificate holder, because the 3 identified HPRCSITs are protected under Council's standard based on the historic and religious importance to the ongoing cultural identity of the CTUIR, the impact assessment was provided by CTUIR.~~[114]

Based on a review of proposed Phase 2 facility component locations compared to both the physical location and integrity aspects of *Alaɔála* and *Ulíkš,* ~~on behalf of CTUIR,~~ Archeologist Shawn Steinmetz commented~~stated~~, on behalf of CTUIR, that significant adverse impacts to *Alaɔála* and *Ulíkš* would occur. Based on the available information concerning the site boundaries of *Alaɔála* and *Ulíkš*, proposed Phase 2 facility components may ~~would~~ result in direct physical impacts depending on Phase 2's final design.[115]

Based on integrity aspects of *Alaɔála* and *Ulíkš*, as described above, CTUIR commented ~~concluded~~ that the proposed Phase 2 facility components would result in significant adverse

~~[114] MWPAMD4 RFA4 Tribal Gov Comment Letter CTUIR 2019-03-26.~~

[115] MWPAMD4 RFA4 Tribal Gov Comment Letter CTUIR 2019-03-26. In a comment letter, Shawn Steinmetz with CTUIR describes that direct impacts would occur in the following location: T.1 S., R. 22 E., Sections 5, 6, 7, and 8; T.1 S., R. 21 E., Sections 1, 2, 11 and 12; T.1 N., R. 21 E., Sections 22, 25, 26, 27, 28, 34, 35, and 36; T.1 N., R. 20 E., Sections 1, 2, 3, 11 and 12.

impacts to its design, setting, feeling and association. ~~Specifically, construction and operation of proposed Phase 2 facility components including roads, transmission line, and other energy facility infrastructure would generate noise and change the existing visual character of the surrounding area.~~ CTUIR expressed that ~~these~~ potential noise and visual impacts would create an audible intrusion and constant disturbance that would ~~forever~~ impact the ongoing use, stories, traditions, and the belief system that values the two HPRCSITs.

During review of pRFA4, Teara Farrow Ferman Cultural Resources Protection Program – Program Manager commented, ~~,~~ on behalf of CTUIR, ~~and stated~~ that proposed Phase 2 facility components would result in adverse impacts to *Tiqaxtiqax*, the third HPRCSIT referenced above. Based on the site boundary of *Tiqaxtiqax*, which overlaps the previously approved site boundary but is outside of the proposed amended site boundary, impacts would be limited to the integrity aspects of the HPRCSIT, assumed to be similar to those identified by CTUIR for *Alaɔála* and *Ulíkš.*[116]

~~To reduce potential significant adverse impacts to the 3 HPRCSITs – *Alaɔála, Ulíkš and Tiqaxtiqax,*~~ CTUIR recommended proposed ~~s~~ mitigation to ensure that potential adverse impacts did not rise to the level of significant for the three HPRCSITs -- *Alaɔála, Ulíkš and Tiqaxtiqax*. Specifically, CTUIR recommended ~~in the form of~~ cultural monitoring during ground disturbing activities that would penetrate the ground at depths of 12 inches or greater. The CTUIR explained ~~s~~ that use of a cultural resource monitor would assure the community that inadvertent discoveries of resources or remains of ancestors that used the HPRCSITs would be handled appropriately. In response to CTUIR's comments, the certificate holder agreed to use a qualified cultural resource monitor and agreed to a ground disturbance depth of 12 inches. The Department recommends that the Council find that for purposes of Recommended Amended Condition 50, ground disturbance does not include pile driving for installation of solar panels. Therefore, based on CTUIR's recommendations along certificate holder's additional evidence, and to minimize potentially significant, adverse impacts to the three identified HPRCSITs, the Department recommends Council amend Condition 50 as follows:

Recommended Amended Condition 50: During construction, the certificate holder shall:

(a) Ensure that a qualified archeologist, as defined in OAR 736-051-0070, instructs construction personnel in the identification of cultural materials and avoidance of accidental damage to identified resource site.

(b) Employ a qualified cultural resource monitor to conduct monitoring of ground disturbance at depths of 12 inches or greater. ~~The qualifications of the selected cultural resources monitor shall be reviewed and approved by the Department, in~~

[116] MWPAMD4. RFA4 Tribal Gov Comment CTUIR 2019-03-26. In a comment on RFA4, Shawn Steimetz describes that CTUIR and the certificate holder are currently negotiating additional mitigation for potential impacts to *Tiqaxtiqax* and therefore did not provide specific comments related to this HPRCSIT. Because Teara Farrow Ferman of CTUIR previously commented on potential adverse impacts to *Tiqaxtiqax* from proposed Phase 2 facility components, and because the referenced mitigation negotiations have not yet been executed, the Department incorporates the applicable analysis into the order for Council's review.

~~consultation with the CTUIR Cultural Resources Protection Program. In the selection of the cultural resources monitor to be employed during construction, preference shall be given to citizens of the CTUIR. Ground disturbance at depths 12 inches or greater shall not occur without the presence of the approved cultural resources monitor.~~ If any cultural resources are identified during monitoring activities, the steps outlined in the Inadvertent Discovery Plan, as provided in Attachment H of the Final Order on Amendment 4 should be followed. The certificate holder shall report to the Department in its semi-annual report a description of the ground disturbing activities that occurred during the reporting period, dates cultural monitoring occurred, and shall include copies of monitoring forms completed by the cultural resource monitor. [AMD4]

Based upon the analysis presented above and subject to compliance with existing conditions and recommended amended conditions, the Department recommends that Council find that the proposed Phase 2 facility components would not be likely to result in significant adverse impacts to resources protected by the Council's Historic, Cultural and Archaeological Resources standard.

Conclusions of Law

Based on the foregoing findings of fact and conclusions of law, the Department recommends that the Council find that the facility, with proposed changes, complies with the Council's Historic, Cultural, and Archeological Resources standard.

III.L. Recreation: OAR 345-022-0100

(1) Except for facilities described in section (2), to issue a site certificate, the Council must find that the design, construction and operation of a facility, taking into account mitigation, are not likely to result in a significant adverse impact to important recreational opportunities in the analysis area as described in the project order. The Council shall consider the following factors in judging the importance of a recreational opportunity:

(a) Any special designation or management of the location;
(b) The degree of demand;
(c) Outstanding or unusual qualities;
(d) Availability or rareness;
(e) Irreplaceability or irretrievability of the opportunity.
*****[117]

[117] The proposed facility is not a special criteria facility under OAR 345-0015-0310; therefore, OAR 345-022-0100(2) is not applicable.

Findings of Fact

The Recreation standard requires the Council to find that the design, construction, and operation of a facility would not likely result in significant adverse impacts to "important" recreational opportunities. Therefore, the Council's Recreation standard applies only to those recreation areas that the Council finds to be "important," utilizing the factors listed in the sub-paragraphs of section (1) of the standard. The importance of recreational opportunities is assessed based on five factors outlined in the standard: special designation or management, degree of demand, outstanding or unusual qualities, availability or rareness, and irreplaceability or irretrievability of the recreational opportunity.

The certificate holder evaluates impacts to important recreational opportunities based on the potential of construction or operation of the facility, with proposed changes, to result in any of the following: direct or indirect loss of a recreational opportunity, excessive noise, increased traffic, and visual impacts of facility structures or plumes. In RFA4, the certificate holder provided information about recreational opportunities in Exhibit T. The analysis area for the Recreation standard is the area within and extending five miles from the site boundary.

To analyze RFA4 against this standard, the Council must first evaluate whether an identified recreational opportunity is important. The Council must then evaluate whether the design, construction or operation of the facility could adversely impact the identified important recreational opportunity. If the facility could adversely impact the resource, then the Council must consider the significance of the possible impact.

Recreational Opportunities within the Analysis Area

In accordance with OAR 345-001-0010(59)(d), and consistent with the study area boundary, the analysis area for recreational opportunities is the area within and extending 5 miles from the proposed amended site boundary. In the *Final Order on the ASC*, *Final Order on Amendment 1*, *Final Order on Amendment 2,* and *Final Order on Amendment 3,* Council found that the design, construction and operation of Phase 1 of the Montague facility, taking into account mitigation and conditions stated in the orders, were not likely to result in significant adverse impacts to recreational opportunities in the analysis area. Within the analysis area, the certificate holder identified twenty-three recreational opportunities as presented in Table 8 below. Fourteen of the identified twenty-three recreational opportunities were previously identified and considered by Council, two of which were considered important.[118]

Table 8: Recreational Opportunities within the Analysis Area and Distance from Proposed Amended Site Boundary

[118] The two recreational opportunities that Council found to be important, per OAR 345-022-0100, were the Oregon National Historic Trail (ONHT) McDonald and John Day Crossing interpretive site, and the ONHT Fourmile Canyon interpretive site.

Recreational Opportunity	Approximate Distance and Direction from the Proposed Amended Site Boundary	Considered Important (per OAR 345-022-0100)	Recreational opportunity previously evaluated by Council
Oregon National Historic Trail (ONHT)	Within the Proposed Amended Site Boundary	No	Yes
Horn Butte Wildlife Area[23]	0 miles	No	No
BLM-administered lands	0-5 miles	No	No
Rock Creek	<1 mile	No	No
ONHT Fourmile Canyon Interpretive Site	<1 mile	Yes	Yes
ONHT Historic Markers	<1 and 1 mile	No	Yes
Willow Creek	3 miles	No	No
Port of Arlington Park and Marina[2]	3 miles	No	Yes
Earl Snell Memorial Park	3 miles	No	Yes
Alkali Park	3 miles	No	Yes
City Park	3 miles	No	Yes
China Creek Golf Course	3 miles	No	Yes
Arlington State Park	3 miles	No	Yes
Blue Mountain Scenic Byway	3 miles	Yes	No
Roosevelt Park[1]	4 miles	No	Yes
John Day Wildlife Refuge	4 miles	Yes	No
Lewis and Clark National Historic Trail (LCNHT)	4 miles	No	Yes
John Day River	5 miles	Yes	No
Rock Creek Day Use Area	5 miles	No	No
John Day Hilderbrand State Park	5 miles	No	Yes
Cottonwood Canyon State Park[3]	5 miles	Yes	No
Lewis and Clark Trail Scenic Byway[1]	5 miles	No	No
ONHT McDonald and John Day Crossing Interpretive Site[2]	5 miles	Yes	Yes

Table 8: Recreational Opportunities within the Analysis Area and Distance from Proposed Amended Site Boundary

Recreational Opportunity	Approximate Distance and Direction from the Proposed Amended Site Boundary	Considered Important (per OAR 345-022-0100)	Recreational opportunity previously evaluated by Council
Notes: 1. These two recreational opportunities are located in Washington state 2. Both the Port of Arlington and the Horn Butte Wildlife Area were previously evaluated by Council in the *Final Order of the ASC*, however, their management plans have been revised since Council's 2010 findings, and are revisited in RFA4. 3. In the *Final Order on the ASC*, Council evaluated both the Horn Butte Wildlife Area and Cottonwood Canyon State Park as a protected area, but never as a recreational opportunity. The Horn Butte Wildlife Refuge was also evaluated as a scenic resource in the *Final Order of the ASC*.			

As presented above in Table 8, *Recreational Opportunities within the Analysis Area and Distance from Proposed Amended Site Boundary,* fourteen of the identified recreational opportunities were previously evaluated by Council. In RFA4, the certificate holder identified ten recreational opportunities that were not previously evaluated by Council. Of the ten "new" recreational opportunities, the certificate holder determined that four, as listed below, should be considered important, per OAR 345-022-0100.

- John Day River
- Cottonwood Canyon State Park
- John Day Wildlife Refuge
- Blue Mountain Scenic Byway

The certificate holder determined that the following six "new" recreational opportunities, having not previously been evaluated by council, should not be considered important recreational opportunities;

- Horn Butte Wildlife Area
- BLM-administered lands
- Rock Creek
- Willow Creek
- Rock Creek Day Use Area
- Lewis and Clark Trail Scenic Byway

The Department concurs with the certificate holder's determination, and recommends that Council not consider the six identified recreational opportunities listed above, to be considered important, per OAR 345-022-0100.

Under the Council's Recreation standard, the Council must find that, taking into account mitigation, the facility, with proposed changes, is not likely to result in a significant adverse

impact to those identified important recreational opportunities. The Department presents its evaluation of potential impacts below.

Potential Direct or Indirect Loss of Recreational Opportunity

Direct Loss

A direct loss to a recreational opportunity occurs when construction or operation of the facility, with proposed changes would impact a recreational opportunity by directly altering the resource so that it no longer exists in its current state. The facility, which is located entirely on private property, would not be located on or within any of the important recreational opportunities identified above. Therefore, the Department recommends that the Council find that the facility, with proposed changes, would not result in direct loss of any of the important recreational opportunities identified as important.

Indirect Loss

Similar to the assessment of direct loss, indirect loss would result if construction or operation of the facility, with proposed changes, would impact a recreational opportunity by indirectly altering the resource or some component of it. To evaluate indirect loss associated resulting from the construction and operation of RFA4, the Department considers potential noise, traffic and visual impacts to the above mentioned important recreational opportunities.

Potential Noise Impacts

The Council previously found that noise resulting from construction and operation of the facility would not be audible at the two important recreational opportunities within the analysis area of the Phase 1 facility. As explained in Exhibit T of RFA4, and as discussed below in Section III.Q.1. *Noise Control Regulation: OAR 340-035-0035*, noise levels associated with the construction of the facility, with proposed changes, would not affect the certificate holder's ability to comply with existing Site Certificate Conditions managing potential noise impacts. The nearest important recreational opportunity to the facility, with proposed changes, is the ONHT Fourmile Canyon interpretative site. In the Final Order on the ASC, Council found that based on the findings made, and the conditions imposed, the facility, as approved was not likely to result in a significant adverse impact to any important recreational opportunity in the analysis area.[119] The interpretive site is closer to the Phase 1 site boundary, and as such, it is not expected that Phase 2 would substantially contribute an adverse impact to the resource. The next nearest recreational opportunity identified in the evaluation of RFA4 is the Blue Mountain Scenic Byway, a 145 mile byway, designated in 1997 by the Oregon Department of Transportation as an Oregon State Scenic Byway. The certificate holder explains that although there are many

[119] MWPAPPDoc157-5 MWP Final Order. p.78

sites of interest and recreational opportunities along the 145 mile byway, none occur within the 11-mile portion of the byway that is within the analysis area.

Due to the linear nature of construction activities, noise levels would decrease based on distance due to attenuation (rate of 6 dBA per doubling of distance) as construction of access roads and wind turbines progress farther from noise sensitive receptor locations. Council previously imposed Condition 106 requiring that, during construction, combustion engine-powered equipment be equipped with exhaust mufflers; operation of noisiest construction equipment be restricted to daylight hours; and requires that the certificate holder establish a noise complaint response system, including a system for the certificate holder to receive and resolve noise complaints. Phase 2 construction activities would be required to comply with the requirements of Condition 106.

Potential Traffic Impacts

The construction and operation of the facility, with proposed changes, would generate traffic, and could potentially impact traffic safety within the analysis area. However, Council previously evaluated traffic safety of the approved facility in the Public Services section of the Final Order on the ASC, and imposed five conditions (Condition's 28, 73, 74, 81, and 42) to mitigate impacts on traffic safety from the facility, and determined that based on commitments made by the certificate holder, and subject to condition compliance, construction and operation of the facility is not likely to result in any significant adverse impacts on traffic safety.

In RFA4, the certificate holder states that the proposed construction transportation routes to be used for Phase 2, will be the same as those used to access the approved facility.[120] Furthermore, the certificate holder explains that the construction of Phase 2 facility components will not significantly change the level of traffic, transportation routes, or road conditions from what Council has previously evaluated and approved for the Phase 1 components.[121]

[120] MWPAMD4 Exhibit U, p.U-11
[121] MWPAMD4 Exhibit T, p.T-16

In the *Final Order on the ASC*, Council found that operation of the facility would not significantly increase traffic within the analysis area.[122] However, after evaluating the certificate holder's estimated construction vehicle trips, and proposed transportation routes (both a primary route and two secondary routes), Council imposed Conditions 73 and 81, requiring the certificate holder to implement measures to reduce traffic impacts and limit truck traffic to designated and existing and improved road surfaces. The requirements of these conditions would continue to apply to proposed Phase 2 facility components.

Potential Visual Impacts

Proposed Phase 2 components, which could result in visual impacts at protected areas within the analysis area include: wind turbines with a maximum blade tip height of 597 feet; approximately 1,189 acres of permanent vegetation disturbance, which includes a solar array 15-feet in height; battery storage systems extending 20-feet in height; and 230 kV transmission line structures.

The certificate holder states that the ZVI analysis of Exhibit R demonstrates that Phase 2 facility components would not be visible from the two previously identified important recreational opportunities; the ONHT McDonald and the John Day Crossing interpretive site. Furthermore, the ZVI analysis indicates that the four important recreational opportunities identified (but not previously considered by Council) in RFA4 would be visible.[123] The Department notes that the Blue Mountain Scenic Byway, was not previously evaluated by Council as a recreational opportunity. Although portions of the scenic byway are located 3 miles east of the facility, the certificate holder indicates that Phase 2 components would only be visible from a portion of the byway less than a mile long, and 12 miles away from the nearest Phase 2 component. At 12 miles away, the visible Phase 2 components are not likely to result in a significant adverse impact to the recreational opportunities along the Blue Mountain Scenic Byway.

Conclusions of Law

Based on the foregoing recommended findings of fact, and subject to compliance with existing site certificate conditions, the Department recommends that the Council find that the facility, as amended, would comply with the Council's Recreation standard.

III.M. Public Services: OAR 345-022-0110

> *(1) Except for facilities described in sections (2) and (3), to issue a site certificate, the Council must find that the construction and operation of the facility, taking into account mitigation, are not likely to result in significant adverse impact to the ability of public*

[122] MWPAPPDoc157-5 MWP Final Order, p.122
[123] MWPAMD4 Exhibit R, Figures R-1, R-2, R-3, and R-4 2019-04-05

and private providers within the analysis area described in the project order to provide: sewers and sewage treatment, water, storm water drainage, solid waste management, housing, traffic safety, police and fire protection, health care and schools.

(2) The Council may issue a site certificate for a facility that would produce power from wind, solar or geothermal energy without making the findings described in section (1). However, the Council may apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.

*****

Findings of Fact

The Council's Public Services standard requires the Council to find that the facility, with proposed changes, is not likely to result in significant adverse impacts on the ability of public and private service providers to supply sewer and sewage treatment, water, stormwater drainage, solid waste management, housing, traffic safety, police and fire protection, health care, and schools. Pursuant to OAR 345-022-0110(2), the Council may issue a site certificate for a facility that would produce power from wind or solar energy without making findings regarding the Public Services standard; however, the Council may impose site certificate conditions based upon the requirements of the standard.

The analysis area for potential impacts to public services from construction and operation of the facility, with proposed changes, is the area within and extending 10-miles from the site boundary.

Potential impacts to public and private service providers were evaluated based on assumptions for number of construction and operational workers, population shifts, and use of transportation routes. As described in RFA4, construction of proposed Phase 2 facility components is estimated to utilize up to 450 workers per day during peak construction activities and up to 200 workers per day on average, for up to 18 months. Operation of proposed Phase 2 facility components is estimated to utilize 10 to 30 workers.

Sewers and Sewage Treatment

Construction of proposed Phase 2 facility components would generate sanitary waste but would utilize onsite portable toilets and would not result in use of public or private sewers. The certificate holder describes that portable toilets would be pumped regularly and disposed of by a licensed contractor at a local treatment facility. The certificate holder does not estimate the quantity of sanitary waste generated during construction nor describe the existing capacity of public or private sewage treatment providers to support the evaluation of potential impacts, but relies on its third-party contractor for sanitary waste handling and disposal. While sewage treatment providers may experience increased throughput during construction of proposed Phase 2 facility components, the certificate holder is required to ensure its contractors obtain applicable permits and comply with applicable rules and regulations (Condition 28), including those necessary for sanitary waste disposal within the surrounding area. Therefore, based on

compliance with existing conditions and because construction related activities would be short-term, the Department recommends Council find that potential construction-related impacts of proposed Phase 2 facility components on the ability of private or public providers to provide sewage treatment would not be likely to result in significant adverse impacts.

Operation of proposed Phase 2 facility components would generate sanitary waste at the proposed O&M building. The proposed O&M building would be served by an onsite sewage disposal system, and would not result in use of public or private sewers. While not specifically addressed in RFA4, the Department assumes that the onsite sewage disposal system would be periodically pumped and transported to a sewage treatment facility. Given the relatively low number of estimated permanent workers associated with Phase 2, ranging from 10 to 30, the Department recommends Council find that potential operational impacts of Phase 2 on the ability of private or public providers to provide sewage treatment would not be likely to result in significant adverse impacts.

Water

Construction of proposed Phase 2 facility components would require up to approximately 36.8 million gallons of water total, or an estimated maximum of 120,000 gallons per day, for dust control and to maintain compaction on constructed access roads.[124] The certificate holder represents that construction-related water would either be purchased from the City of Arlington or obtained through a new or existing well and a third-party limited water use license. If construction-related water is obtained through a limited water use license obtained by a third-party contractor, potential impacts to private or public providers of water service would not occur.

To support review of potential impacts to public and private providers of water service, the certificate holder provides a 2018 letter from City of Arlington confirming sufficient capacity to provide up to 40 million gallons of water during construction. Based on the 2018 letter from City of Arlington, as provided in RFA4 Exhibit U, and potential use of an onsite well, the Department recommends Council find that construction of Phase 2 facility components would not be likely to result in significant adverse impacts on the ability of public or private providers of water to deliver services.

Operation of proposed Phase 2 facility components would require up to approximately 430,000 gallons of water per year for solar panel washing and up to 5,000 gallons per year to serve sanitary uses at the proposed Phase 2 O&M building. The certificate holder represents that solar panel washwater, if necessary, would either be purchased from the City of Arlington or obtained through a new or existing well and a third-party existing or new water right.

[124] In RFA4 Exhibit U, the certificate holder describes that up to 36.8 million gallons of water total would be required during construction of both Phase 1 and Phase 2. However, because RFA4 is specific to proposed Phase 2 facility components, the Department references to Phase 2 only.

Operational water use served by an onsite, permit-exempt well at the proposed Phase 2 O&M building and obtained through a new or existing water right would not result in impacts on the ability of public or private providers of water to deliver services.

In the event solar panel washwater is purchased from the City of Arlington, the certificate holder provides a 2018 letter from City of Arlington confirming sufficient capacity to provide up to 500,000 gallons of water per year during operation. Based on the 2018 letter from City of Arlington, as provided in RFA4 Exhibit U, and potential water use under a new or existing water right, the Department recommends Council find that operation of proposed Phase 2 facility components would not be likely to result in significant adverse impacts on the ability of public or private providers of water to deliver services.

Stormwater Drainage

Construction and operation of proposed Phase 2 would not rely on public or private stormwater drainage infrastructure. Therefore, the Department recommends Council find that the construction and operation of proposed Phase 2 would not impact public and private providers of stormwater drainage.

Solid Waste Management

As explained in RFA4 Exhibit V, the types of solid waste and wastewater generated during Phase 2 facility construction, operation, and retirement and the procedures and practices used to handle these materials, would largely be similar to those identified in the Council's earlier findings on waste minimization.

In RFA4, the certificate holder represents that during operation, batteries associated with the battery storage system would be replaced every 7 years. The handling and replacement of batteries would follow guidelines in 49 Code of Federal Regulations (CFR) 173.185 Department of Transportation Pipeline and Hazardous Material Administration. 49 CFR 173.185 includes requirements for prevention of dangerous evolution of heat; prevention of short circuits; prevention of damage to terminals; and, prevention of contact with other batteries or conductive materials. Because the 49 CFR 173.185 guidelines are related to management of waste, and based on the certificate holder's representation, the Department recommends Council amend condition 112 to include both lithium-ion, and flow batteries in (e), and impose Condition 116, as represented above in Section III.B. Organizational Expertise.

Traffic Safety

As described in Section III.A. *General Standard of Review*, the certificate holder anticipates an 18 months construction schedule for Phase 2, however, the Department recommends Council grant construction commencement and completion deadlines based upon three and six years following the date of Council approval.

In RFA4, the certificate holder proclaims that as with any large construction project, there would be a considerable amount of truck traffic during the construction of Phase 2.[125] To evaluate potential traffic impacts within the Public Services analysis area during facility construction, peak daily trip generation is estimated at 180 roundtrips per day over an approximately 9-month period.

The Department does not expect the addition of an energy storage system to likely result in a significant adverse impact to traffic safety. The certificate holder notes that Code of Federal Regulations 49 CFR 173.185 pertains to Lithium Ion batteries by regulating the "dangerous evolution of heat," short circuits, damage to terminals, and battery contact with conductive materials. As such, the Department acknowledges the transportation of Lithium Ion batteries could impact traffic if not handled properly.

The Council previously imposed Conditions 71 and 75, which confines any improvements and upgrades that may be necessary during construction to existing state and county public road right-or-ways, and the repair of any damage to county roads caused by construction of the facility. Council also previously imposed Conditions 73 and 81, to mitigate traffic impacts from the construction and operation of the facility. Condition 73 requires the certificate holder to implement measures to reduce traffic impacts during construction of the facility, whereas Condition 81 requires the certificate holder to avoid soil compaction, to the extent practicable, by limiting truck traffic to improved road surfaces. The Department recommends updates to Condition 75 to clarify the process for maintaining county roads, and for repairing county roads if the Phase 2 facility construction is determined to have caused unusual damage or wear.

Recommended Amended Condition 75

The certificate holder shall cooperate with the Gilliam County Road Department ~~and with the Morrow County Public Works Department~~ to ensure that any unusual damage or wear to county roads that is caused by construction of the facility is repaired by the certificate holder. Submittal to the Department of an executed Road Use Agreement with Gilliam County shall constitute evidence of compliance with this condition. Upon completion of construction, the certificate holder shall restore public roads to pre-construction condition or better to the satisfaction of the applicable county departments. If required by ~~Morrow County or~~ Gilliam County, the certificate holder shall post bonds to ensure funds are available to repair and maintain roads affected by the facility. If construction of a phase of the facility will utilize county roads in counties other than Gilliam County, the certificate holder shall coordinate with the Department and the respective county road departments regarding the implementation of a similar Road Use Agreement. [AMD4]

The risks associated with the transportation of components of the battery storage system would be minimized by requiring the transportation of batteries to and from the facility, be

[125] MWPAMD4 Exhibit U, p.U-6 2019-04-05

performed by a licensed waste handler. In Exhibit V, the certificate holder indicates that both battery technologies (Lithium Ion and Flow) will produce incidental waste from repair or replacement, and that the battery components will be recycled or disposed of at a permitted facility throughout operations and facility retirement.[126] As presented in Section III.B., *Organizational Expertise*, Condition 116 requires the certificate holder to provide evidence that the transportation and disposal of battery and battery waste complies with all applicable laws and regulations, including applicable provisions of 49 CFR 173.185, prior to and during construction.

The Department recommends that the Council find that the facility, as amended, would not present a significant adverse impact to traffic, based on the certificate holder's compliance with preexisting conditions, the proposed amended condition, and with 49 CFR 173.185.

Air Traffic

Within the Public Services analysis area, the Arlington Municipal Airport, operated by the city of Arlington in Gilliam County, is the only public airport providing access for general aviation. The airport is located approximately 8.5 miles from the Phase 2 facility components, and as such, it is not expected that wind turbines or other facility components would interfere with airport operations. In Exhibit R, *Scenic Resources*, the certificate holder explains that in accordance with FAA Interim Policy for review of solar energy systems projects on federally obligated airports (78 Federal Register [FR] 63276), a glare analysis was conducted for the flight path of the Arlington Municipal Airport. The glare analysis holder included their glare analysis in Exhibit R of RFA4 as Attachment R-2, which concludes that the solar array is unlikely to cause a significant glare issue to the flight pattern into or out of the Arlington Municipal Airport.

Police Protection

Police services for the facility site would be provided by the Gilliam County Sheriff's Office. If Phase 2 were to be constructed, and depending on the Design Scenario chosen, potential impacts to police protection would be the same, if not less than those previously analyzed in the *Final Order on the ASC*, *Final Order on Amendment 1, Final Order on Amendment 2, and Final Order on Amendment 3*. The certificate holder explains in RFA4 that because Phase 2 constitutes only half of the originally approved facility, the maximum number of people onsite during peak months may be lower than previously estimated. Furthermore, though unlikely, if construction activities of Phase 1 and Phase 2 were to overlap, the total maximum of people onsite at a given time would not exceed the estimates previously analyzed.

Council previously imposed Condition 78 requiring the certificate holder to both provide onsite security during construction and operation of the facility, and establish and maintain communication with the local law enforcement personnel. Although the certificate holder

[126] MWPAMD4 Exhibit V, p. V-2

indicates that the requirements of Condition 78 would continue to apply to the proposed Phase 2, the Department recommends that the condition be amended to remove the requirements of on-site security during facility operation. As required by Condition 77, the Health and Safety Plan will include important telephone numbers and the location of on-site fire extinguishers and nearby hospitals. The Department recommends that Condition 77 be amended to include the location of the Gilliam County Sheriff's Office and the office locations of the backup law enforcement services (Oregon State Police Eastern Region, with offices in Arlington, Condon, Pendleton, and Milton-Freewater). As represented in Attachment U-1 of RFA4 Exhibit U, the Gilliam County Sheriff's Office commented that the area in which the proposed Phase 2 is to be developed, is in a relatively low crime area of their County. As such, the Sheriff's office indicates that they will respond appropriately, and as necessary to all complaints that come from the facility. As discussed in the below section under Fire Protection, the Department recommends amending the below condition to specify an applicant representation of developing a fire contingency plan as well as include an applicant proposal of inviting local fire departments to train in tower rescues. The Department recommends that the Council make the following changes to Conditions 77 and 78:

Recommended Amended Condition 77:

During operation of the facility, the certificate holder shall develop and implement a site health and safety plan that informs employees and others on-site about first aid techniques and what to do in case of an emergency, including a contingency plan in a fire emergency, and that includes important telephone numbers and the locations of on-site fire extinguishers, ~~and~~ nearby hospitals, Gilliam County Sheriff's Office and the office locations of the backup law enforcement services. The certificate holder shall ensure that operations personnel are trained and equipped for tower rescue. If the certificate holder conducts an annual emergency drill or performs tower rescue training at the facility, the North Gilliam County Rural Fire Protection District and the Arlington Fire Department will be invited to observe. [AMD4]

Recommended Amended Condition 78:

(a) During construction ~~and operation~~ of the facility, the certificate holder shall provide ~~for~~ on-site security within the facility site boundary, and shall establish good communications between on-site security personnel and the Gilliam County Sheriff's Office by establishing a communication protocol between the security personnel and the Sherriff's office. The communication protocol shall be sent to the Department prior to construction.

(b) During operation, the certificate holder shall ensure that appropriate law enforcement agency personnel have an up-to-date list of the names and telephone numbers of facility personnel available to respond on a 24-hour basis in case of an emergency on the facility site. The list shall also be sent to the Department. [AMD4]

Fire Protection

Construction and operation of the facility, including the proposed changes in Phase 2, may present a risk of ground fire. The risk of fire from the Phase 2 components, and the potential to

impact fire prevention service providers, is primarily from the accidental ignition of a grass fire within the analysis area. The ground cover under the solar array would consist of mowed vegetative cover consistent with the adjacent Category 6 habitat and adjacent agricultural land uses. However, the certificate holder maintains that the risk of fire associated with the solar array components is not substantially different from the fire risks associated with the construction and operation of wind facilities.

In RFA4, the certificate holder describes that the presence of a battery storage system may pose an additional threat of igniting a grass fire within the analysis area, however, this threat would be minimized by existing and additional mitigation measures. The applicant describes that the battery systems are designed to minimize the potential for fires to spread between battery modules from external fires and the enclosures have external fire protection to contain the heat and flames if an incident occurs internally. In the unlikely event that there is a fire ignited within a battery storage container, gas agents, such as carbon dioxide, may be used to reduce or mitigate flammability in the battery enclosure until ventilation or cooling strategies, or both, will be implemented.

To address applicant representations of mitigation measures to reduce any potential impact on fire service providers, the Department recommends Council add Conditions 116 and 118, and amend Condition 77. Condition 116 addresses the transportation and disposal of the battery facilities and Condition 118 outlines that the certificate holder evidence its insurance coverage for events, including fires. The Department also recommends the Council amend Condition 77, discussed above in Police Protection, to specify that the operational site health and safety plan that informs employees what to do in case of an emergency, including a contingency plan in a fire emergency. The amended Condition 77 also stipulates that the certificate holder conducts an annual emergency drill or performs tower rescue training at the facility, the North Gilliam County Rural Fire Protection District and the Arlington Fire Department will be invited to observe.

The Department recommends that the Council find that the facility, as amended, would not present a significant adverse impact to fire protection service.

Housing, Schools, and Healthcare

The Department does not expect construction or operation of proposed Phase 2 facility components to result in a significant adverse impact to providers of housing, school, or healthcare. The certificate holder states that approximately 30 percent of the construction workers are expected to be local workers from Gilliam County.

Based on the information provided by the certificate holder, and subject to compliance with the existing and recommended site certificate conditions, the Department recommends that the Council find that the facility, with proposed changes, are not likely to result in significant adverse impacts to the ability of public and private providers within the analysis area to provide the identified services.

Conclusions of Law

Based on the foregoing analysis, and subject to the existing and amended conditions in the site certificate, the Department recommends that the Council find that the facility continues to comply with the Council's Public Services standard.

III.N. Waste Minimization: OAR 345-022-0120

> *(1) Except for facilities described in sections (2) and (3), to issue a site certificate, the Council must find that, to the extent reasonably practicable:*
>
> > *(a) The applicant's solid waste and wastewater plans are likely to minimize generation of solid waste and wastewater in the construction and operation of the facility, and when solid waste or wastewater is generated, to result in recycling and reuse of such wastes;*
> >
> > *(b) The applicant's plans to manage the accumulation, storage, disposal and transportation of waste generated by the construction and operation of the facility are likely to result in minimal adverse impact on surrounding and adjacent areas.*
>
> *(2) The Council may issue a site certificate for a facility that would produce power from wind, solar or geothermal energy without making the findings described in section (1). However, the Council may apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.*
> *****

Findings of Fact

The Waste Minimization Standard requires the Council to find that the Certificate holder will minimize the generation of solid waste and wastewater, and that the waste generated would be managed to minimally impact surrounding and adjacent areas. Pursuant to OAR 345-022-0020(2), the Council may issue a site certificate for a wind facility without making findings regarding the Waste Minimization standard; however, the Council may impose site certificate conditions based upon the requirements of the standard.

Solid Waste

The construction of each of the three proposed Phase 2 Design Scenarios would generate solid waste. While the certificate holder explains that the types of solid waste generated from Phase 2 during construction and operation would be largely similar to the types of solid waste that Council previous made findings on, the proposed solar array and battery storage system would introduce new materials into the facility, thus resulting in the introduction of new types of waste during construction.

As explained in RFA 4 Exhibit G, Phase 2 construction materials would include rock, gravel, water, concrete, steel, and assorted electrical equipment. The certificate holder claims that construction waste could include hazardous materials, including unused solvents; vehicle and equipment fluids and components (e.g., used oil, used hydraulic fluids, spent fluids, oily rags, and spent lead acid or nickel-cadmium batteries).

In Exhibit U of RFA4, the certificate holder represents that the construction of Phase 2 would not change the type and quantity of onsite waste generated during construction and operation, and Montague would still able to use the adjacent Columbia Ridge Landfill for disposed of solid wastes. During facility operation, the battery storage system may generate incidental waste during repair or replacement of electrical equipment, and periodic replacement of the batteries (every 6-7 years for lithium-ion modules, and every 20 years for flow batteries). The certificate holder explains that the use of a battery storage system will introduce new industrial materials, and if a lithium-ion system is selected (rather than a flow battery), the new industrial materials introduced may include hazardous materials. Furthermore, Exhibit G of RFA 4 states that regardless of type of battery storage system (lithium-ion or flow), the batteries will have integrated safety systems that monitor battery performance, detect malfunctions, and implement response measures. As previously mentioned, both battery systems, would require replacement during facility operation. When the battery modules require replacement, the facility operator will disconnect and de-energize the battery system prior to removal, and package the batteries for transport to a licensed disposal facility where they will either be recycled or properly disposed of. In Exhibit V of RFA 4, the certificate holder identifies Waste Management's Columbia Ridge Landfill as a licensed landfill that accepts municipal solid waste, industrial wastes, and special wastes. The Waste Management Chemical Waste Management facility on Cedar Springs Lane (near Arlington) is a licensed facility capable of providing industrial and hazardous waste services for Montague Phase 2.

Council previously imposed Conditions 111 and 112 requiring that, during construction and operation, the certificate holder develop and implement a solid waste management plan. In addition to the previously imposed conditions, Condition 116 as described in Section III.B *Organizational Expertise* of this order, would minimize potential health and safety impacts during onsite handling and transport of battery and battery waste during facility construction and operation.

Wastewater

The construction of all three proposed Phase 2 Design Scenarios would generate minor quantities of wastewater. The certificate holder asserts the only wastewater expected to be generated during construction would result from concrete washouts and sewage collected in portable toilets. The certificate holder explains in Exhibit V that the rinse water from concrete delivery truck washout will be handled in accordance with a prior agreement with DEQ, and construction of the Facility will be subject to the NPDES permit and its associated erosion and

sediment control plan.[127] Portable toilets would be managed by a third-party contractor in accordance with standard procedures.

In the *Final Order of the ASC*, Council imposed Condition 80, which requires the certificate holder to conduct construction activities in accordance with a NPDES 1200-C Stormwater permit, ensuring appropriate on-site handling of Stormwater and measures to reduce erosion. The NPDES 1200-C permit requires the development and implementation of an erosion and sediment control plan (ESCP), including BMPs for controlling erosion during construction. The certificate holder maintains an existing National Pollutant Discharge Elimination System 1200-C (NPDES 1200-C) construction permit and its associated erosion and sediment control plan.

During operations, wastewater would be primarily generated from solar panel washing, and sanitation at the O&M building. If the solar array were to be constructed, periodic washing of the solar modules may occur. The certificate holder states that solar array may be washed twice annually, and that the washwater used would not be heated or include detergents, and would not be expected to cause an impact to soils. As discussed above in Section III.D. *Soil Protection*, any washwater released to the ground would be allowed to evaporate and infiltrate. If equipment cleaning (including solar array washing) during facility operations becomes necessary, the facility's third-party contractor would need to obtain a Department of Environmental Quality (DEQ) General Water Pollution Control Facilities Permit (WPCF 1700-B) for washwater discharge of equipment cleaning. The WPCF-1700-B permit covers equipment cleaning activities that discharge washwater by means of evaporation, seepage, or irrigation, including both fixed and mobile washing operations. To accommodate the integration of new technology and components previously unevaluated by Council (solar array and battery storage), and to ensure compliance with WPCF 1700-B requirements, the Department recommends that Council amend Condition 87 as follows:

Recommended Amended Condition 87:

i. During facility operation, if blade-washing becomes necessary, the certificate holder shall ensure that there is no runoff of wash water from the site or discharges to surface waters, storm sewers or dry wells. The certificate holder shall not use acids, bases or metal brighteners with the wash water. The certificate holder may use biodegradable, phosphate-free cleaners sparingly.

ii. <u>During facility operation, if solar array washing becomes necessary, the certificate holder shall provide to the Department a copy of the Oregon Department of Environmental Quality a WPCF 1700-B permit to the certificate holder's third-party contractor.</u>

[127] In Exhibit V of the ASC, the certificate holder explains that the method of concrete water washout management, of which DEQ was consulted and approved, includes washing concrete truck chutes at each foundation site to prevent the concrete from hardening within the chutes. When washed, the resulting concrete washwater would be washed out, and into a dedicated concrete washout area located at each completed turbine foundation (constructed and located in a corner of the foundation excavation. The Soil used to construct the washout area berms would be buried along with waste concrete solids, as part of the turbine foundation backfill.

As proposed, amended Conditions 29 and 87 would apply to the facility if a WPCF 1700-B permit is determined to be necessary for Phase 2 facility operations. As discussed in the Section III.B Organizational Expertise section of this order, amended Condition 29 would, require the certificate holder to provide the Department copies of all obtained third party permits, and provide copies of compliance recordkeeping as required by third-party permits in semi-annual reports.

Consistent with previously imposed Condition 110, the onsite septic system at the Phase 2 O&M building will have a discharge capacity of less than 2,500 gallons per day, and would be licensed and constructed in accordance with state law. The certificate holder clarifies that Phase 1 operations will utilize the existing Leaning Juniper IIB (LJIIb) O&M building, as approved by the Department on May 22, 2017, in the Change Request 2 Department Determination.[128] The certificate holder will abide by the terms and conditions of the LJIIb Site Certificate, when using the O&M building, including LJIIb site certificate condition 97, which mirrors the existing Montague Condition 110, limiting the discharge capacity of the O&M building to 2,500 gallons per day.

Conclusions of Law

Based on the foregoing analysis, and in compliance with OAR 345-022-0120(2), the Department recommends that the Council include the conditions listed above in the site certificate to address the Council's Waste Minimization Standard.

III.O. Division 23 Standards

The Division 23 standards apply only to "nongenerating facilities" as defined in ORS 469.503(2)(e)(K), except nongenerating facilities that are related or supporting facilities. The facility, with proposed changes, would not be a nongenerating facility as defined in statute and therefore Division 23 is inapplicable to the facility, with proposed changes.

III.P. Division 24 Standards

The Council's Division 24 standards include specific standards for the siting of energy facilities, including wind projects, underground gas storage reservoirs, transmission lines, and facilities that emit carbon dioxide.

III.P.1. Public Health and Safety Standards for Wind Energy Facilities: OAR 345-024-0010

To issue a site certificate for a proposed wind energy facility, the Council must find that the applicant:

[128] MWPOPSDoc85 Change Request 2 (O&M LJIIb) Determination Letter 2017-05-22, p. 4.

(1) Can design, construct and operate the facility to exclude members of the public from close proximity to the turbine blades and electrical equipment.

(2) Can design, construct and operate the facility to preclude structural failure of the tower or blades that could endanger the public safety and to have adequate safety devices and testing procedures designed to warn of impending failure and to minimize the consequences of such failure.

Findings of Fact

OAR 345-024-0010 requires the Council to consider specific public health and safety standards related to wind energy facilities. For a site certificate amendment request, the Council must evaluate a certificate holder's proposed measures to exclude members of the public from proximity to the turbine blades and electrical equipment, and the certificate holder's ability to design, construct and operate the facility, with proposed changes, to prevent structural failure of the tower or blades and to provide sufficient safety devices to warn of failure.

The Council addressed the Public Health and Safety standard for Wind Facilities in the *Final Order on the ASC*, *Final Order on Amendment 1*, *Final Order on Amendment 2,* and *Final Order on Amendment 3*. The Council imposed several conditions in the *Final Order on the Application* and found that the certificate holder could design, construct, and operate the facility to exclude members of the public from close proximity to the turbine blades and electrical equipment. The Council further found that the certificate holder could design, construct, and operate the facility to preclude structural failure of the tower or blades that could endanger public safety, and to have adequate safety devices and testing procedures designed to warn of impending failure and to minimize the consequences of such failure.

In RFA4, the certificate holder affirms that the wind energy facility components will be substantially similar to those previously approved by the Council and that the larger turbine dimensions proposed would not affect Montague's ability to comply with the previously approved site certificate conditions. The proposed larger turbines would increase the maximum blade tip height from 492 feet (150 meters) to 597 feet (182 meters).

The *Final Order on the ASC* explained that Condition 27, specifically the requirements limiting the maximum blade tip height, was imposed to satisfy the requirements of the Public Health and Safety Standards for Wind Energy Facilities (OAR 345-024-0010). Therefore, the certificate holder explains in RFA4 that the installation of larger turbines will not impact Montague's ability to exclude members of the public from close proximity to the turbine blades and electrical equipment, and to comply with the Council's Cumulative Effects Standard for Wind Energy Facilities (*cumulative effects standard for wind facilities is discussed in Section III.P.2 of this DPO*). As presented in Section III.A. *General Standard of Review*, Condition 27 requires that the certificate holder design, construct, operate, and retire the facility substantially as described in the site certificate.

Condition 42 establishes setback requirements for turbines, including a setback distance of at least 1,320 feet from residences and 110 percent of maximum blade tip height (656.7 feet for the tallest, proposed turbine) from public roads. This condition will continue to apply to Phase 2.

The Department recommends that Council finds that the certificate holder continues to have the ability to design, construct, and operate the facility, as amended, to exclude members of the public from close proximity to the turbine blades and electrical equipment.

Potential Public Health and Safety Impacts from Proximity to Turbine Blades and Electrical Equipment

The Department relies upon the knowledge, experience, and input of the Oregon Department of Aviation (ODA) when assessing a wind facility's impacts to navigable airspace. In its comment letter, ODA determined that the they do not object with conditions to the construction described in [RFA4]…and that their determination was with respect to the safe and efficient use of the navigable airspace by aircraft and to the safety of persons and property on the ground.[129]

For aviation safety, ODA recommended that marking and lighting be installed and maintained in accordance with FAA Advisory Circular AC70/7460-1L. In the *Final Order on the ASC*, Council imposed condition 104(a), which requires the certificate holder to use the minimum turbine tower lighting required or recommended by the Federal Aviation Administration (FAA).

The facility, with proposed changes, would be located entirely on private property. This would restrict public access to turbine and other facility component locations, including the battery storage systems. To exclude members of the public from close proximity to the facility and electrical equipment, including substations, Council adopted site certificate Condition 69. Site certificate Condition 69 safeguards against public entry to areas where there is electrical equipment by requiring the certificate holder to install fencing and locks. To ensure that the access by the public to the additional electrical requirement associated with the battery storage systems and the solar array, the Department recommends that Council amend Condition 69, to ensure that both the battery storage system and solar array are enclosed in facing and protected with locks.

> **Recommended Amended Condition 69:**
> To protect the public from electrical hazards, the certificate holder shall enclose the facility substations, solar array, and battery storage systems with appropriate fencing and locked gates. [AMD4]

[129] MWPAMD4Doc ODA Determination Letter 2018-11-16

Condition 64 requires the certificate holder to submit a Notice of Proposed Construction or Alteration to the FAA and to the Oregon Department of Aviation for each turbine location when the final design configuration of the facility is known. Because the FAA and ODA determinations are valid for 18 months, and Phase 2 construction may not be complete by the time the determination expires (18 months after determination was issued), the certificate holder may be obligated to renew their determinations. As such, the Department recommends that Council amend Condition 64 to clarify that hazard determinations from the FAA and ODA be maintained throughout the construction of Phase 2.

Recommended Amended Condition 64:
Before beginning construction of:
i. Phase 1 the certificate holder shall,…
ii. Phase 2, the certificate holder shall submit a Notice of Proposed Construction or Alteration to the Federal Aviation Administration (FAA) and the Oregon Department of Aviation identifying the proposed final locations of turbine towers and meteorological towers to determine if the structure(s) are a hazard to air navigation and aviation safety. The certificate holder shall promptly notify the Department of the responses from the FAA and the Oregon Department of Aviation. The FAA and ODA evaluation and determinations are valid for 18 months (per OAR 738-070-0180), once issued. The certificate holder shall maintain current hazard determinations on file commensurate with construction timelines. [AMD4]

Potential impacts from structural failure of the tower or blades and safety devices and testing procedures to warn of impending failure

In the *Final Order on the ASC*, Council imposed Condition 27, specifying construction requirements for the approved facility. The requirements included a limit to the minimum above-ground blade tip clearance, total number of turbines at the facility, and maximum blade tip height restrictions, in order to satisfy the requirements of the Public Health and Safety Standards for Wind Energy Facilities (OAR 345-024-0010). As mentioned above in III.A. *General Standard of Review*, the Department recommends that Council amend Condition 27 to incorporate specific construction requirements for Phase 2 components. Condition 58 requires that the certificate holder install and maintain self-monitoring devices on each turbine, linked to sensors at the operations and maintenance building, to alert operators to potentially dangerous conditions, and the certificate holder shall immediately remedy any dangerous conditions.

As mentioned above in III.E. *Land Use*, existing Condition 42 establishes setback requirements for turbines, including a setback distance of at least 1,320 feet from residences and 110 percent of maximum blade tip height (656.7 feet for the tallest, proposed turbine) from public roads. The requirements of this condition will continue to apply to Phase 2.

Based on the forgoing analysis, and subject to compliance with the existing and recommended modified condition, the Department recommends the Council find that the certificate holder can design, construct and operate the facility, with proposed changes, to exclude members of the public from the close proximity to the turbine blades and electrical equipment. Additionally, based on the previous analysis and conditions within the site certificate, the Department recommends the Council find that the certificate holder can continue to preclude structural failure of the tower or blades that could endanger the public safety and to have adequate safety devices and testing procedures designed to warn of impending failure and to minimize the consequences of such failure.

Conclusions of Law

Based on the reasoning above, and subject to compliance with the existing and amended Public Health and Safety standard conditions, the Department recommends that Council find that the facility, as amended, would continue to comply with the Council's Public Health and Safety standards for wind energy facilities.

III.P.2. Cumulative Effects Standard for Wind Energy Facilities [OAR 345-024-0015]

To issue a site certificate for a proposed wind energy facility, the Council must find that the applicant can design and construct the facility to reduce cumulative adverse environmental effects in the vicinity by practicable measures including, but not limited to, the following:

(1) Using existing roads to provide access to the facility site, or if new roads are needed, minimizing the amount of land used for new roads and locating them to reduce adverse environmental impacts.
(2) Using underground transmission lines and combining transmission routes.
(3) Connecting the facility to existing substations, or if new substations are needed, minimizing the number of new substations.
(4) Designing the facility to reduce the risk of injury to raptors or other vulnerable wildlife in areas near turbines or electrical equipment.
(5) Designing the components of the facility to minimize adverse visual features.
(6) Using the minimum lighting necessary for safety and security purposes and using techniques to prevent casting glare from the site, except as otherwise required by the Federal Aviation Administration or the Oregon Department of Aviation.

Findings of Fact

The Wind Energy Facility Cumulative Effects standard requires the certificate holder to use practicable measures in designing and constructing a facility to reduce the cumulative adverse environmental effects in the vicinity. The standard does not require the Council to find that the facility would have no cumulative environmental impacts. Instead, the Council must find that the applicant (certificate holder) is able to use "practicable measures" in the design and construction of the facility to reduce the cumulative effects.

The Council addressed the Cumulative Effects standard for wind facilities in the *Final Order on the ASC*, *Final Order on Amendment 1*, *Final Order on Amendment 2*, and *Final Order on Amendment* 3 and found that the proposed design, construction, and operation of the facility would minimize cumulative adverse environmental effects in the vicinity through compliance with the requirements of the Council's Siting Standards for Wind Energy Facilities. Specifically, in approving the original ASC, the Council considered and made findings regarding cumulative impacts of the facility related to (1) roads; (2) transmission lines and substations; (3) wildlife protection; (4) visual features; and (5) lighting.

The facility, with proposed changes included in RFA4 would not impact the cumulative environmental effects of the components authorized for construction or otherwise change the facts upon which the Council relied in making findings for this standard regarding the cumulative environmental effects from this wind facility.

Potential cumulative adverse environmental effects resulting from the construction and operation of the facility, with proposed changes, from access roads, transmission lines and substations, lighting, visual features, and wildlife protection are discussed below.

Access Roads

OAR 345-024-0015(1) encourages the use of existing roads for facility site access, minimizing the amount of land used for new roads, and locating new roads in such a manner that reduces adverse environmental impacts.

As approved, the Montague Facility is to include up to approximately 71 miles of new access roads. The certificate holder explains that the construction and operation of Phase 1 would require approximately 32.2 miles of new access roads, and proposes that Phase 2 would require the construction of up to approximately 21.5 miles of new access roads, with a combined total for Phase 1 and Phase 2 access roads of 53.7 miles. The combined total as proposed, would require approximately 17. 3 miles less than what was originally approved in the *Final Order on the ASC*. The certificate holder relies on the analysis conducted in the *Final Order on the ASC*, *Final Order on Amendment 1*, *Final Order on Amendment 2*, and the *Final Order on Amendment 3* in that, the facility would be located entirely on private property. Subject to compliance with existing site certificate conditions, the Department recommends that the Council find that the certificate holder continues to demonstrate that it can reduce cumulative adverse environmental effects in the vicinity by designing the components of the facility, with proposed changes, to minimize the adverse impacts of access roads.

Transmission Lines and Substations

OAR 345-024-0015(2) and (3) encourages wind facilities to utilize underground transmission lines, combine transmission line routes and minimize the number of new substations.

Council previously approved up to 19 miles of aboveground, single circuit 230-kV transmission line in the Final Order on the ASC. As described in RFA4, the Departments determination on Change request 3 (which rerouted the Phase 1 transmission line to avoid Washington Ground Squirrel (WGS) Category 1 habitat), approved for a reduction in total length of the 230-kV line from 19 miles to 10.8 miles. For Phase 2, the certificate holder proposes to construct an additional 3.0 miles of 230-kV line to connect the proposed Phase 2 substation to the approved Phase 1 substation.[130] The width of both the approved Phase 1 transmission line corridor and the proposed Phase 2 transmission line corridor is ½ mile, or ¼ mile per side of the transmission line, consistent with the OAR 345-001-0010(13) definition of "corridor."

In the final order on the ASC, Council imposed Condition 89, which addressed reasonable steps to reduce or manage human exposure to electric and magnetic fields. Some of the steps include a 200 foot construction set back requirement from any residence or other occupied structure, measured from the centerline of a proposed transmission line. Designing and maintaining all transmission lines so that alternating current electric fields do not exceed 9 kV per meter at one meter above the ground surface in areas accessible to the public.

Subject to compliance with existing site certificate conditions, the Department recommends that the Council find that the certificate holder continues to demonstrate that it can reduce cumulative adverse environmental effects in the vicinitry by designing the components of the facility, with proposed changes, to minimize the adverse impacts of transmission lines and substations.

Wildlife Protection

As provided in Sections III.H, Fish and Wildlife Habitat and III.I, Threatened and Endangered Species of this order, the wind turbines, solar array, and battery storage systems would be located within the proposed micrositing corridor. These facility components would be constructed in predominantly Category 6 habitat and would be subject to the existing site certificate conditions.

Visual Features

Exhibit R in the RFA4, and Section III.J., *Scenic Resources* of this order provide a more detailed discussion of visual impacts, mitigation measures, and existing site certificate conditions to minimize the visual impacts of the facility, with proposed changes. Per Condition 102, the certificate holder is required to uniformly paint turbine towers, nacelles, and rotors in a neutral white color; paint the substation structures in a low-reflectivity neutral color to blend with the surrounding landscape;

[130] In Exhibit DD of RFA4, the certificate holder notes that the development of Phase 2 would not increase the number of collector substations approved for the Montague Wind facility. In the *Final Order of the ASC*, Council approved the construction of up to two substations. In RFA4, the certificate holder proposes to construct one substation per development phase of the facility (Phase 1 and Phase 2).

RFA4 describes the battery storage building enclosure footprint as approximately 467 feet in length by 600 feet in width (100 MW). Additionally, RFA4 Section 3.2 states that the battery storage system would be 20 feet in height and centrally located within the proposed amended site boundary area, therefore, there visual impacts from the battery storage system would be unlikely.

Lighting

Other than lighting on structures subject to the requirements of the Federal Aviation Administration or the Oregon Department of Aviation site certificate, Condition 104 reduces the visual impacts associated with lighting facility structures, which would include the battery storage systems. In Section III.J. *Scenic Resources* of this order, the Department recommends modifying this condition to add the battery storage systems.

Conclusions of Law

Based on the foregoing findings of fact and conclusions, and subject to compliance with the site certificate conditions, the Council finds that the facility, with proposed changes, would comply with the Council's Cumulative Effects Standards for Wind Energy Facilities.

III.P.3. Siting Standards for Transmission Lines: OAR 345-024-0090

To issue a site certificate for a facility that includes any transmission line under Council jurisdiction, the Council must find that the applicant:

(1) Can design, construct and operate the proposed transmission line so that alternating current electric fields do not exceed 9 kV per meter at one meter above the ground surface in areas accessible to the public;
(2) Can design, construct and operate the proposed transmission line so that induced currents resulting from the transmission line and related or supporting facilities will be as low as reasonably achievable.

Findings of Fact

The Siting Standards for Transmission Lines address issues associated with alternating current electric fields and induced currents generated by high-voltage transmission lines. OAR 345-024-0090(1) sets a limit for electric fields from transmission lines of not more than 9 kV per meter at one meter above the ground surface in areas that are accessible to the public. Section (2) requires implementation of measures to reduce the risk of induced current.

Electric Fields

Electric fields around transmission lines are produced by the presence of an electric charge, measured as voltage, on the energized conductor. Electric field strength is directly proportional to the line's voltage; increased voltage produces a stronger electric field. In the *Final Order on the ASC, Final Order on Amendment 1, Final Order on Amendment 2, and Final Order on Amendment 3*, the Council found that the certificate holder could design, construct, and operate the proposed transmission lines so that alternating current electric fields do not exceed 9kV per meter at one meter above the ground surface in areas accessible to the public.

In Exhibit AA of RFA4, the certificate holder modeled electric fields, and magnetic fields within the boundaries of the proposed transmission line corridor and micrositing corridor. The model utilizes a methodology developed by the Bonneville Power Administration and the EMF estimates are computed for a height of 1 meter aboveground. The outputs used for calculating the EMF strengths are assumed to be typical peak-load outputs from the generators and are therefore higher than the nominal outputs. As shown in Figures AA-6, AA-8, AA-10 and AA-12 of Exhibit AA, the maximum modeled electric fields modeled for the proposed overhead 230-kV transmission line and 34.5-kV collector lines is approximately 2.7 kV/m. With a modeled maximum of 2.7 kV/m, the proposed transmission and collector lines would remain below the 9-kV per meter threshold set forth in OAR 345-024-0090(1). Therefore, based on the certificate holder's modeling, the Council finds that the proposed overhead 230-kV transmission line and the 34.5-kV overhead collector lines would not exceed 9-kV per meter at one meter above ground level.

Induced Voltage and Current

In the *Final Order on the ASC, Final Order on Amendment 1, Final Order on Amendment 2, and Final Order on Amendment 3*, the Council found that the certificate holder could construct, and operate the proposed transmission lines so that induced currents resulting from the transmission lines would be as low as reasonably achievable. Council adopted Condition 17 into the site certificate, which reflected the requirements of Mandatory Condition OAR 345-0027-0023(4). Mandatory Condition OAR 345-0027-0023(4) required the certificate holder to both; (1) design, construct and operate transmission lines in accordance with requirements of the National Electrical Safety Code, and (2) develop and implement a program during operations to ensure structures that could become inadvertently charged are grounded or bonded throughout the life of the facility. In subsequent amendments to the site certificate, Condition 17 has been amended to reflect current requirements of the mandatory condition. As presented in Exhibit AA of RFA4, the certificate holder describes that induced currents from the proposed 34.5 kV interconnection transmission line would be as low as reasonably achievable.

Because the language from Condition 17 emanates from site-specific conditions contained at Oregon Administrative Rule 345-025-0010(4), and references requirements of the National Electric Safety Code (NESC) as approved on June 3, 2011, which are outdated, the Department

proposes to administratively remove Condition 17 from the site certificate. The most current version of the NESC standards was published in 2017. Additionally, OAR 345-025-0010 states that "The Council *may* include the following conditions, as appropriate, in the site certificate…" (emphasis added). As such, this is not a mandatory condition, and there is no reason to require the certificate holder to demonstrate compliance with an outdated 2011 NESC standard as well as the 2017 NESC standard. In summary, given that the certificate holder must comply with current NESC standards during facility construction and operation, the Department recommends the removal of Condition 17 below:

Recommended Deleted Condition 17: [DELETED] ~~OAR 35-027-0023(4):~~

~~(a) The certificate holder shall design, construct and operate the transmission line in accordance with the requirements of the National Electrical Safety Code approved on June 3, 2011, by the American National Standards Institute, and~~
~~(b) The certificate holder shall develop and implement a program that provides reasonable assurance that all fences, gates, cattle guards, trailers, or other objects or structures of a permanent nature that could become inadvertently charged with electricity are grounded or bonded throughout the life of the line.~~ [AMD3, AMD4]

Conclusions of Law

For the reasons discussed above, and subject to compliance with the existing site certificate conditions, the Department recommends that the Council find that the facility, with proposed changes, would not result in a significant adverse impact under OAR 345-024-0090 that was not addressed in a previous Council order and would continue to comply with the Council's Siting Standards for Transmission Lines.

III.Q. Other Applicable Regulatory Requirements Under Council Jurisdiction

Under ORS 469.503(3) and under the Council's General Standard of Review (OAR 345-022-0000), the Council must determine whether the facility, with proposed changes, complies with "all other Oregon statutes and administrative rules…as applicable to the issuance of a site certificate for the proposed facility." This section addresses the applicable Oregon statutes and administrative rules that are not otherwise addressed in Council standards, including noise control regulations, regulations for removal or fill of material affecting waters of the state, and regulations for water rights.

III.Q.1. Noise Control Regulation: OAR 340-035-0035

(1) Standards and Regulations:
*****
(b) New Noise Sources:
*****

(B) New Sources Located on Previously Unused Site:

(i) No person owning or controlling a new industrial or commercial noise source located on a previously unused industrial or commercial site shall cause or permit the operation of that noise source if the noise levels generated or indirectly caused by that noise source increase the ambient statistical noise levels, L10 or L50, by more than 10 dBA in any one hour, or exceed the levels specified in Table 8, as measured at an appropriate measurement point, as specified in subsection (3)(b) of this rule, except as specified in subparagraph (1)(b)(B)(iii).

(ii) The ambient statistical noise level of a new industrial or commercial noise source on a previously unused industrial or commercial site shall include all noises generated or indirectly caused by or attributable to that source including all of its related activities. Sources exempted from the requirements of section (1) of this rule, which are identified in subsections (5)(b) - (f), (j), and (k) of this rule, shall not be excluded from this ambient measurement.

(iii) For noise levels generated or caused by a wind energy facility:

(I) The increase in ambient statistical noise levels is based on an assumed background L50 ambient noise level of 26 dBA or the actual ambient background level. The person owning the wind energy facility may conduct measurements to determine the actual ambient L10 and L50 background level.

(II) The "actual ambient background level" is the measured noise level at the appropriate measurement point as specified in subsection (3)(b) of this rule using generally accepted noise engineering measurement practices. Background noise measurements shall be obtained at the appropriate measurement point, synchronized with windspeed measurements of hub height conditions at the nearest wind turbine location. "Actual ambient background level" does not include noise generated or caused by the wind energy facility.

(III) The noise levels from a wind energy facility may increase the ambient statistical noise levels L10 and L50 by more than 10 dBA (but not above the limits specified in Table 8), if the person who owns the noise sensitive property executes a legally effective easement or real covenant that benefits the property on which the wind energy facility is located. The easement or covenant must authorize the wind energy facility to increase the ambient statistical noise levels, L10 or L50 on the sensitive property by more than 10 dBA at the appropriate measurement point.

(IV) For purposes of determining whether a proposed wind energy facility would satisfy the ambient noise standard where a landowner has not waived the standard, noise levels at the appropriate measurement point are predicted assuming that all of the proposed wind facility's turbines are operating between cut-in speed and the wind speed corresponding to the maximum sound power level established by IEC 61400-11 (version 2002-12). These predictions must be compared to the highest of either the assumed ambient noise level of 26 dBA or to the actual ambient background L10 and L50 noise level, if measured. The facility complies with the noise ambient background standard if this comparison shows that the increase in noise is not more than 10 dBA over this entire range of wind speeds.

(V) For purposes of determining whether an operating wind energy facility complies with the ambient noise standard where a landowner has not waived the standard, noise levels at the appropriate measurement point are measured when the facility's nearest wind turbine is operating over the entire range of wind speeds between cut-in speed and the windspeed corresponding to the maximum sound power level and no turbine that could contribute to the noise level is disabled. The facility complies with the noise ambient background standard if the increase in noise over either the assumed ambient noise level of 26 dBA or to the actual ambient background L10 and L50 noise level, if measured, is not more than 10 dBA over this entire range of wind speeds.

(VI) For purposes of determining whether a proposed wind energy facility would satisfy the Table 8 standards, noise levels at the appropriate measurement point are predicted by using the turbine's maximum sound power level following procedures established by IEC 61400-11 (version 2002-12), and assuming that all of the proposed wind facility's turbines are operating at the maximum sound power level.

(VII) For purposes of determining whether an operating wind energy facility satisfies the Table 8 standards, noise generated by the energy facility is measured at the appropriate measurement point when the facility's nearest wind turbine is operating at the windspeed corresponding to the maximum sound power level and no turbine that could contribute to the noise level is disabled.

***

Findings of Fact

OAR 340-035-0035 provides the Oregon Department of Environmental Quality (DEQ) noise rules for industry and commence, which have been adopted by Council as the compliance

requirements for EFSC-jurisdictional energy facilities.

The noise impact analysis area includes the area within and extending 1-mile from the proposed amended site boundary; however, for RFA4, the certificate holder evaluates potential noise impacts from the facility, with proposed changes, to noise sensitive properties located within 2-miles of the proposed amended site boundary.[131]

Noise Standards

The DEQ noise rules set noise limits for new industrial or commercial noise sources based upon whether those sources would be developed on a previously used or unused industrial or commercial site. Pursuant to OAR 340-035-0015(47), a "previously unused industrial or commercial site" is defined as property which has not been used by any industrial or commercial noise source during the 20 years immediately preceding commencement of construction of a new industrial or commercial source on that property. There is no evidence in the record that the facility site has been in industrial or commercial use at any time during the last 20 years, therefore the site is considered a previously unused site and evaluated per the requirements of OAR 340-035-0035(1)(b)(B).

The requirements of OAR 340-035-0035(1)(b)(B)(ii), as provided above, apply to noise levels of new industrial or commercial noise sources on previously unused industrial or commercial sites; the requirements of OAR 340-035-0035(1)(b)(B)(iii) apply to noise levels generated by a "wind energy facility."[132] The facility, as approved, would include a 404 MW facility with up to 269 wind turbines. Phase 2 of the facility would include wind turbines, or a mix of wind turbines, a solar array and battery storage system. DEQ's industrial and commercial noise standards differ for general industrial and commercial noise sources and for an industrial and commercial noise source that is a wind energy facility. DEQ rules do not define "wind energy facility" but reference a predictive noise analysis methodology for wind energy facilities that evaluates maximum noise levels at noise sensitive receptors assuming operation of all wind turbines between cut-in speed and maximum sound power level wind speed, and does not address a methodology for evaluating other potential noise sources. Therefore, because the certificate holder proposes, in addition to a new wind turbine type, a solar array and battery storage which have noise generating components that are not addressed in DEQ's noise rules for wind energy facilities, the Department recommends Council apply the requirements of both OAR 345-035-0035(1)(b)(B)(ii) and –(iii) to the facility, with proposed changes.

Noise generated by a wind energy facility or a new industrial or commercial source located on a previously unused site must comply with two standards: the "ambient noise degradation standard" and the "maximum allowable noise standard." Under the ambient noise degradation

[131] OAR 340-35-0015(38) defines Noise Sensitive Property as "real property normally used for sleeping, or normally used as schools, churches, hospitals or public libraries. Property used in industrial or agricultural activities is not Noise Sensitive Property unless it meets the above criteria in more than an incidental manner."
[132] OAR 340-035-0035(1)(b)(A).

standard, facility-generated noise must not increase the ambient hourly L10 or L50 noise levels at any noise sensitive property by more than 10 dBA. For a wind energy facility, this evaluation is based on a predictive noise analysis assuming wind turbines are operating "between cut-in speed and the wind speed corresponding to the maximum sound power level" and may assume an ambient hourly L50 noise level of 26 dBA or based on measured ambient hourly noise levels at the receiver in accordance with the procedures specified in the regulation. For a new industrial or commercial source, this evaluation is based on all noises generated or indirectly caused or attributable to that source including all of its related activities and measured ambient hourly noise levels.

To demonstrate compliance with the ambient noise degradation standard, noise generated during facility operation must not cause the hourly L50 noise level at any noise-sensitive property to exceed 10 dBA above ambient or assumed ambient, in this case, 36 dBA. For a wind energy facility, OAR 340-035-0035(1)(b)(B)(iii)(III) relieves the certificate holder from having to show compliance with the ambient noise degradation standard "if the person who owns the noise sensitive property executes a legally effective easement or real covenant that benefits the property on which the wind energy facility is located" (a "noise waiver"). The option to obtain a noise waiver is not available for new industrial or commercial noise sources that are not wind generating facilities.

Under the maximum allowable noise standard at OAR 340-035-0035(1)(b)(B)(i), both new industrial or commercial noise sources and wind energy facilities may not exceed the noise levels specified in the noise rules, as represented in Table 9, *Statistical Noise Limits for Industrial and Commercial Noise Sources* below.

Table 9: Statistical Noise Limits for Industrial and Commercial Noise Sources

Statistical Descriptor[1]	Maximum Permissible Hourly Statistical Noise Levels (dBA)	
	Daytime (7:00 AM - 10:00 PM)	Nighttime (10:00 PM - 7:00 AM)
L50	55	50
L10	60	55
L1	75	60

Notes:
1. The hourly L50, L10 and L1 noise levels are defined as the noise levels equaled or exceeded 50 percent, 10 percent, and 1 percent of the hour, respectively.

Source: OAR 340-035-0035, Table 8

Potential Noise Impacts

Potential noise impacts from construction and operation of the facility, with proposed changes, within the 2-mile analysis area are presented below.

Construction

OAR 340-035-0035(5)(g) specifically exempts noise caused by construction activities; however, an evaluation of construction-related noise is presented in accordance with OAR Chapter 345 Division 21 information requirements and to inform the construction-related noise analysis required under the Council's Protected Areas and Recreation standards. In RFA4, the certificate holder affirms that construction of the facility, with proposed changes, would not result in changes to previously evaluated construction activities.

As evaluated in the ASC Exhibit X, construction phases of the facility, as approved, would include clearing, excavation, foundation, erection and finishing. Typical construction equipment and predicted sound pressure levels at specific distances would include but is not limited to: air compressor (81 dBA at 50 ft), backhoe (85 dBA at 50 ft), pile driver (101 dBA at 50 ft), grader (85 dBA at 50 ft), loader (79 dBA at 50 ft), saw (78 dBA at 50 ft), and trucks (91 dBA at 50 ft). Predicted sound pressure levels from construction phases would result range from 90 to 60 dBA at 50 and 1,500 feet, respectively. Due the linear nature of construction activities, noise levels would decrease based on distance due to attenuation (rate of 6 dBA per doubling of distance) as construction of access roads and wind turbines progress farther from noise sensitive receptor locations. Council previously imposed Condition 106 requiring that, during construction, combustion engine-powered equipment be equipped with exhaust mufflers; operation of noisiest construction equipment be restricted to daylight hours; and requires that the certificate holder establish a noise complaint response system, including a system for the certificate holder to receive and resolve noise complaints. Phase 2 construction activities would be required to comply with the requirements of Condition 106.

Operations

Operation of the facility, with proposed changes, would generate noise from wind turbines, transformers and inverters associated with a solar array, and inverters and cooling systems associated with battery storage systems. In RFA4, the certificate holder provides a noise analysis of the facility, with proposed changes, including the sources and sound power levels for Phase 1 and Design Scenarios A, B, and C; these are presented in *Table 10, Modeled Noise Sources – Phase 1 and Phase 2*.

Table 10: Modeled Noise Sources – Phase 1 and Phase 2 (A, B or C)

Noise Source	Phase 1	Phase 2 Scenarios			Maximum Sound Power Level at Source (dBA)[2]
		A	B	C	
	No. of Sources				
Wind Turbine[1]	2	-	-	-	110.5
	46	-	-	-	110.2
	-	-	48	-	110
	-	70	-	-	109.2
	3	-	-	-	108.1*
	-	11	-	-	107.7*
	5	-	-	-	107.5*

Table 10: Modeled Noise Sources – Phase 1 and Phase 2 (A, B or C)

Noise Source	Phase 1	Phase 2 Scenarios			Maximum Sound Power Level at Source (dBA)[2]
		A	B	C	
	No. of Sources				
Substation Transformer	2	2	2	2	98
Battery Storage System[3] (Per 10 MW centroid)	-	10	10	10	102.2
Solar Array Inverter	-	-	-	102	95.5

Notes:

4. Maximum sound power levels include 2 dBA to account for uncertainty, consistent with manufacturer specifications.
5. Maximum sound power levels were provided to the Department under separate confidential cover under ORS 192.501(2).
6. Sounds levels of the battery storage system include noise generating sources such as HVAC and inverters.

*Includes noise reduction from serrated trailing edge blades.

As described in RFA4 Exhibit X, a sound power level (commonly abbreviated as PW_L or L_w) is analogous to the wattage of a light bulb; it is a measure of the acoustical energy emitted by the source and is, therefore, independent of distance. A sound pressure level is analogous to the brightness or intensity of light experienced at a specific distance from a source and is measured directly with a sound-level meter. Sound pressure levels always should be specified with a location or distance from the noise source. Sound power level data are used in acoustic models to predict sound pressure levels. This is because sound power levels take into account the size of the acoustical source and account for the total acoustical energy emitted by the source. The decrease in sound level caused by distance from any single sound source normally follows the inverse square law; that is, the sound pressure level changes in inverse proportion to the square of the distance from the sound source. In a large open area with no obstructive or reflective surfaces, it is a general rule that at distances greater than approximately the largest dimension of the noise-emitting surface, the sound pressure level from a single source of sound drops off at a rate of 6 dB with each doubling of the distance from the source. Sound energy is absorbed in the air as a function of temperature, humidity, and the frequency of the sound. This attenuation can be up to 2 dB over 1,000 feet. The drop-off rate will also vary based on terrain conditions and the presence of obstructions in the sound's propagation path. These factors are considered in the development of the acoustical model.[133]

Noise Modeling Results and Compliance with Regulations

For its analysis, the certificate holder evaluates Phase 1 and Phase 2 noise sources, as presented in Table 6, *Modeled Noise Sources – Phase 1 and Phase 2*, and uses the International Organization for Standardization 9613-2 (ISO 9613-2), Acoustics—Sound Attenuation During Propagation Outdoors Part 2: General Method of Calculation (1996) implemented by CADNA/A (Version 2019 [build: 167:4905]) by DataKustik GmbH of Munich, Germany to make the

[133] MWPAMD4. Request for Amendment 4, Exhibit X. 2019-04-05.

predictions of peak noise levels at noise-sensitive properties within the 2-mile analysis area. The CADNA/A program accounts for geometric divergence, atmospheric absorption, reflection from surfaces, screening by topography and obstacles, terrain complexity and ground effects, source directivity factors, seasonal foliage effects, and meteorological conditions. Results of the noise analysis are presented graphically on noise contour maps identifying facility component locations and noise sensitive receptors within 2-miles of the proposed amended site boundary, identifying the boundaries of 36 and 50 dBA noise contours.

Ambient Noise Degradation Standard

The ambient noise degradation standard requires a demonstration that noise generated during facility operation must not cause the hourly L50 noise level at any noise-sensitive property to exceed 10 dBA above ambient or, in this case, 36 dBA. Based upon the certificate holder's noise analysis and noise contour maps, which were requested be treated as trade secrets under ORS 192.501(1), Design Scenario A, B and C are predicted to exceed the ambient noise degradation standard of 36 dBA, at many noise sensitive receptors. In accordance with OAR 340-035-0035(1)(b)(iii)(III) the noise levels from a wind energy facility may increase the ambient statistical noise levels L10 and L50 by more than 10 dBA (but not above the limits specified in Table 6, above), if the person who owns the noise sensitive property executes a legally effective easement or real covenant. Council previously imposed Condition 107, as described below, requiring that based on a pre-construction final design noise analysis, the certificate holder provide to the Department copies of executed easements or real covenants to demonstrate compliance with the noise control regulation for noise increases of 10 dBA or more at identified noise sensitive receptors.

Therefore, to demonstrate compliance with the DEQ noise rules during operation of proposed Phase 2, the certificate holder must either negotiate and execute legally effective easements or real covenants with the affected property owners authorizing the facility to increase the ambient statistical noise levels more than 10 dBA; or, in the alternative, the certificate holder must change the layout, utilize noise reducing technology such as serrated trailing edge blades, operate wind turbines in a reduced power function operating mode, or reduce the number of noise generating facility-components to reduce the noise levels to levels that would not exceed the ambient noise degradation limit. As discussed below, site certificate Condition 107 requires that the certificate holder, prior to construction, provide evidence of receipt of noise waivers from the owners noise sensitive properties where the ambient noise degradation standard is exceeded.

Predicted noise levels of the proposed solar array and battery storage system, when considered independent of the wind energy facility, would result in a maximum increase in ambient noise level of 3 dBA at the nearest sensitive property, described by the certificate holder as a de minimis contribution to the overall predicted noise levels.[134] Therefore, even if the proposed

[134] MWPAMD4. Request for Amendment 4, Exhibit X, Table X-4. 2019-01-15.

solar array and battery storage systems were evaluated as a new industrial or commercial noise source under the noise control regulation, separately from the wind energy facility, it can be concluded that noise levels would not exceed the ambient noise degradation standard or the maximum allowable noise standard, as the noise levels are predominately contributed by wind turbine operations from Phase 1 and Phase 2 Design Scenarios A and B.

Maximum Allowable Standard

The maximum allowable noise standard requires a demonstration that noise generated during facility operation must not exceed the hourly statistical noise level of 50 dBA. Modeling results for Phase 2 Design Scenario A and B indicate a potential exceedance of the maximum allowable noise standard, 50 dBA, at a few noise sensitive receptors. Design Scenario C is not expected to exceed 50 dBA at any noise sensitive receptor locations. Council previously imposed Condition 107 requiring that, prior to construction, the certificate holder submit to the Department a noise assessment based on final facility design and layout, using the maximum sound power level for substation transformers and wind turbines. The condition further requires that noise waivers necessary at noise sensitive receptor locations, where the ambient degradation noise level is exceeded, be secured and provided to the Department. The Department recommends that Council apply Condition 107 to each phase of the facility as follows:

~~The Department recommends Council amend Condition 107 to require that if the pre-construction noise analysis identifies noise sensitive properties within 1 dBA of maximum allowable noise standard, the certificate holder conduct noise monitoring during the first year of operation to confirm compliance with the noise regulation, as follows:~~

> **Recommended Amended Condition 107:** Before beginning construction *of each phase*, t~~T~~he certificate holder shall provide to the Department * * * [AMD4]
>
> (a) Information that identifies the final design locations of all turbines to be built at the facility.
>
> (b) The maximum sound power level for the substation transformers and the maximum sound power level and octave band data for the turbines selected for the facility based on manufacturers' warranties or confirmed by other means acceptable to the Department.
>
> (c) The results of noise analysis of the facility to be built according to the final design performed in a manner consistent with the requirements of OAR 39 340-035-0035(1)(b)(B)(iii) (IV) and (VI) demonstrating to the satisfaction of the Department that the total noise generated by the facility (including the noise from turbines; substation transformers; *inverters and transformers associated with the solar components; and inverters, transformers, and cooling systems associated with the battery storage components*) would meet the ambient degradation test and maximum allowable test at

the appropriate measurement point for all potentially-affected noise sensitive properties.

(d) For each noise-sensitive property where the certificate holder relies on a noise waiver to demonstrate compliance in accordance with OAR 340-035-0035(1)(b)(B)(iii)(III), a copy of the a legally effective easement or real covenant pursuant to which the owner of the property authorizes the certificate holder's operation of the facility to increase ambient statistical noise levels L10 and L50 by more than 10 dBA at the appropriate measurement point. The legally-effective easement or real covenant must: include a legal description of the burdened property (the noise sensitive property); be recorded in the real property records of the county; expressly benefit the certificate holder; expressly run with the land and bind all future owners, lessees or holders of any interest in the burdened property; and not be subject to revocation without the certificate holder's written approval.

~~Before beginning construction, the certificate holder shall provide to the Department:~~

~~i. Prior to Phase 1 construction:~~

~~a. Information that identifies the final design locations of (all turbines, to be built at the facility…~~

~~ii. For Phase 2 of the facility:~~

~~a. Prior to construction, a noise analysis that includes the following Information:~~

~~Final design locations of all Phase 1 and Phase 2 noise generating facility components (all wind turbines; substation transformers; inverters and transformers associated with the photovoltaic solar array; and inverters and cooling systems associated with battery storage system).~~

~~The maximum sound power level for the Phase 2 substation transformers; inverters and transformers associated with the photovoltaic solar array; inverters and cooling systems associated with battery storage system; and the maximum sound power level and octave band data for the Phase 2 wind turbines selected for the facility based on manufacturers' warranties or confirmed by other means acceptable to the Department.~~

~~The results of noise analysis of Phase 1 and Phase 2 components according to the final design performed in a manner consistent with the requirements of OAR 340-035-0035(1)(b)(B)(iii) (IV) and (VI) demonstrating to the satisfaction of the Department that the total noise generated by the facility (including the noise from wind turbines, substation transformers, inverters and transformers associated with the photovoltaic solar array; inverters and cooling systems associated with battery storage system) would meet the ambient degradation test and maximum allowable test at the appropriate measurement point for all potentially-affected noise sensitive properties.~~

~~For each noise-sensitive property where the certificate holder relies on a noise waiver to demonstrate compliance in accordance with OAR 340-035-0035(1)(b)(B)(iii)(III), a copy of the a legally effective easement or real covenant pursuant to which the owner of the property authorizes the certificate holder's operation of the facility to increase ambient statistical noise levels L10 and L50 by more than 10 dBA at the appropriate measurement point. The legally effective easement or real covenant must: include a legal description of the burdened property (the noise sensitive property); be recorded in the real property records of the county; expressly benefit the certificate holder; expressly run with the land and bind all future owners, lessees or holders of any interest in the burdened property; and not be subject to revocation without the certificate holder's written approval.~~

~~b. During operation, if the results of the pre-construction final noise analysis submitted per Condition 107(ii) identify that modeled noise levels are predicted to be within 1 dBA of the ambient degradation standard (10 dBA) for noise sensitive properties where noise waivers were not obtained, or within 1 dBA of the maximum allowable noise standard (50 dBA) for any noise sensitive property, the certificate holder shall monitor and record actual statistical noise levels at these noise sensitive properties to verify that Phase 2 facility components are operating in compliance with the noise control regulation. The monitoring plan must be reviewed and approved by the Department prior to implementation.~~

~~If, during monitoring, the ambient degradation standard (10 dBA) or maximum allowable noise standard (50 dBA) are exceeded at any noise sensitive property, the certificate holder shall submit to the Department its mitigation proposal demonstrating the measures to be utilized to lower noise levels and achieve compliance with the applicable noise standard. The mitigation proposal shall be reviewed and approved by the Department.~~
~~[Final Order on ASC; AMD4]~~

Corona Effect

The corona effect (corona) is audible noise that emits from transmission lines caused from the partial electrical breakdown of the insulating properties of air around the conductors of a transmission line. Heat and energy are dissipated in a small volume near the surface of the conductors, part of this energy is in the form of small local pressure changes that result in audible noise. Corona-generated audible noise is characterized by a low hum, hissing, frying, or crackling sound. Corona is a function of transmission line voltage, altitude, conductor diameter, condition of the conductor, suspension hardware and specific damp weather conditions. The proposed 3-mile 230 kV transmission segment could generate random corona radiation during wet weather as a result of rain drops on the wire or to a lesser amount in dry weather as a result of dust, insects, or sharp points on the conductors or suspension hardwire.

In RFA4 Exhibit AA, the certificate holder identifies four noise sensitive properties with the proposed 3-mile 230 kV transmission line corridor, located within 200 feet of the outer boundary of the 0.5-mile in width transmission line corridor. Based on an audible corona noise calculation with rainy conditions, corona noise generated by the proposed 3-mile 230 kV transmission line at 80 feet would exceed the ambient degradation standard (L50 = 36.2). The certificate holder describes that the proposed 3-mile 230 kV transmission line segment would be setback a distance of 200 feet from noise sensitive properties, in compliance with Condition 89. At 200 feet, audible L50 corona noise with rainy conditions would be approximately 31.8 dBA and therefore would not exceed the ambient degradation standard or maximum allowable standard.

Conclusions of Law

Based on the foregoing findings, the Department recommends that the Council find that the facility, with proposed changes, would comply with the Noise Control Regulations in OAR 340-035-0035(1)(b)(B).

III.Q.2. Removal-Fill

The Oregon Removal-Fill Law (ORS 196.795 through 196.990) and Department of State Lands (DSL) regulations (OAR 141-085-0500 through 141-085-0785) require a removal-fill permit if 50 cubic yards or more of material is removed, filled, or altered within any "waters of the state."[135] The Council, in consultation with DSL, must determine whether a removal-fill permit is needed and if so, whether a removal-fill permit should be issued. The analysis area for wetlands and other waters of the state is the area within the site boundary.

Findings of Fact

The Council addressed the removal-fill law in Section IV.S of the *Final Order on the Application* and found that the Phase 1 facility does not require a removal-fill permit. During the review of the ASC, Department of State Lands reviewed the wetland delineation report and provided a concurrence letter, in which DSL agreed with the wetland delineation report and classifications.

In RFA4, the certificate holder states that there are no previously delineated wetlands within the Phase 2 analysis area. No wetlands were observed during the 2017 and 2018 field investigations of the Phase 2 analysis area. The wetland delineation reports were submitted to DSL for review, and on March 6, 2019, DSL concurred with the two wetland delineation reports provided for RFA4.[136] There are no wetlands in areas where Phase 2 facility components could be located. There are three streams that would be crossed by collector lines between wind

[135] ORS 196.800(15) defines "Waters of this state." The term includes wetlands and certain other waterbodies.
[136] MWPAMD4Doc Reviewing Agency WD2018-0660final 2019-03-07; MWPAMD4 DSL Wetland Delineation Concurrence Confirmation 2019-03-06.

turbine strings, either by boring under the streams or by overhead crossings. In either scenario, no impacts to the streams are expected to occur.[137]

The Phase 2 facility does not require a removal-fill permit. If any facility design changes such that a removal-fill permit is necessary, it would require a site certificate amendment to evaluate the permit request. The existing site certificate contains a number of conditions that protect wetlands and waters of the state, specifically Conditions 80 through 87. These conditions will continue to apply to the Phase 2 facility. The Department recommends minor administrative changes to Conditions 83, 84, and 87. These changes are included in the draft amended site certificate, Attachment A of this order.

Therefore, the Department recommends the Council find that the facility, with proposed changes, maintains compliance with the removal-fill law and the certificate holder is not currently required to obtain a removal-fill permit.

Conclusions of Law

Based on the foregoing findings of fact and conclusions, the Department recommends that the Council find that a removal-fill permit is not needed for the facility, with proposed changes.

III.Q.3. Water Rights

Under ORS Chapters 537 and 540 and OAR Chapter 690, the Oregon Water Resources Department (OWRD) administers water rights for appropriation and use of the water resources of the state. Under OAR 345-022-0000(1)(b), the Council must determine whether the facility would comply with these statutes and administrative rules. OAR 345-021-0010(1)(o)(F) requires that if a facility needs a groundwater permit, surface water permit, or water right transfer, that a decision on authorizing such a permit rests with the Council.

Findings of Fact

As explained in Exhibit O of RFA4, construction of the Phase 2 facility is anticipated to require less water than was previously expected to be necessary for the Phase 1 facility alone. During construction water would be used for dust suppression during construction, for concrete used in turbine foundations and solar array foundations, and as a concrete pad for the battery storage system. Table O-1, Exhibit O, lists conservative estimates of water anticipated to be necessary during facility construction. The "worst case" scenario for water is Design Scenario B, which is estimated to need 18.3 million gallons of water during construction.

During operation, the Phase 2 facility may need water for washing the solar array, however, as described in Exhibit O, advances in robotic cleaning techniques of solar arrays may reduce the

[137] MWPAMD4 Exhibit J, p. J-1. 2019-04-05.

need for water to clean panels. Table O-2 of Exhibit O shows anticipated water use during Phase 2 facility operation, with the "worst case" scenario as Scenario C, if water is used for solar panel washing. If water is used for panel washing, the certificate holder states that it would not use solvents or cleaning chemicals.

During both facility construction and operation minor quantities of water will be necessary for potable purposes. During operation, water will be supplied at the O&M building via an OWRD permit-exempt well in accordance with existing site certificate Condition 86.

In RFA4 Exhibit O, the certificate holder states that if the Phase 1 construction maximum estimated water usage were to be combined with the Phase 2 maximum estimated water usage, the resulting total would be slightly less than the estimated total water needed for construction during the original ASC review, or 36,800,000 gallons.[138] The certificate holder anticipates purchasing water from the City of Arlington for construction purposes, and provided a letter (attachment O-1, Exhibit O) from the City of Arlington, Public Works Superintendent, stating that the city could provide up to 40,000,000 gallons for construction and 500,000 gallons per year.

As described in *Soil Protection* section of this order, if the solar array is built and if the certificate holder washes the panels, the run-off water from washing is subject to a DEQ-issued WPCF permit 1700-B. WPCF permits are state-issued permits and would be under control of an EFSC-issued site certificate; however, the certificate holder states in RFA4 Exhibit E that if a WPCF permit is necessary, it would be secured by a third-party contractor, which is allowed in accordance with OAR 345-022-022-0110(3) and (4). Recommended amended Condition 80 would require the certificate holder to provide the Department a copy of the WPCF permit secured by the third-party contractor prior to washing solar panels.

Based on the findings presented here, the Department recommends that the Council find that the certificate holder can provide adequate water for construction and operation of the facility, with proposed changes, and does not need a groundwater permit, surface water permit, or water right transfer. If such a permit is required by the certificate holder at a later time, a site certificate amendment would be required to review and consider such a permit application.

Conclusions of Law

Based on the foregoing findings of fact, the Department recommends that the Council conclude that the facility, with proposed changes, does not need a groundwater permit, surface water permit, or water right transfer.

[138] MWPAMD4. Request for Amendment 4 Exhibit O, O-5. 2019-04-05.

IV. PROPOSED CONCLUSIONS AND ORDER

Based on the recommended findings and conclusions included in this order, the Department recommends that Council make the following findings:

1. The proposed facility modifications included in Request for Amendment 4 of the Montague Wind Power Facility site certificate complies with the requirements of the Oregon Energy Facility Siting Statutes, ORS 469.300 to 469.520.

2. The proposed facility modifications included in Request for Amendment 4 of the Montague Wind Power Facility site certificate complies with the standards adopted by the Council pursuant to ORS 469.501.

3. The proposed facility modifications included in Request for Amendment 4 of the Montague Wind Power Facility site certificate complies with all other Oregon statutes and administrative rules identified in the project order as applicable to the issuance of a site certificate for the facility.

Accordingly, the Department recommends that the Council find that the proposed facility modifications included in Request for Amendment 4 of the Montague Wind Power Facility site certificate complies with the General Standard of Review (OAR 345-022-0000). The Department recommends that the Council find, based on a preponderance of the evidence on the record, that the site certificate may be amended as requested.

Proposed Order

The Department recommends that the Council approve Amendment 4 of the Montague Wind Power Facility site certificate.

Issued this 5th day of April, 2019

The OREGON DEPARTMENT OF ENERGY

By: _____

Todd Cornett, Assistant Director
Oregon Department of Energy, Energy Facility Siting Division

Attachments:
Attachment A: Draft Amended Site Certificate
Attachment B: Reviewing Agency Comments on preliminary RFA4
Attachment C: [Reserved for Draft Proposed Order Comments/Index]
Attachment D: Draft Habitat Mitigation Plan
Attachment E: Draft Revegetation Plan
Attachment F: Draft Wildlife Monitoring and Management Plan
Attachment G: Draft Historical Resource Mitigation Plan
Attachment H: Inadvertent Discovery Plan

Notice of the Right to Appeal

[Text to be added to Final Order]

AVANGRID RENEWABLES

Energy Facility Siting Council

DPO Public Hearing, May 16, 2019

Montague Wind Energy Facility Request for Amendment #4

Today's Presentation

- Overview of Avangrid Renewables
- Project History
- Project Map & Proposed Site Boundary Changes
- Design Scenarios & Phasing
- DPO and Proposed Conditions
- Questions

Avangrid Renewables as Owner/Operator

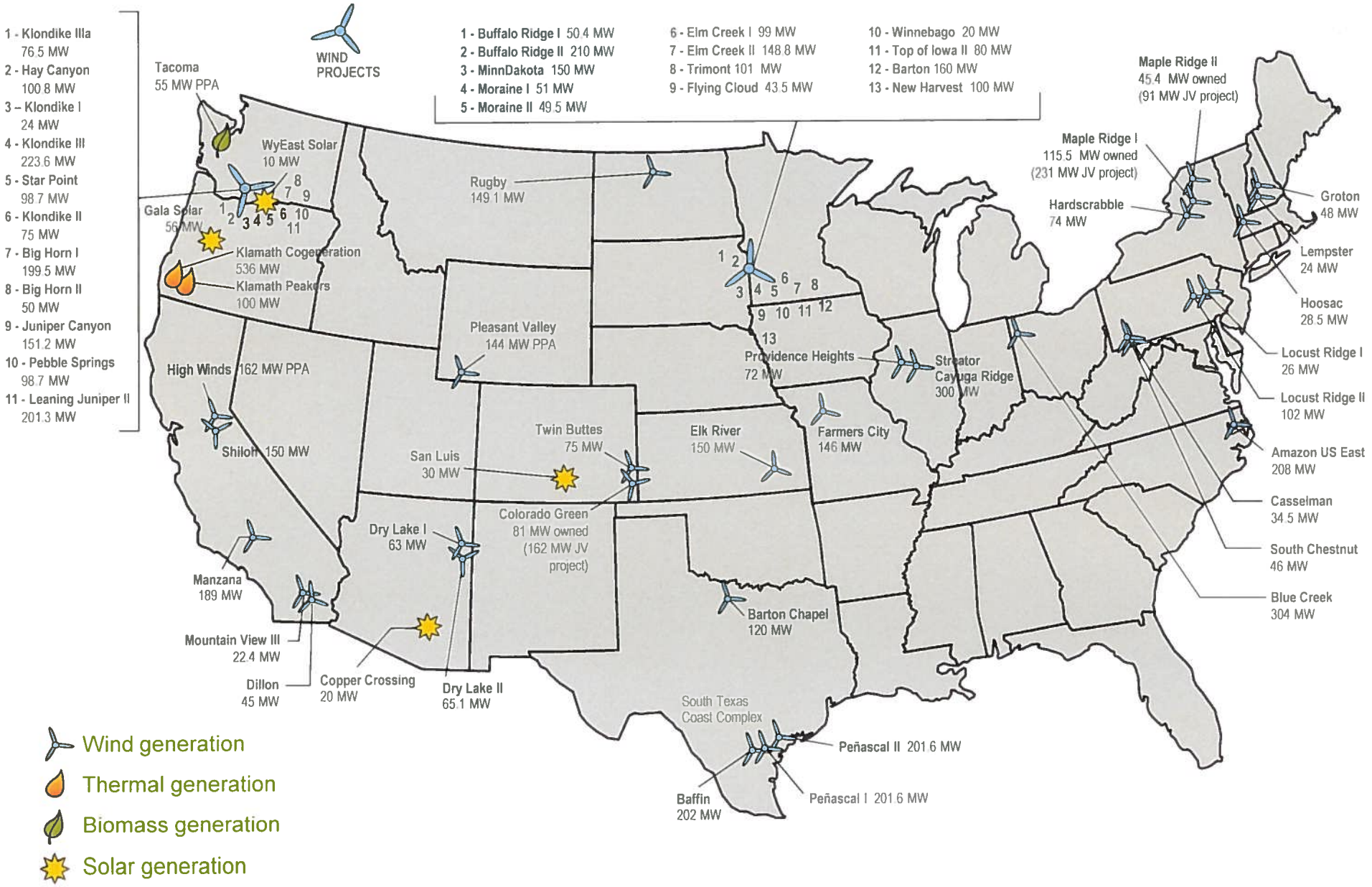
Leader in Responsible Renewable Energy Development

- North American headquarters in Portland, Oregon
- @ 400 employees in Oregon
- Since 1999, invested over $2B in Oregon energy projects
- Largest owner/operator of renewable energy in Oregon
- Established Avangrid "Green" Balancing Authority in 2018

Experienced Developer and Project Operator in Oregon

- 5 wind project conditional use permits
- 4 wind project EFSC site certificates
- 3 solar project conditional use permits
- Other approvals (see next slide)

Avangrid Renewable U.S. Power Assets

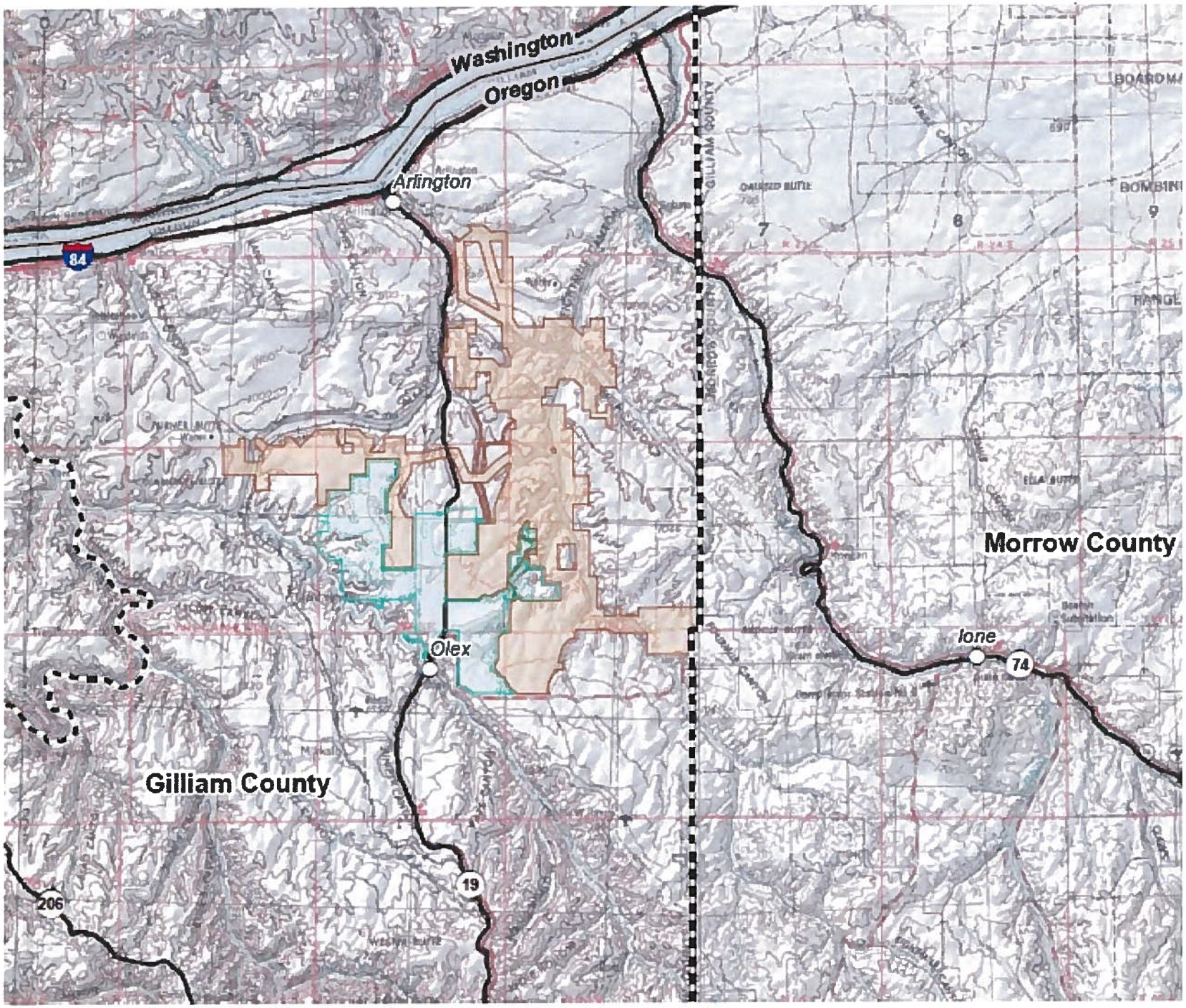


Project History

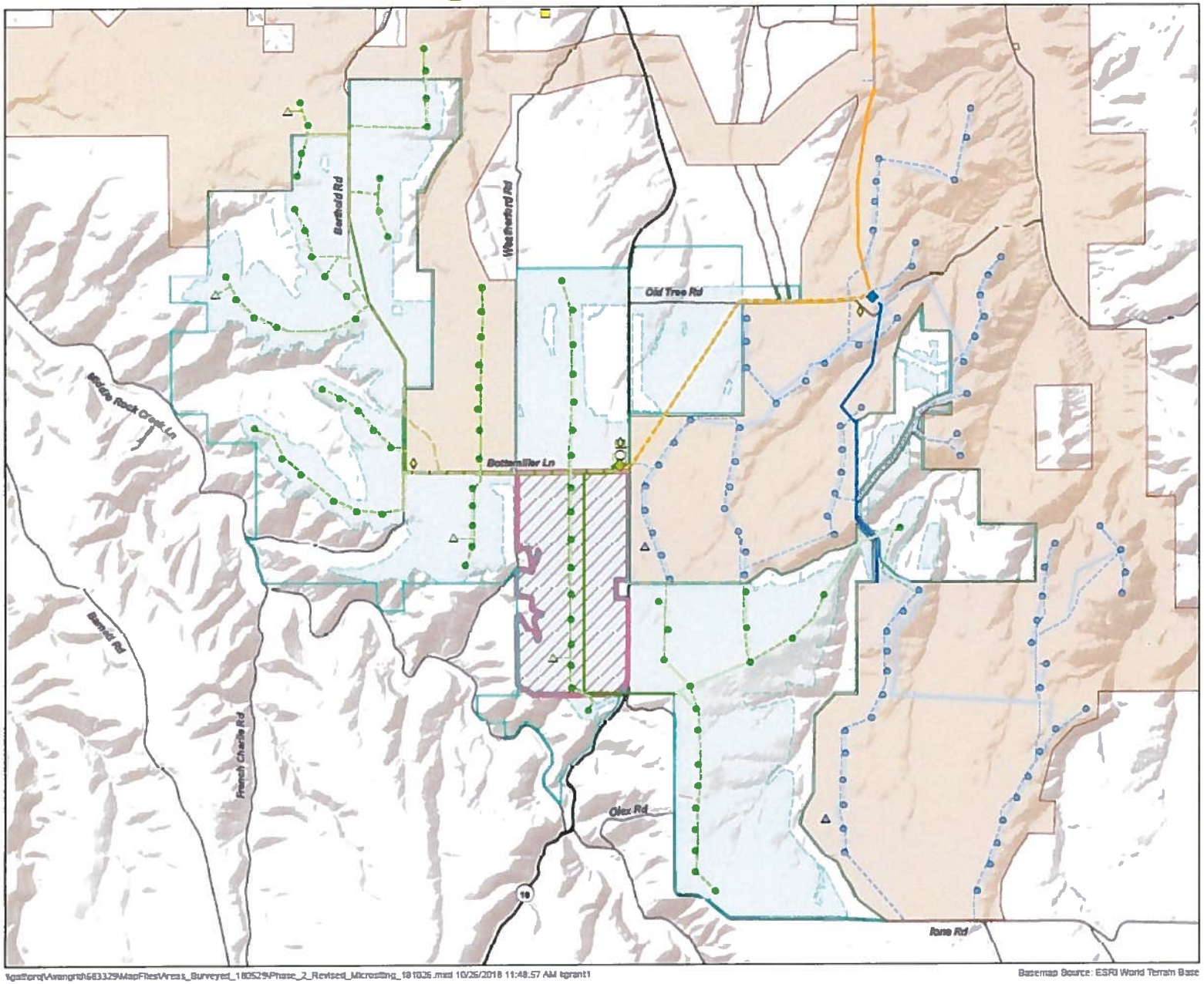
- Filed preliminary ASC — January 2010
- Final Order & Site Certificate — September 2010
- Request for Amendment #1 — December 2012
  - Request to extend construction deadlines, reduce blade tip clearance, and approve transfer to PGE
- Final Order & First Amended Site Certificate — June 2013
- Request for Amendment #2 — March 2015
  - Request to extend construction deadlines
- Final Order & Second Amended Site Certificate — December 2015
- Request for Amendment #3 — May 2017
  - Request to reduce blade tip clearance and increase blade tip height to accommodate new turbine technology

Project History (cont'd)

- Final Order & Third Amended Site Certificate — July 2017
- Start Construction Montague Phase 1 — September 2017
  - Began construction of 202 MW in Phase 1 area
- Request for Amendment #4 (preliminary) (revised December 2018, March 2019) — November 2017
  - Expand site boundary to avoid Washington Ground Squirrel habitat, add solar and battery technology, increase blade tip height, and extend construction completion deadline for Phase 2
- Request for Amendment #4 (final) — April 2019
- Public Hearing on RFA#4 DPO — May 2019


Washington
Oregon
Arlington
84
Morrow County
Olex
Ione
74
Gilliam County
19
206

Phase 2 Micrositing Corridor



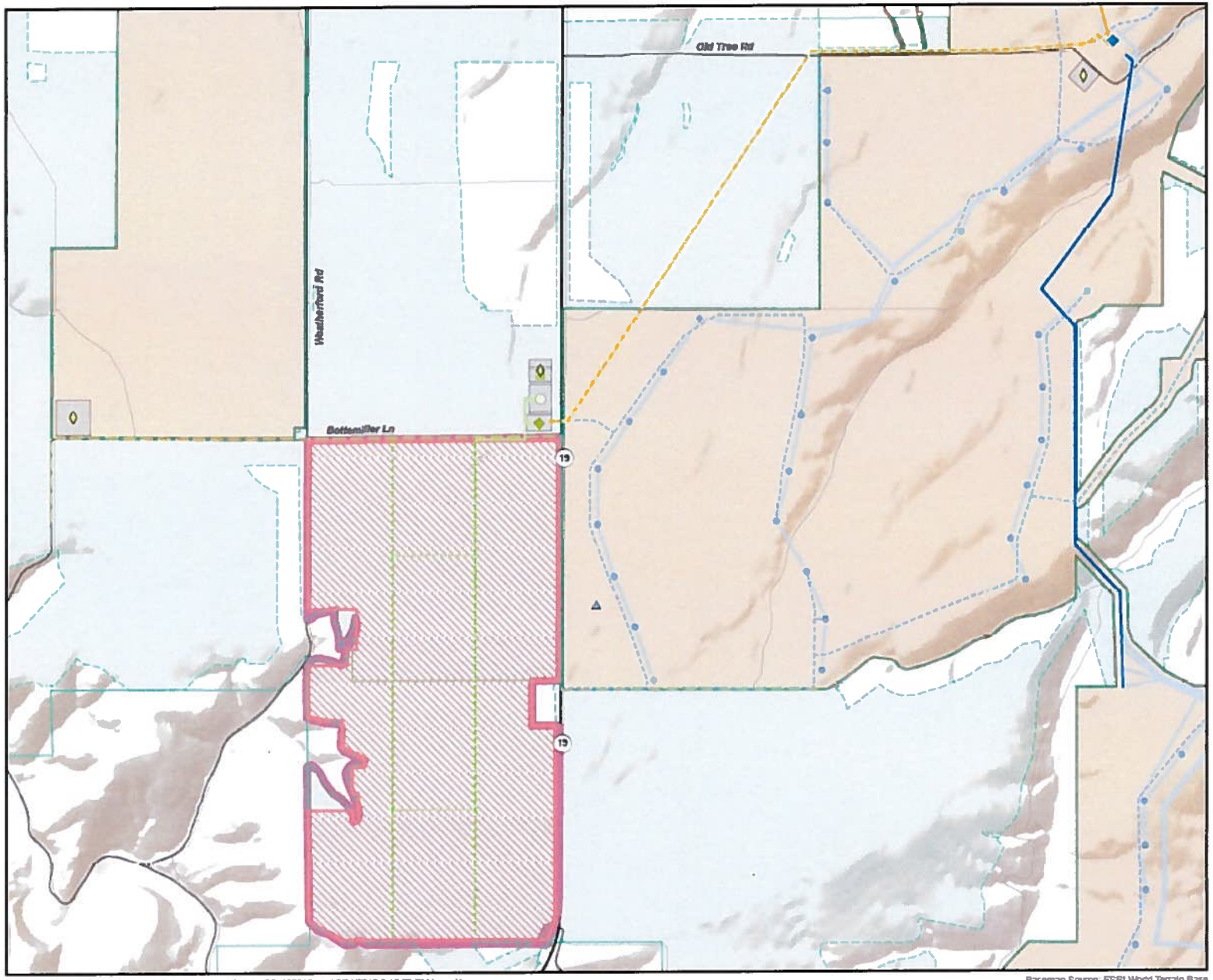
Design Scenarios and Phasing

Considerations

- Incorporate land previously included in the Baseline Wind Project to the south of the previously approved site boundary
- Relocated turbines out of WGS habitat in the northern portion of the previously approved site boundary and onto cultivated plateau, reducing expanse of turbine layout
- Relocated turbines further from areas of tribal concern
- Add solar to respond to market drivers
- Add battery to respond to market drivers and new technology

Montague Phase 1	Montague Phase 2
Under construction	Target, Q1 2021
202 MW of wind, 56 turbines	202 MW of wind, wind/solar/battery storage, or solar/battery storage

Phase 2 Solar Micrositing Area



Project Studies (to date)

Biological Resources

Washington Ground Squirrel	Rare Plants	Raptor Nest Surveys
2010 Wildlife and Habitat Studies Report	2010 Rare Plant Survey Report	2010 Wildlife and Habitat Studies Report
2010 Supplemental Wildlife and Habitat Studies	2017 Rare Plant Survey Report—Phase 1	2010 Supplemental Wildlife and Habitat Studies
2017 Washington Ground Squirrel Surveys and Habitat Mapping— Phase 1	2017 Rare Plant Survey Report—Phase 2	Summary of 2010 Avian Use Surveys (2017)
2017 Washington Ground Squirrel Surveys and Habitat Mapping— Phase 2	2018 Rare Plant Survey Report—Phase 1	Phase 1 Raptor Nest Survey Report (2017)
2018 Washington Ground Squirrel Surveys and Habitat Mapping— Phase 1		Phase 2 Raptor Nest Survey Report (2017)

Project Studies (to date)

Wetlands and Historic, Cultural, and Archaeological Resources

Wetlands	Historic, Cultural, and Archaeological Resources
2017 Wetlands and Waterbodies Delineation Report, Montague Wind Power Facility—Phase 1	2009/2010 Montague Surveys
2017 Supplemental Delineation Report for Reissuance of Expired WD#2011-0364—Phase 2	2010 Baseline Surveys
2018 Wetlands and Waterbodies Supplemental Delineation for Montague Wind Power Facility—Phase 1	2017 Field Investigation Report—Phase 1
2018 Wetlands and Waterbodies Supplemental Delineation for Montague Wind Power Facility—Phase 2	2017 Field Investigation Report—Phase 2
	2018 Field Investigation Report—Phase 1
	2018 Field Investigation Report—Phase 2

Goal 3 Exception

- Needed for Design Scenario B (wind/solar/battery)
- Needed for Design Scenario C (solar/battery)
- Proposed on up to 1,189 acres of cultivated dryland wheat
- Reasons support Goal 3 Exception, including carbon emission reduction from no-till of 1,189 acres for life of the project

Coordination with Underlying Landowner

- Micrositing area in less productive area of farmland
- No water rights available for agricultural irrigation
- Agreement to coordinate on final design to minimize adverse impacts to ongoing farm operations on remainder of 8,000 acres

DPO & Proposed Conditions

Montague supports DPO, proposed findings, and proposed conditions with some recommended revisions and clarifications:

- Consistency between Phase 1 and Phase 2 condition language
- Clarify what obligations are specific to Phase 2
- Clarify that battery supports wind, solar, or both
- Reduce redundancy with applicable state and federal requirements
- Streamline reporting requirements
- Allow for future site certificate split of Phase 1 and Phase 2

AVANGRID
RENEWABLES

Questions?

AVANGRID
RENEWABLES

Montague RFA#4
Rebuttal Testimony

EFSC DPO Hearing
May 16, 2019

Noise

- Phase 1 Pre-Construction Study (Condition 107)
- Phase 2 Noise Analysis in RFA#4
- Phase 2 Pre-Construction Study (Condition 107)
  - Requires noise easements for compliance
  - Landowners control turbine locations

→ *No further action needed.*

Scenic Resources

- Captures resources within site boundary plus 10 miles
- Resources identified in local, state, federal, tribal plans
  - Gilliam County Comprehensive Plan (GCCP)
- GCCP (Goal 5) identifies John Day River is important scenic resource and "rock outcroppings marking the 'rim and walls of steep canyon slopes'" as important characteristics of the landscape.
- Gilliam County Special Advisory Group did not identify any specific "rock outcroppings" that should be considered as a significant or important scenic resource in the analysis area.
- Council previously considered rock outcropping as scenic resource approximately 7 miles from site boundary.

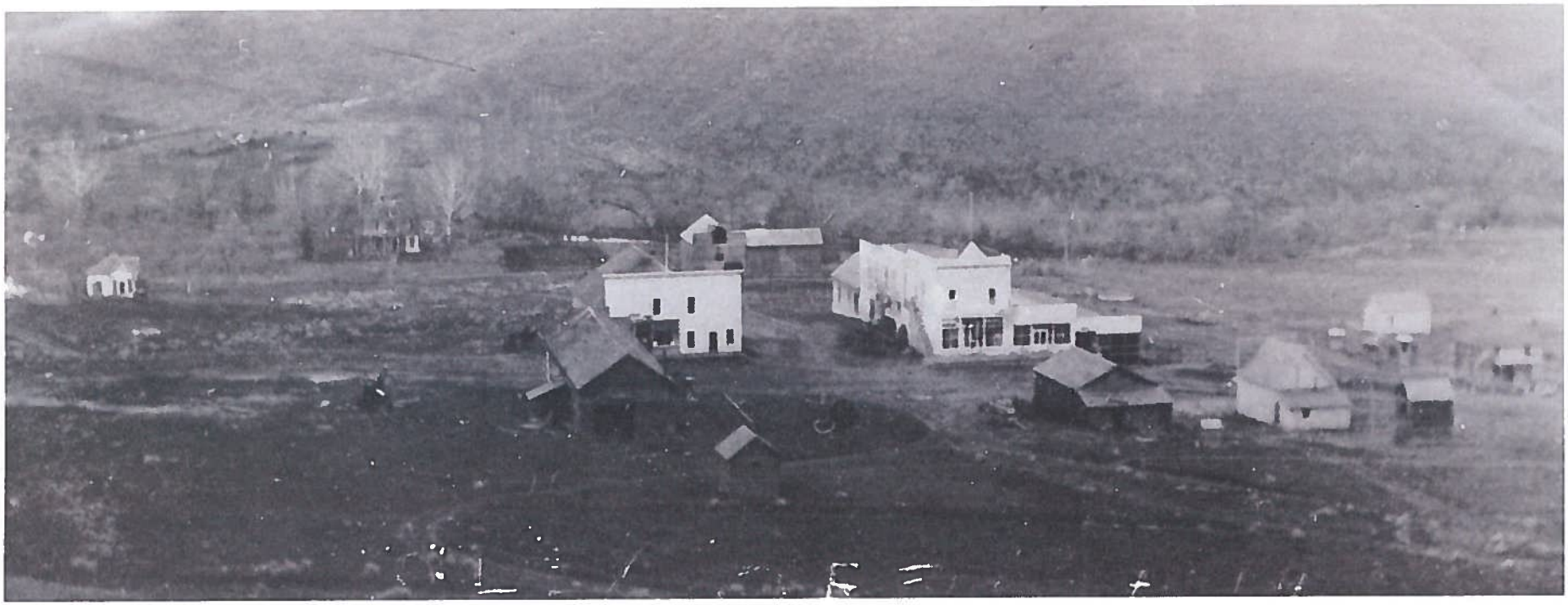
→ No further action needed.

Rock Outcropping Photo

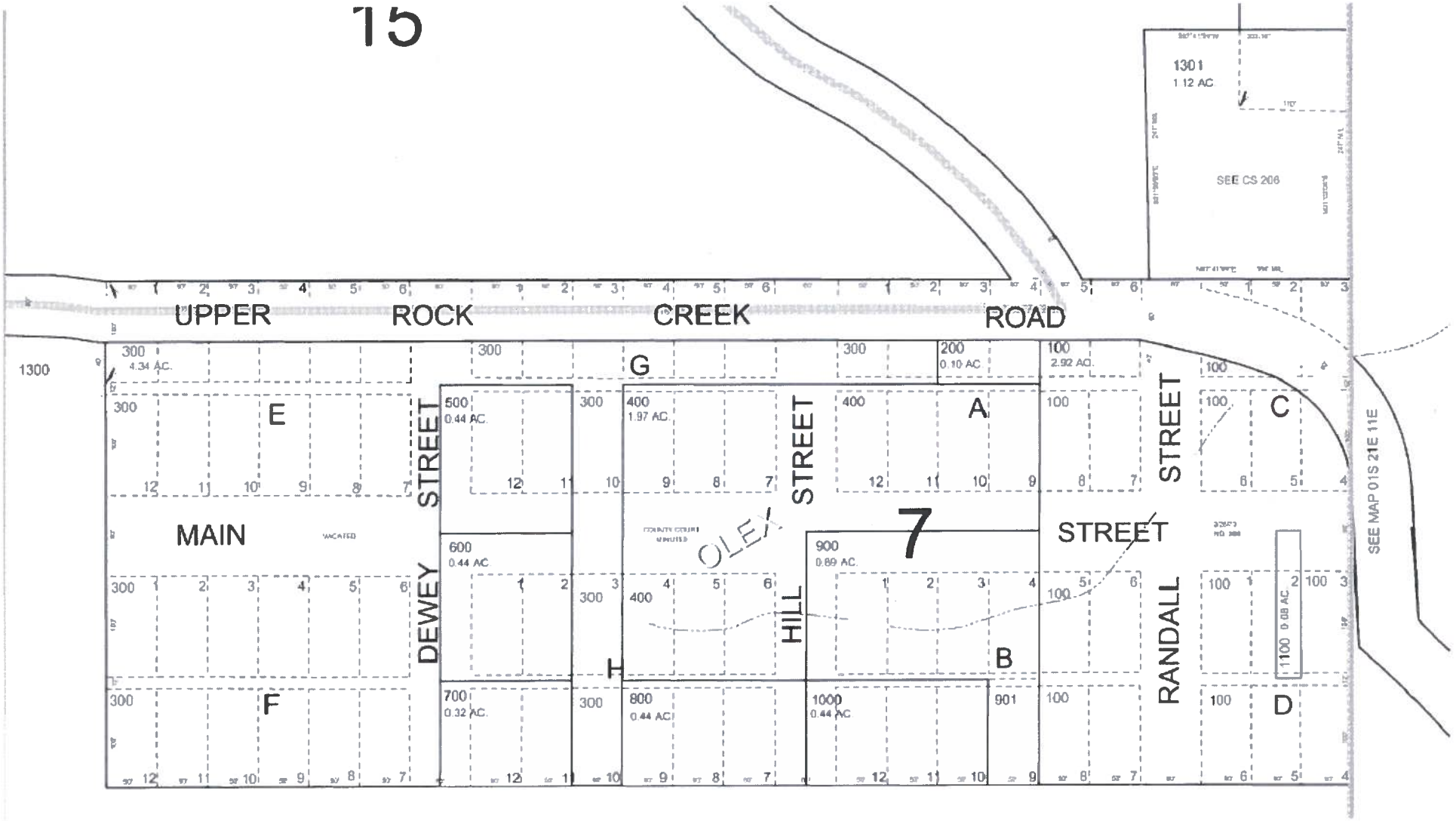
Historic Resources

- Two kinds of historic resources and analysis areas
  - *Exhibit K* = Goal 5 inventoried resources *within 0.5 miles of site boundary* (County-focused)
  - *Exhibit S* = Eligible or potentially eligible NRHP sites *within site boundary* (SPHO-focused)
- Goal 5, Finding 19 (1988 Historic Resource Inventory List)
  - Olex School – outside Exhibit K analysis area
  - Olex Cemetery – inside Exhibit K analysis area
  - Olex Loading Platform – no known location
  - Olex Townsite – mostly outside Exhibit K analysis area
- SHPO Database
  - Olex School (eligible) – outside Exhibit S analysis area
  - Olex Townsite (contributing) – outside Exhibit S analysis area

Historic Photo of Olex Townsite (1914)

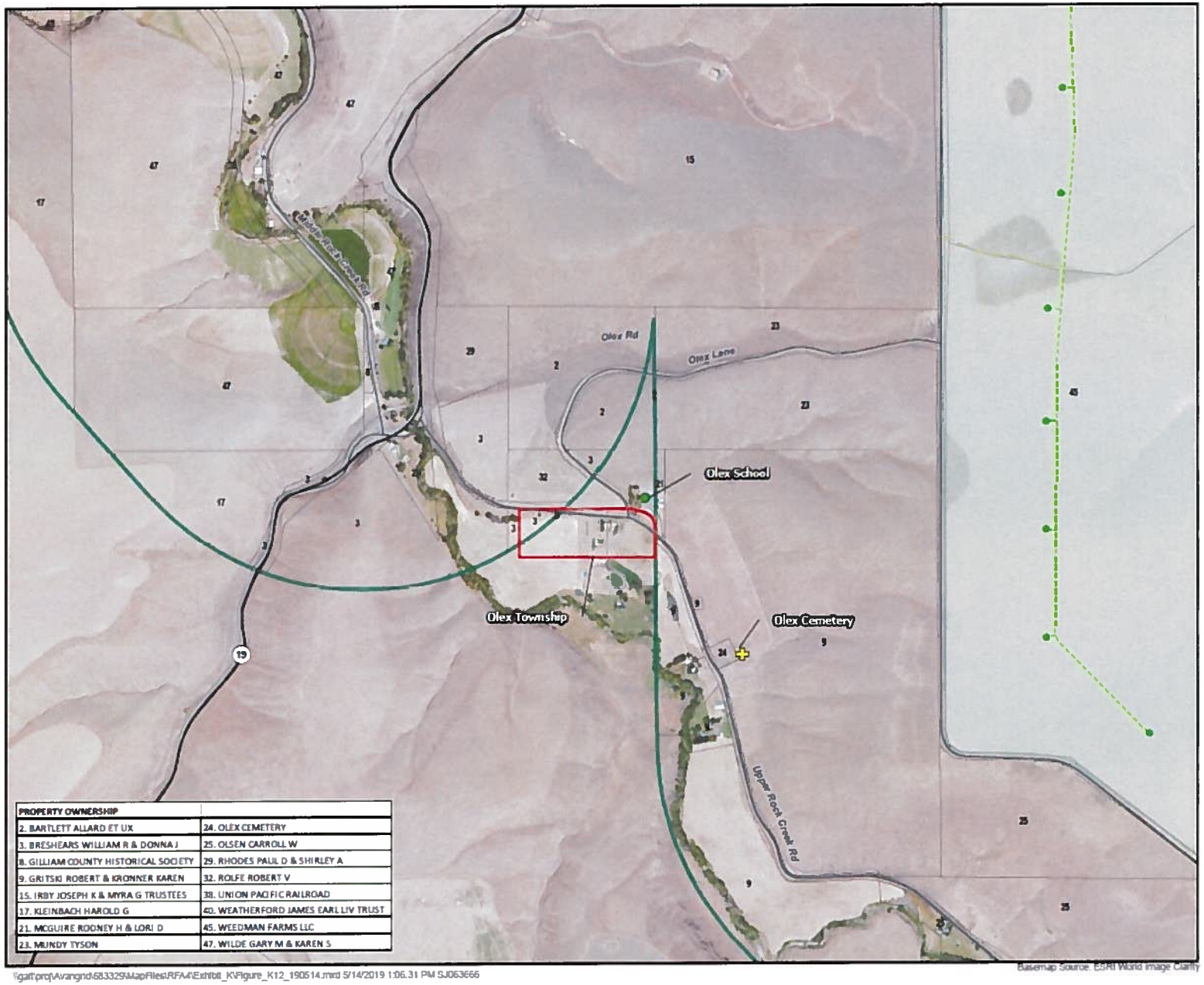


Plat of Olex Townsite



Aerial Photo of Olex Townsite

Land Use Analysis Area – Olex Townsite



PROPERTY OWNERSHIP	
2. BARTLETT ALLARD ET UX	24. OLEX CEMETERY
3. BRESHEARS WILLIAM R & DONNA J	25. OLSEN CARROLL W
8. GILLIAM COUNTY HISTORICAL SOCIETY	29. RHODES PAUL D & SHIRLEY A
9. GRITSKI ROBERT & KRONNER KAREN	32. ROLFE ROBERT V
15. IRBY JOSEPH K & MYRA G TRUSTEES	38. UNION PACIFIC RAILROAD
17. KLEINBACH HAROLD G	40. WEATHERFORD JAMES EARL LIV TRUST
21. MCGUIRE RODNEY H & LORI D	45. WEEDMAN FARMS LLC
23. MUNDY TYSON	47. WILDE GARY M & KAREN S

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Recent Photo of Olex Schoolhouse

Historic Resources (cont'd)

- Review under Exhibit K (2 sites)
  - Unclear whether "the list" is the actual "list" referenced in GCCP.
  - GCZO 4.100, Significant Resource (SR) Zone is directed at aggregate resources, scenic areas, natural areas, and fish and wildlife habitat, historic resources are not explicitly referenced. GCZO 4.100(A).
  - Nonetheless, analyze Olex Cemetery and Olex Townsite under GCZO 4.100(D) and (G) review criteria to demonstrate that the facility will not result in irreparable harm or physical alteration of the sites.
  - "Alteration" for purposes of GCZO 4.100(G) means addition to, removal of, or change in the exterior part of a structure.
- Review under Exhibit S (no sites)
  - Olex School and Olex Townsite outside of analysis area
  - Questionable whether even still eligible

Olex Townsite Visual Simulation

Facing east from Olex Townsite, showing Turbines K8 through K13

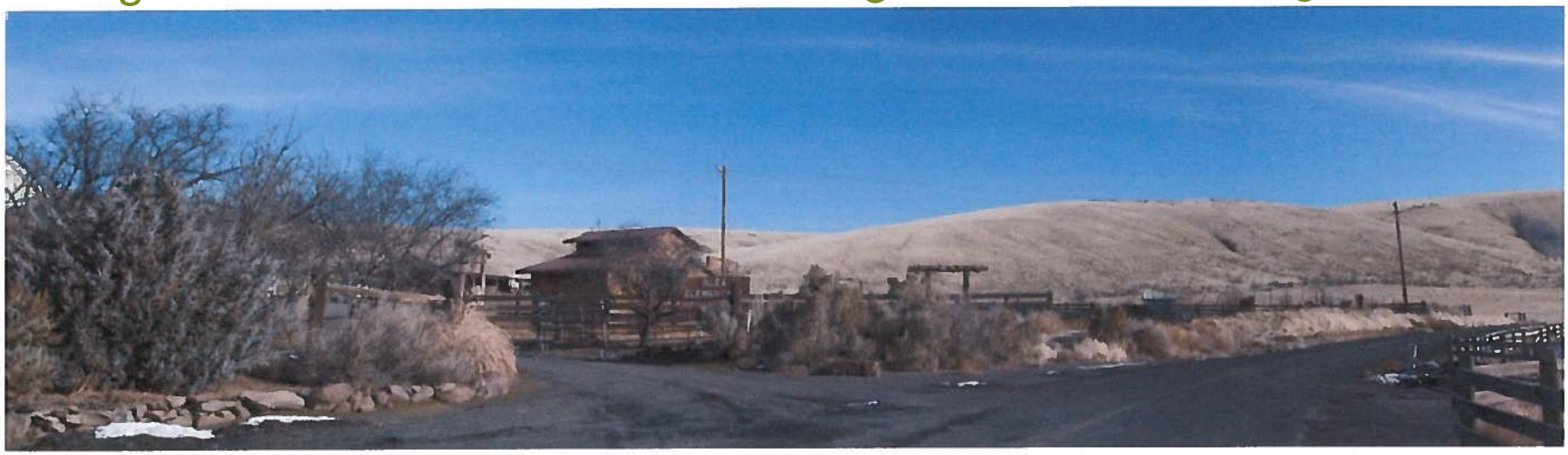

Figure 3a Existing View Looking East from Community of Olex

Figure 3b Simulated View of Proposed Facility Looking East from Community of Olex

Proposed Voluntary Condition

- Certificate holder will not construct Turbines K7 to K12 until certificate holder has received concurrence from SPHO that Olex Schoolhouse and Olex Townsite are no longer eligible for listing on the NRHP, or if eligible, certificate holder has received SPHO concurrence on a mitigation agreement before constructing Turbines K7 to K12.

- Condition would create a view corridor for the Olex Townsite, similar to the view corridor in Condition 105, adopted to address concerns about visual impact to Oregon Trail segments located in Phase 1 site boundary area.

Certificate holder requests the Council close the public hearing and leave the written record open for 2 weeks to allow certificate holder the opportunity to provide written response to public comments and testimony and final legal argument.

PLEASE RETURN THIS FORM TO THE COUNCIL ASSISTANT
*See reverse for tips on giving testimony

ENERGY FACILITY SITING COUNCIL (EFSC)
ORAL & WRITTEN TESTIMONY FORM
May 16, 2019 – Condon, Oregon
MONTAGUE WIND POWER FACILITY
PUBLIC HEARING ON THE DRAFT PROPOSED ORDER

*Name: Irene Gilbert

*Address: 2310 Adams Ave. La Grande

*I represent (if applicable) Friends of the Grande Ronde Valley + Sofy

Print your name OR your organization/business name.

☒ Send me future notifications about this project via email. My email address is: oth.irene@frontier.com

☒ I wish to address the Energy Facility Siting Council and/or

☒ I wish to submit the following written testimony:

* Required

If additional space is needed, please use back of form.

Chase McVeigh-Walker, Siting Analyst, Oregon Dept. of Energy May 16, 2018
550 Capitol Street E 1st Floor
Salem, Oregon 97301

COMMENTS RELATED TO THE MONTAGUE AMENDMENT REQUEST FOUR

I understand that my comments will have no bearing on the decision the council will make to approve this amended site certificate and deny any future requests I make for a contested case. I feel it is my duty to create a written and verbal record of the actions occurring in the siting process, and this is virtually the only tool available to me. Please do not paraphrase or take my comments out of context in your responses. The issues often are lost in interpretation when ODOE rephrases them.

I appreciated seeing the developer will be doing at least 2 post development fatality surveys and the agreement to mitigate for impacts to the Weatherford Barn.

I had planned not to submit comments regarding this development, however, after reading the new interpretation regarding what must be included in comments when the public has as little as 20 days to review the application and draft site certificate, I decided that I must comment. Since I was forced to comment on this issue, I also included other concerns that I had planned to discuss with the developer outside the EFSC and ODOE process.

Comment One:
This site certificate fails to comply with OAR 345-022-0000(a) which requires the facility to comply with the requirements of the Oregon Energy Facility Siting statutes ORS 469.300 to ORS 469.570.

The paragraph starting on Line 23 of Page 11 needs to be removed from the order as it is incorrect. ODOE references OAR 345-027-0067 as supporting a restriction on justification for a request for a contested case to information included in the public comments is inaccurate. The enabling statue is OAR 469.370(3) which states, "Any issue that may be the basis for a contested case shall be raised not later than the close of the record at or following the final public hearing prior to issuance of the department's proposed order. Such issues shall be raised with sufficient specificity to afford the council, the department and the applicant an adequate opportunity to respond to each issue." OAR 469.370(5) further states that a failure to follow the requirements of OAR 469.370(3) means that contested case requests are no longer limited to those issues raised during the public hearing. The exact language of OAR 345-027-067(3)(G) referenced by ODOE is: "The Council will not consider any further public comment on the request for amendment or the draft proposed order after the close of the record of the public hearing." This reference appears in the section of the rule entitled **"Public Comment and Hearing on the Draft Proposed Order for Requests for Amendment Under Type A Review"**
Any council members with a legal background will recognize the principle of statutory interpretation which states "not to omit what has been inserted" or to "insert that which has been omitted". The Statute and the Rule being referenced makes no reference to it applying to

the later action of requesting a contested case. Further, the statute and rule only require a simple statement of what the issue is. Again, there is appeal language that indicates that the public comments are intended to establish the topic, not make the argument regarding the topic. ODOE is asking you to approve and take responsibility for statements that are prefabricated and contrary to the requirements contained in statute which the agency is to abide by. This comment relates to an issue that is under the control of the Council, would effect decisions made on any future requests for contested cases, and make the council responsible and accountable for signing off on the desires of the Siting Division which have no support in either statute or rule.

What is very distressing about this type of insertion of Oregon Energy Siting Division desires to rewrite the law absent involvement of the legislature or the public is the following:

This will result in ODOE responding to a significantly increased amount of information which will be included in comments regarding site certificates. Much of this information would never have to be responded to as most comments do not result in a contested case. The Department is asking EFSC to allow them to increase their work load, which will be billed to the developers, and which will be used to support their request that the legislature authorize 2 new siting analyst positions. Developers should be outraged at the increase in costs to them since they are billed for not only ODOE time, but also legal expenses the department incurs in defense of ODOE actions. as they should be outraged when contested cases are denied over and over resulting in issues never being resolved and developers being placed on the hook for the costs ODOE is billing them responding to these issues over and over. ODOE escapes responsibility, accountability and costs related to their decisions. EFSC ends up being blamed and is then viewed by the public as being incompetent and unethical.

I urge you to refuse to support actions which appear to me to be nothing more than efforts on the part of the Siting Division to increase their empire at the expense of the public and the developers.

COMMENT TWO

ODOE failed to consult with the Department of Navy or include them as an advisory group as required by OAR 345-022-0000. This rule requires the department to consult with other agencies regarding a determination regarding compliance with rules and ordinances administered by other agencies or when other agencies have special expertise. The Department of Navy administers the rules related to the impacts to the safety and health of pilots and the public when piolets in training are performing high speed, low altitude maneuvers. In addition, they are responsible for determining safety when any structure exceeds 500 feet in height. I am submitting by reference with this comment the documents provided by the Department of Navy in the Saddle Butte contested case hearing which includes documentation of turbine impacts to safety and health and the Navy's special expertise related to low altitude training for new pilots responsible for protecting the United States. In the predictable future when ODOE claims that the testimony presented as evidence from the

Saddle Butte hearing is not admissible as evidence in this site certificate, please refer to the legal definition for "evidence" as it has been defined through appeal. It basically says that while the weight of some evidence may be stronger than others, any document that could be used to influence the public to come to a decision is appropriate and admissible as evidence.

The Department of Navy was concerned enough to request a contested case when the turbines were shorter than they are now. The Department is not given authority in the statutes to move the Department of Navy into the ranks of the public with limited access to opportunities to review, analyze, research and comment on the proposed amended site certificate.

ODOE is placing me, Navy personnel and citizens at risk due to the failure to meet the requirement to consult with them. Given past actions of ODOE and EFSC to deny access to the a contested case from the Department of Navy in spite of the fact that they did not receive notice in a timely fashion, I am making this comment to preserve my right to a contested case hearing absent documentation that the Department of Navy has been consulted with and determined that the turbines do not pose a threat to pilots, me and other citizens due to their increased height. The increased size of the proposed turbines which have never befor been constructed in the state require additional fatality monitoring to determine impacts to wildlife and their habitat in the area of the proposed development.

Comment Three
The Oregon Department of Energy gave an inaccurate response to the direct question from Gilliam County. In the e-mail dated January 25, 2019, they requested the blade length. In the response to the question, it was stated that the blade length of the largest turbine would be 246 feet. It is actually proposed to be 492 feet. Previously the blade length approved was 328 feet. The increase of 164 feet increases the effective kill area for birds and bats from 1.94 acres per turbine to 4.36 acres per turbine. (Area Calculations are attached.)

Comment Four:
Properties of religious and cultural significance identified in the communications from the Confederated Tribes of the Umatilla Indian Reservation dated March 26, 2019 need to be included and reviewed under the Land Use Rules and listed on Page 139 and 140 of the Draft Proposed Order on Request for Amendment 4. Tribal land management plans along with many tribal rules and contractual agreements are provided in oral histories. The information provided in the letter place in written form the verbal history indicating the significant importance of these sites and the land use protections which apply. The application fails to meet the requirements of OAR 345-022-0030 in order to determine that the applicant meets these requirements.

A couple of years ago I was invited by a group of 12 elders from the Amish Community in Monroe and Vernon Counties, Wisconsin to talk with them and their attorney regarding plans to run the Badger Cooley transmission line through their community. The issue was how to convey to "Englishmen"(that would be us) why the transmission line would be an infringement on their religious freedom and destroy their community due to those impacts. I took on the task of attempting to communicate what I have observed and learned over the years of spending time

in my cabin within the area and my relationships with the Amish people. The transmission line ended up being constructed in another area. The response of the Oregon Department of Energy indicating that they would require a 200 foot setback from these properties is the kind of action that the Amish feared. As a step mother of two Native American girls, I find myself outraged that the Oregon Department of Energy would be so bold. The appropriate site certificate condition would be to require the developer to provide a formal site plan for these locations that includes mitigation for impacts that is acceptable to the tribal leaders. I do not understand the thinking of the Amish or the tribes regarding what is important to them and how to protect their religious values. I know that when a young Amish man told me I was a "hard working woman", it was a statement of incredible respect and highly unusual. That I can understand. I would not venture to assume I understand their religious beliefs. The developer and certainly the Oregon Department of Energy have no legitimate basis for establishing that a 200 foot setback is adequate when the tribal representative has clearly stated that the development will have a significant adverse effect to the integrity of design, setting, feeling and association" of these locations of significance to their culture and religion. The site certificate needs to be changed to include a site condition that provides for the tribes to sign off on mitigation requirements.

Comment Five:

The developer has not provided information necessary to make a determination that the development meets the requirements of ORS 469.310. This site certificate fails to meet the requirements of ORS 469.401(2) and does not provide information necessary to determine compliance with the standards, statutes and rules described in ORS 469.50l and ORS 469.503. The statement on Page 12, line 36 indicates that the developer will have the ability to design the facility in a manner that is different from any of the design scenarios presented in this amendment. This level of "flexibility" denies the public, reviewing agencies, and any other interested parties the information necessary to determine whether or not it is necessary to comment or object to impacts the development will have on any of the criteria for evaluation contained in Div. 22, Div. 24, The evaluation of visual, noise, health and safety, land use, habitat impacts, impacts to Threatened and Endangered Wildlife, etc. are dependent upon knowing what resources exist and where the siting corridors will be located. Two specific examples (Note that these are only examples, but the comment refers to the inability to evaluate any of the standards given the amount of flexibility being proposed) 1. The land use standard requires evaluation of multiple issues such as views, wildlife, etc. which are dependent upon knowing where exactly the development will be built. 2. Depending upon where the development is built, there could be a need for an exception to a rule, etc.)

The developer has enlarged the site boundary to the extent that major changes and resulting impacts are possible with the level of flexibility being proposed in the site certificate. The site certificate already proposes three different options for this development. That provides a level of flexibility beyond any development sited to date. Expanding the site to over 44,000 acres which is approximately 69 square miles and then giving the developer the opportunity to utilize any of that site is basically abdicating responsibility on the part of the Department and EFSC to assure compliance with the statutes and rules and denies the public and other agencies any

opportunity to comment on actual impacts that could occur depending upon what part of the site is actually used. This is not acceptable.

Comment Six:

The weed management plan needs to comply with the Oregon Statutes ORS 569.390 requiring the developer to control noxious weeds and keep them from going to seed. It also impacts both the Wildlife standard as well as the Threatened and Endangered species rule OAR 345-022-0060 and OAR 345-022-0070 due to the impacts noxious weeds have on habitat. The Oregon Statute also requires washing of equipment and vehicles which enter or leave the development to control the spread of noxious weeds.

I would appreciate it if you would read my document in it's entirety and seriously consider requiring this development to comply with Oregon Statutes and rules.

Sincerely

Irene Gilbert
2310 Adams Ave
La Grande, Oregon 97850
Email: ott.irene@frontier.com

Information also submitted on behalf of Friends of the Grande Ronde Valley in my role as Legal Research Analyst representing that non-profit.

Let's Calculate Area of a Circle

Area of a Circle Calculator

Area of a circle is simply, number of square units fit into a circle.

Our circle area calculator, requires **diameter OR radius** of a circle to calculate area of a given circle.

Circle Diameter

492 feet

Circle Radius

246 feet

Price (Optional)

foot (ft^2) $

CALCULATE AREA

Results: Area of a Circle

190116.621025 ft^2

Square Footage = **190116.621025** ft^2

Square Yards = **21123.857762** Yd^2

Square Meters = **17662.404443** m^2

Acres = **4.360000** acre

Let's Calculate Area of a Circle

Area of a Circle Calculator

Area of a circle is simply, number of square units fit into a circle.

Our circle area calculator, requires **diameter OR radius** of a circle to calculate area of a given circle.

Circle Diameter

328 | feet

Circle Radius

164 | feet

Price (Optional)

	foot (ft^2)	$

CALCULATE AREA

Results: Area of a Circle

84496.276011 ft^2

Square Footage	=	**84496.276011** ft^2
Square Yards	=	**9388.381228** Yd^2
Square Meters	=	**7849.95753** m^2
Acres	=	**1.940000** acre

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ENERGY FACILITY SITING COUNCIL (EFSC)
ORAL & WRITTEN TESTIMONY FORM
May 16, 2019 – Condon, Oregon
MONTAGUE WIND POWER FACILITY
PUBLIC HEARING ON THE DRAFT PROPOSED ORDER

*Name: Eudora S. Olsen

*Address: 65848 UPPER Rock Creek Road Arlington Ore. 97812

*I represent (if applicable) _____

Print your name OR your organization/business name.

☑ Send me future notifications about this project via email. My email address is: above

☒ I wish to address the Energy Facility Siting Council and/or

☒ I wish to submit the following written testimony:

I would like to read my letter and hand that in to the council ~~to~~ so that they can enter it with the rest of the comments related to Montague wind Power facility.

* Required

If additional space is needed, please use back of form.

Greetings, May 16, 2019

My name is Eudora Olsen. I live at 65848 Upper Rock Creek Road, twenty one miles south of Arlington, in the historic farming community of Olex, Oregon. I am the author of the letter that you are hearing today, written on behalf of my-self and my neighbors who live in the Olex Community.

This is where I would like to begin my first comment regarding the request for Amendment 4 of the Montague Wind Power Facility and the Draft Proposed Order. I am here today to both read my comments and hand deliver them so that my comments will become part of the permanent record as having raised an issue. I support the solar/battery storage but have a concern about some turbines along Baseline Road. I start out my comment by clarifying that a few of you have already heard from me via email through my Gmail account where I am registered under my maiden name of Eudora Nachand ; (chosen14yah@gmail.com).

A notice of this public meeting being held here today were supposed to be mailed to property owners between up to 1,000 feet of the site boundary. I am going on record today to reiterate once again, that Carroll W Olsen as a land owner under these conditions did not receive the Public Notice of this meeting. I know this to be true because the address provided to you by Gilliam County on March 21, 2019 for Carroll W Olsen, is my mailing address and has been for the last thirty seven years. Carroll W Olsen receives all of his mail to this address in my United State mailbox and has, ever since he changed his address to do so, approximately seventeen years ago when his wife died.

You might be wondering, how did I get involved in the process of raising an issue here today? On April 29th, 2019, I mailed a certified and notarized letter to the Gilliam County Court and then on that same day, I hand delivered a copy of that same letter to the Gilliam County Court Administrator. In that letter I requested that the Council impose a condition on the Montague Wind Power Facility that they place the turbines where they cannot be seen or heard, by those residents who reside on Upper Rock Creek Road. I was told via a phone message later that day (which I still have), from the county judge that ~~that~~ "It turns out that the siting of the Montague Project is actually not something that the County Court has jurisdiction over", even though Chase McVeigh stated at the February 6th, 2019 meeting that part of his presentation was to provide an overview process of the roles and responsibility to the Special Advisory Group (SAG) which is the Gilliam County Court.

I also noted my concern to the Gilliam County Court regarding the possible constant audible and visual intrusion and disturbances that will forever impact our community of the residents living along Upper Rock Creek Road, depending on the final turbine placements.

The reason I did this is because a few weeks prior, I witnessed wind tower equipment coming in on trucks and trailers at the north end of our county. One can hardly miss the turbine parts coming in on Hwy 19 along with all the gravel trucks, etc. When I saw all of the traffic coming in on Baseline Road, I decided to go online at Avangrid Renewables (signs posted) to research the subject of my inquiry. When I did this, I came across a photo and then a comparison of a simulated photo showing the turbines and what they would look like from that vantage site. The visual impact caused me a great deal of stress regarding the future possible placement of wind turbines just above Upper Rock Creek Road.

The photo I saw was the old Olex Grade School of what it looks like now and what it will look like (as near as the developer can tell) once the wind turbines are placed along Baseline Road should this fourth amended site certificate be recommended for approval.

This was a traumatic disturbance to say the least. Seeing this visual caused me to look further into this project to see how it will affect what I will see and hear. This is when I found maps of the 'possible 'placement showing two turbines that I will tentatively see, from any vantage point on the property where I have lived; as I mentioned earlier for the last thirty seven years. The cliffs in my home and property view-shed where these two turbines are proposed to be placed are definitely a scenic resource and are, according to Goal 5, "an important characteristic of the county landscape".

Upon further reading, I found out about this meeting today and the date the public notice was supposedly issued only 41 days prior. This didn't offer much time for me or anyone else to read all the documentation in order to make an informed comment. The Department of Energy agencies and the Tribe have all had more than two years to comment or work out any differences of opinion. Everyone has had plenty of time to study and comment, except for the people who would see and hear the turbines but yet are not within the expounded site boundary as a participant. In other words, the folks who will be affected the most, did not get notified of this meeting today.

I would also add that no notice of this meeting has been published in the weekly local paper as of May 2nd, 2019. There may have been something published after this date because I know that the publisher (Mac Stinchfield), sat in the audience of the Gilliam County Court meeting held on May 2nd, 2019 when I addressed the court; both noting that there was no such notice of this meeting posted on either of the two bulletin boards at the Gilliam County Court House nor has there been sufficient notice regarding the addition of 13,000 or more acres also adding solar into the equation.

I also note here that from May 2nd when I addressed the Gilliam County Court, until this date, there was only a 15 day window; certainly not enough time for anyone who could be effected by today's outcome to either comment on any modifications that might lead to a recommended approval by this council.

Upon even more reading online at the Avangrid Renewables site regarding the Montague Power Facility, I read on page R.7.3 Page R-18 of Exhibit R, regarding a brief 'non-historical' analysis of the Community of Olex and how all the residents will be affected. In the second paragraph mentioning where these turbines are proposed to be placed, it reads that the turbines placed along Baseline Road will be potentially visible from different parts of the community ranging from 1-5 turbines or 6-15 turbines and for two residents their turbine visibility will range from 6-30, yet none of us were contacted about how this would impact the serene view of our landscape. From everything I have read so far on the Avangrid Renewables webpage, there was no historical analysis regarding the community of Olex. I question why this was not addressed?

The author makes light of the potential visual impact subject by saying "there are a number of factors that are likely to attenuate (uh-ten-yoo-yet) the potential effect of the turbines on the views experienced by those who live in the community or who drive through it. One of them is that when viewers are looking straight ahead at their surroundings, the turbines located on the tops of the surrounding canyon will not always lie within their field of view". I was offended when I read this and I suggest that this text is never used again to explain the eye movement of someone like myself who was never even spoken too about the Montague project that includes spinning blades that easily distract. My husband and I often look up at the ridge line and scan the hills and cliffs all around our canyon. I sure hope that the Department of Energy or anyone on this council does not agree with that blanket statement.

Our community is a very peaceful and quiet one. The Ries /Olsen family is the oldest homestead with a continual resident of our family living here on Upper Rock Creek. I discovered this information many years ago through an employee who worked at the Gilliam County Museum. Upon receiving this information, I have made it my personal quest to look out for my neighbors and their well-being, as a representative of that distinction. Therefore, I am not only raising my concerns, but the concerns of my neighbors as well.

Our community has a pioneer cemetery with the earliest burial listed in 1866. There are twelve members of our family resting in peace at the Olex Cemetery with the oldest family grave site having died in 1885. Her name was Pheobe C

Lincolnmier Reis, the wife of the late Christopher H Reis, my husband's Great Great Grandfather on his grandmother's side. This site has informally been in the process for preparation of an application to be listed on the National Register of Historic Places. Just so you know, folks still bring their loved ones occasionally to be laid to rest at the cemetery here in Olex. I myself plan to be buried here.

Every cemetery that I have ever visited, are plotted in a landscape of serenity and our community cemetery at Olex is no different. I do not want this to change. I feel it is imperative that when folks come to place flowers, or bury their loved ones or even the folks that just come to the cemetery to reflect on those who came before us; that they be able to enjoy the peaceful environment that Olex is known for.

For the folks who still come to attend a graveside service, I feel that they deserve the right to pray and say their farewell, in a peaceful setting without the direct and physical impact that these wind turbines will have, looming above our pioneer cemetery at Olex.

There are three other historic sites. They are the Olex School, shown in the simulated photo I mentioned in paragraph seven of this letter. My husband's mother, he and his siblings and two of our children went to grade school at the Olex School. The other two sites listed are the Olex Townsite and the Olex loading platforms.

In regards to noise, how can one comment when everything is just tentative? When more information becomes available, I reserve my right to comment further on the site certificate conditions. I do contend that an additional noise analysis needs to be conducted that will include the historical features I have mentioned and that you as this council add some type of condition that relates especially to the Olex Cemetery. On a side note, I find it very confusing that no one like myself received a public notice of this meeting today when it is obvious that I am within the noise analysis area. It would have been nice to at least been briefed on this rather than finding this out in the study of my inquiry.

My hope is that this council might be convinced to do everything you know possible to protect the quality of our lives in a respectful manner; so that the backdrop of our historical community will not be forced to endure the constant audible and visual intrusion and disturbance that will forever impact our community of the folks who live along Upper Rock Creek Road. Something you might also consider is this: Does it always have to fall within a rule, or standard or other regulation? Can't we humans think through what we are doing to things that we value? Can't we protect important resources from adverse impacts even if the significance is not clearly known today? How can we as a people explore green energy if we as a people do not protect the existing green earth that we live on; such as the Olex School, the Olex Cemetery, and the wagon trails of all those who have come before us. Is this council aware that there are wagon trails on the opposite side of Baseline Road? We have historical information that you are not aware of.

I remain hopeful that you will agree that this is an easy fix.

Perhaps you have influence with Montague Wind Power Facility so that they might re-evaluate this situation and change the proposed placement of any turbines right alongside of Baseline Road so that residents in our peaceful canyon would not be affected by either the audible or visual impact that would other-wise affect us if their proposed placement were to go through.

There is still enough time allotted anyway, since the final turbine type for phase 2 of this project has not yet been decided, as is stated in the documentation. Montague still has plenty of time to rectify the turbine arrangement along Baseline Road so that we are not visually or audibly affected here on the canyon floor. Perhaps they might be persuaded

to put in short turbines alongside Baseline Road where the site and noise of higher turbines might otherwise drop over into our community?

For my second comment, I am also proposing that everyone on this panel take a tour of our community, specifically the sites I have mentioned as well as including a visit to our canyon where you will discover the amphitheater like landscape with rock cliffs both in front of and behind the property. This thriving environment is less than 400 feet below the plateau where the windmills are proposed to be placed above in our canyon. Because of the rock cliffs in our canyon, I find it very likely that the 29 decibels allowed for hearing will be greatly amplified because of the echo effect. But of course, how would anyone know this if they are not told or have not engaged themselves in this geological condition?

Please come and bring your camera. Take a few memories home with you of the often photographed Crum Flour Mill. I invite you to come and see the perception of what we all think of as God's best hidden beauty of Gilliam County, the place we call home. Come visit, Olex community and its people. Come and visualize our scenic and historical resources that have been overlooked in the planning stages of Phase 2 of the Montague Wind Power Project.

On behalf of myself and some of the Olex Community, I thank you for this opportunity to state my case and request additional analysis and clarifications.

Sincerely,

Eudora S. Olsen

Eudora S Olsen

Rodney H. McGuire
Rodney H McGuire
66325 upper Rock crack Road
Arlington, Oregon 97812
olex School


OLEX
CEMETERY

Figure 3a Existing View Looking East from Community of Olex

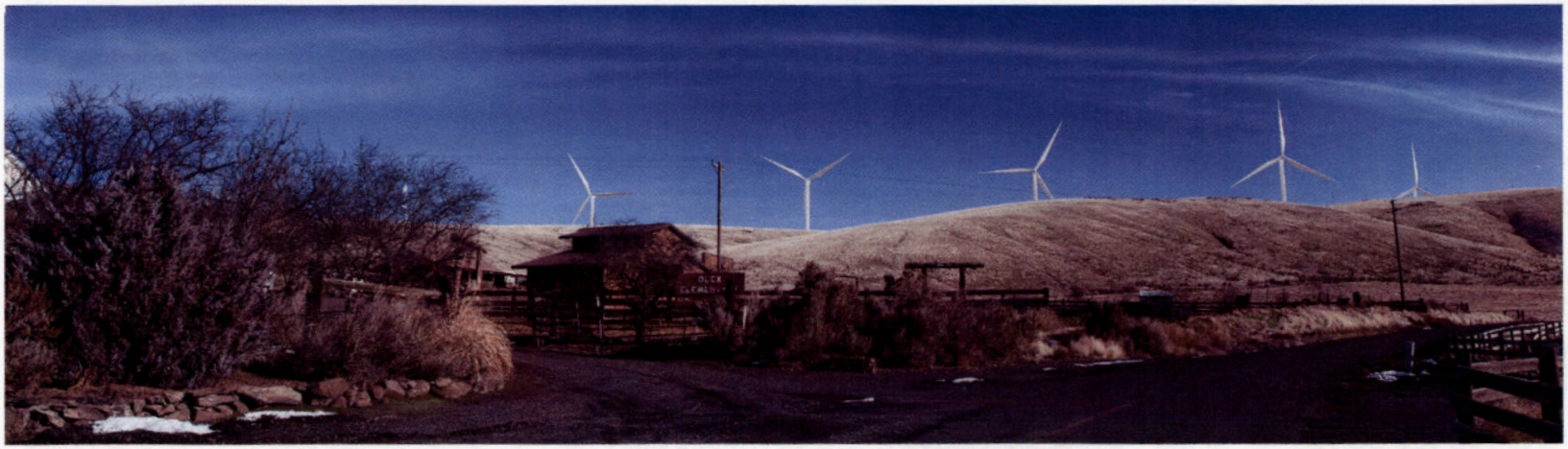

Figure 3b Simulated View of Proposed Facility Looking East from Community of Olex

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*See reverse for tips on giving testimony

ENERGY FACILITY SITING COUNCIL (EFSC)
ORAL & WRITTEN TESTIMONY FORM
May 16, 2019 – Condon, Oregon
MONTAGUE WIND POWER FACILITY
PUBLIC HEARING ON THE DRAFT PROPOSED ORDER

*Name: Erin Weedman

*Address: 68040 Hwy. 19 Arlington, OR 97812

*I represent (if applicable) Erin Weedman, Weedman Brothers, Weedman Farms, LLC
Print your name OR your organization/business name.

☐ Send me future notifications about this project via email. My email address is: _____

☒ I wish to address the Energy Facility Siting Council and/or

☐ I wish to submit the following written testimony:

* Required

If additional space is needed, please use back of form.

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*Name: Dennis Macnab

*Address: 23050 Wolf Hollow Rd

*I represent (if applicable) Highland Hills Ranch Condon, OR 97823

Print your name OR your organization/business name.

☐ Send me future notifications about this project via email. My email address is: info@highlandhillsranch.com

☒ I wish to address the Energy Facility Siting Council and/or

☒ I wish to submit the following written testimony:

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ORAL & WRITTEN TESTIMONY FORM
May 16, 2019 – Condon, Oregon
MONTAGUE WIND POWER FACILITY
PUBLIC HEARING ON THE DRAFT PROPOSED ORDER

*Name: STEVE SHAFFER

*Address: Box 414 CONDON, OR. 97823

*I represent (if applicable) _____
Print your name OR your organization/business name.

☐ Send me future notifications about this project via email. My email address is: _____

☒ I wish to address the Energy Facility Siting Council and/or

☐ I wish to submit the following written testimony:

ECONOMIC IMPACT OF RENEWABLE ENERGY TO A COUNTY

* Required

If additional space is needed, please use back of form.

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ENERGY FACILITY SITING COUNCIL (EFSC)
ORAL & WRITTEN TESTIMONY FORM
May 16, 2019 – Condon, Oregon
MONTAGUE WIND POWER FACILITY
PUBLIC HEARING ON THE DRAFT PROPOSED ORDER

*Name: Michelle Colby

*Address: PO Box 427 Condon OR 97823

*I represent (if applicable) Gilliam County Planning Dept.
Print your name OR your organization/business name.

☐ Send me future notifications about this project via email. My email address is: _____

☐ I wish to address the Energy Facility Siting Council and/or

☒ I wish to submit the following written testimony:

Encourage the EFSC Council to consider taking up the task of how an EFSC goal 3 exception to exclusive farm use land may be coordinated/implemented/recognized at the local-County Level

* Required

If additional space is needed, please use back of form.

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PLEASE RETURN THIS FORM TO THE COUNCIL ASSISTANT
*See reverse for tips on giving testimony

*Name: CHUCK LITTLE

*Address: 17 WESTVIEW DRIVE HERMISTON, OR 97838

*I represent (if applicable) CHUCK LITTLE

Print your name OR your organization/business name.

☐ Send me future notifications about this project via email. My email address is: _____

☐ I wish to address the Energy Facility Siting Council and/or

☒ I wish to submit the following written testimony:

* Required

If additional space is needed, please use back of form.

May 16, 2019

Oregon Department of Energy

550 Capital Street NE

Salem, Oregon 97301

Re: Montague Wind Power Facility, Draft Proposed Order on Request for Amendment 4 of the Site Certificate.

I am writing today to voice some of my concerns on the modifications to the site certificate.

All though I do like some of the additional features such as the solar photovoltaic generation system I am concerned of the use of up 1,189 acres that will be added to the site. This is just short of two square miles of land by only 91 acres.

There is also the 100-megawatt battery storage system that will also be a great addition but it will add some concerns I feel need to be addressed. This will also add to the foot print of the site. It will also add some element of the possible problems with the chemical release for the facility in the event of an accidental damaging to the batteries. This could harm wild life, plant life and possible pollution of local water resources.

The addition of up to 81 wind turbines could also affect the surrounding wild life.

There is also the increase of wild fires in the past few years that have damaged vast areas of public and private lands across the State of Oregon. The Substation fire outside of The Dalles was one of the largest in the nation, at that time one of the highest priorities.

The questions that I think that need to be addressed are as follows:

1. Have the studies that have already been done adequately address all the issues that increasing the overall site boundary?
2. Have the photovoltaic panels been adequately studies to see what hazards that they could cause to the environment in the event of an accident?
3. Has the 100 megawatt battery storage system been adequately planned for protection of any harmful releases to the environment?
4. Has the fire protection plan been adequately reviewed to be sure that any possible fires do not get out of control and are extinguished in a timely manner before thousands of acres of land involved?
5. There is also the matter of the use of Oregon residents in the construction of the additional phases of the project being requested. The current contractor is from out of state and uses only around 10% local people on the project. Can't we do better than that?

Chuck Little

Chuck Little
11 WESTVIEW DRIVE
HERMISTON, OR 97838

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May 16, 2019 – Condon, Oregon
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*Name: Rodney McGuire

*Address: 66325 UPPER Rock Creek Road Arlington oregon 97812

*I represent (if applicable) _____

Print your name OR your organization/business name.

☒ Send me future notifications about this project via email. My email address is: _____

☐ I wish to address the Energy Facility Siting Council and/or

☒ I wish to submit the following written testimony:

written letter :

* Required

If additional space is needed, please use back of form.

As a property owner and a tax payer of Gilliam Co and supposedly within view of a proposed wind mills I am stringly in opposition. We have never been notified of any such occurance, if it wasn't for my concerned, neighbor I would have never Known. She came with pictures even. I live in the country to see the country not to be surrouded by a bunch of worthless Wind mills. The Landscape of our area and the heritage is very important to us. I live in The old school house and have for 23 years lived on rock creek for going on 40 years the sites and heritage here is very valuable to us, We have wagon ruts about my house & shows guest and our cemetary To now add disturbing wind farms in our view without being informed, is very disturbing I can't attend todays meeting I am obligated some where else but I assure you I will be talking to my attourney about my rights on this matter.

and didn't have time to write an clean professional Letter my neighbor brought this to my attention as I was leaving for work.

Rodney McGuire
66325 upper Rock
creek Road
Arlington, Oregon
97812

P.S,
I would also Like to Know who approved such a Project covering up some of Gilliam ~~County~~'s best Land, Schutler flat is some of Gilliam Co.s best soil and to cover it with wind and solar is crazy, we have so much other Lands this could of been done on who approved this where was our planning Comm.ss. where was public notice. my attourney will soon be asking these questions. I had very little Time to prepare and I am very concerned,

May 16, 2019

To: Oregon Energy Facility Siting Council Members
Chase McVeigh-Walker Oregon Department of Energy
551 Capitol Street NE, 1st Floor
Salem, Oregon 97301

From: Karen Kronner
Bob Gritski
66174 Upper Rock Creek Rd.
66186 Upper Rock Creek Rd.
Arlington, Oregon 97812

Thank you for the opportunity to comment on the Montague Wind Power Facility Request for Amendment 4 (RFA4) dated April 5, 2019. We are in support of the Phase 2. We have been discussing with Brian Walsh of Avangrid Renewables and his team a few of the proposed turbine locations near our home and our second residence located in the valley at Olex. Some of our land is next to Baseline Rd. near the south end of the proposed expanded boundary. We appreciate their thoroughness and responsiveness and the time to come visit with us. Staff from Oregon Dept. of Energy and the Gilliam County Planning Dept. visited our homesite with Avangrid Renewables. When more final turbine locations are known we will continue to discuss them with Avangrid. We think the solar project is on an excellent site and will be good for the local communities.

Sincerely,

Karen Kronner
Karen Kronner

Bob Gritski
Bob Gritski

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May 16, 2019 – Condon, Oregon
MONTAGUE WIND POWER FACILITY
PUBLIC HEARING ON THE DRAFT PROPOSED ORDER

*Name: PAUL & SHIRLEY RHODES

*Address: 67771 Hwy 19 "OLEX" ARLINGTON OR 97812

*I represent (if applicable) _____
Print your name OR your organization/business name.

☐ Send me future notifications about this project via email. My email address is: BLUEBLUESEASHORE@MSN.COM

☐ I wish to address the Energy Facility Siting Council and/or

☑ I wish to submit the following written testimony:

ONE CANCER "SURVIVOR" BOUGHT THIS HOME FOR BEAUTY SEEING OPEN CLEAR ROLLING HILLS CREEK. FREE FROM LIGHTS OPEN SKY STARS CLEAR BEAUTY

THIS IS ALL BEING TAKEN ALONG WITH HOME VALUE! WILL DROP MUCH

Shirley A Rhodes

* Required

If additional space is needed, please use back of form.

MCVEIGH-WALKER Chase * ODOE

From: Brian Skeahan <brian.skeahan@community-renewables.org>
Sent: Thursday, May 16, 2019 3:18 PM
To: Montague AMD4 * ODOE
Subject: CREA letter of support for Montague Amendment 4
Attachments: EFSC letter of support for Montague Amendment 4.pdf

Please find attached a letter of support for Amendment #4 to the Montague wind project in Gilliam County. Based on information provided by EFSC these comments, submitted prior to the close of today's hearing will be considered as part of the record for the Council's consideration of the Draft Proposed Order.

Your consideration is appreciated.

Brian Skeahan
CREA

May 16, 2019

Chase McVeigh-Walker
Siting Analyst
Oregon Dept. of Energy
Via email: Montague.AMD4@Oregon.gov

On behalf of the Community Renewable Energy Association I am writing in support of Montague Wind Power's requested Amendment 4 to their Site Certificate. CREA is an ORS 190 intergovernmental association. Members include counties, irrigation districts, project developers, for-profit businesses and non-profit organizations who support renewable energy as an important component of rural economic development. CREA is very familiar with this project as Gilliam County is a CREA member, and as CREA assisted the County in the negotiations of the Strategic Investment Program (SIP) agreement for this project.

It is our understanding that the proposed amendment would allow:

- changes to the previously permitted wind turbine generator configuration and size,
- the inclusion of a solar generation component,
- a battery energy storage component,
- additional transmission facilities and,
- a modification of the proposed site boundary

It is our understanding that all of these modifications are associated with phase two of the Montague project. CREA believes that all of these proposed modifications are reasonable and are reflective of the evolving nature of the renewable energy generation environment that have occurred since this project's original certification going back to September 2010.

Montague represents in their application that their requests regarding turbine dimensions is consistent with other Oregon projects including the Golden Hills project which EFSC has previously approved. CREA is aware of the trend to larger turbines in the industry. According to the USDOE / LBL Wind Technologies Market Report these trends are evidenced by:

- Average unit nameplate capacity has increased from 1.8MW in 2010 to 2.32 in 2017
- Hub height has increased from an average of 80 to 86 meters
- Turbine tip height has increased from a median average of 420 to 499 feet
- In 2010 0% of the installed projects in the US had rotor diameters of 110-120 meters. By 2017 65% of the projects did.

These statistics reinforce the notion that the turbine dimensions and sizing reflected in this amendment is commensurate with industry trends nationwide.

The request of inclusion of solar and battery components are also reflective of emerging trends. The first tranche of renewable development in Oregon and the Pacific Northwest was significantly wind with installation ratio of wind to solar MW currently over 10-1. The customers of the generation produced by projects such as Montague are looking for generation output profiles that are more diverse by the inclusion of solar with wind, thereby reducing the challenges of integrating the output of both of these generation sources with other existing generation as well as serving customer load. In addition, solar has seen rapid and significant price decreases, with the installed per watt costs in 2017 approximately half what they were as recently as 2012, making solar inclusion economically more attractive.

Utility planners are increasingly concerned about capacity shortfalls in the Pacific Northwest in the coming years. This is significantly driven by announced retirements of coal plants such as the Boardman plant in Oregon, the Centralia plant in Washington and the Colstrip 3 and 4 projects in Montana. PacifiCorp recently announced that their studies suggest the possibility of earlier than planned retirement of an additional portion of their coal fleet. This in turn has resulted in a capacity shortfall of up to 8,000 MW by 2030 and a resultant significant loss of load probability. This, coupled with pressures to not build natural gas fired "peaker" facilities to meet capacity needs due to carbon concerns, is necessitating generation developers and purchasers to begin to look at the incorporation of energy storage into projects such as Montague.

CREA understands that additional amendment components include the acquisition of some land that was previously included in a wind project that has not been constructed and a relatively small (3 mile) transmission line necessitated by the other elements of the project modifications. CREA believes that these are reasonable and appropriate modifications to the project given the other aspects of the amendment discussed above.

CREA also would like to reiterate the beneficial impacts of the Montague project to Gilliam County and north central Oregon. After the considerable beneficial impact resulting from the project construction, it is CREA's understanding that the combined phase 1 and 2 county tax and community benefit revenues the Montague project would provide over $2.3 million annually, plus $8 million in local improvement payments, a significant amount for a rural county of less than 2,000 people. This project will truly be a difference maker for Gilliam County and its residents.

In conclusion CREA supports the approval of Amendment 4. We believe the request reflects the changes in technology, technology economics, and power market demands that have evolved during the course of Montague's development. We also recognize and support the significant benefits this project will provide the citizens of Gilliam County. In combination these factors warrant the Council's approval of Amendment 4.

Your consideration is appreciated.

Sincerely

Brian Skeahan, Executive Director

Myra Irby
67907 HWY 19
Arlington OR 97812

RECEIVED
MAY 23 2019
DEPARTMENT OF ENERGY

Chase McVeigh-Walker
Siting Analyst
Energy Siting Division ODOE
550 Capitol Street NE 1st Floor
Salem OR 97301-3737

Dear Chase McVeigh-Walker

My name is Myra Irby and I am a long time resident of Olex Oregon. I was never notified of the meeting or project of the Montague Wind project. I learned of this from a neighbor. I was not given proper notice to prepare my comments or written letter.

My son and I attended the May 16th siting meeting in Condon OR. At the meeting they presented a map of the area and my property was not even listed.

My property and residence is the closest adjoining neighbor to Phase 2 . My property borders Baseline Road.

My concerns for this project are many, due to the fact that they will be so close to my residence.

They are: Windmill noise, shadows and blinking lights. Also my property value declining due to this project. I am concerned on the quality of life on my property.

I have lived in this residence for over 23 years and have been an Olex resident since 1977. My deceased husband Joe Irby was born and raised in Olex.

I am 83 years old so I am having my son Matthew G. Irby be my contact.

His address is: 1330 East Second Street PO BOX 247 Arlington OR 97812 Phone 541-370-4252

We feel that I have been treated unfairly as I was left out on the planning of this phase of the project.

Thank you for your consideration

Myra Irby

CC: Brian Walsh Avangrid Renewables

MCVEIGH-WALKER Chase * ODOE

From: Erin Weedman <erinweedman@hotmail.com>
Sent: Thursday, May 23, 2019 4:51 PM
To: Montague AMD4 * ODOE
Subject: Weedman support of Montague Phase 2
Attachments: Weedman support of RFA4.docx

Sent from Mail for Windows 10

Erin Weedman
68040 Highway 19
Arlington, OR 97812

May 23, 2019

Chase Mc-Veigh-Walker
Siting Anaylst
Oregon Departmant of Energy
550 Capital Street NE, 1st Floor
Salem, OR 97301

Dear Oregon Departemnt of Energy and Energy Facility Siting Council,

Writing to you as a person living in phase 1 and 2 of the Montague Wind Power Facility and representing Weedman Brothers and Weedman Farms, LLC both landowners in Montague Amendment 4, Phase 2 of the wind and solar projects. We are a sixth-generation family farm, originating in Sherman County to the west since 1882, this amendment is important to our entire family and future of farming. On Thursday, May 16th I was able to give an oral statement in regards to our support of the project and left knowing I had more to say and address the opposition.

My husband, daughter (2), newborn (due July) and myself live in Phase 1 and the projected phase 2 of Montague. Avangrid Renewables has listened to our concerns about both projects and has worked with us to adapt certain areas of their facilities, which I addressed Thursday. Moving the batch plant so it was not in front of our house, moving their cranes through our wheat in a manner we can work around at harvest time and addressing some water issues this winter. I said before I wish the opposition would speak with Avangrid about some of their concerns instead of just opposing the entire project from the beginning. In the projected phase 2 Avangrid has worked with us with concerns of solar next to our home and moving equipment around our property.

The way everyone was talking about the Olex schoolhouse gave me great concern. How is a building that has been completely remodeled inside and out into a home a historical building? About the only original part of the building is the foundation. Yes, I have been in this home many times and seen for myself. Along with Weatherford's Barn, they have had plans to remove it/tear it down for a few years now. I love history and historical places, have had many travels to see many around the world. I believe it is important to keep them, but when the owners have changed them so much where you would not know what it was originally or not taken any care to keep them historical then I do not believe this qualifies them as being such.

One statement from the opposing is understandable but not entirely the truth, concerning the Olex Cemetery. I completely understand the serenity of a peacefully countryside cemetery to place flowers and visit, but to say people will be offended seeing the wind turbines when placing said flowers is ridiculous. The cemetery is tucked up on the hillside and the wind turbines are not visible from the cemetery.

Mr. Macnab has made his living as a dentist and has lived an hour and half away from this site. He does not live at the lodge, he entertains his hunting clients there periodically. I do not feel Mr. Macnab gave an accurate portrayal of himself as why he could not get information to the siting council before he left on a trip. He stated he would be seeding all weekend and not have time before Tuesday. Mr. Macnab does not do the seeding himself, he has employees that do the work. I understand if he has to supervise them but to make it sound like he was doing the work himself offended me as that is my everyday job (farming). Mr. Macnab also stated he surveyed his clients and they would not come to his lodge and hunt if they saw wind turbines, it would affect him financially. The clients fly to Portland, Oregon and come via I-84 with lots of turbines, Pasco, Washington via I-84 and Highway 19 with also lots of wind turbines or fly directly into Condon, Oregon that has wind turbines in view. The lodge is approximately 10 miles from the proposed site boundary and nestled down in the bottom of a canyon. There is no way to get to the hunting lodge currently without seeing turbines.

Farming is a tough way of life and always has been we all know that. There are a few good years and a lot more bad years, than most can understand. Wind turbines coming in to these small rural communities has literally saved some family farms from going bankrupt. The land projected in phase 2 is subpar farm ground. In the recent drought cycles we have been 30 +bushels an acre below average crop year, three years in a row and 20 bushels two other years. We have had 2 great years with 20+ bushels above average and then just average bushels per acre. Average pays the bills, below average breaks the bank. We save and save on those good years to have enough to the help in all the below average years. The money we receive from wind turbines and solar goes into our farming operation to help pay for all those bad years. This is how we live and raise our families, farming is our income. We are trying to make the best decisions for future generations on our family farm, so they will continue to be able to farm.

I would like to thank the Energy Facility Siting Council for extending the period for written comment. Our family has worked hard for years to purchase other land, so the next generation could grow and farm too (me being the next generation farming and living at Shutler Flat). As landowners we should get the right to decide what happens to our property. I understand neighbors have concerns, as have I. Discussing concerns and resolving issues directly with Avangrid seems like a simpler way than raising a fuss with everyone in the community.

Thank you,

Erin Weedman

Weedman Brothers, partner

Weedman Farms, LLC, member

Davis Wright Tremaine LLP

Suite 2400
1300 SW Fifth Avenue
Portland, OR 97201-5610

Elaine Albrich
503-778-5423 tel
elainealbrich@dwt.com

May 30, 2019

VIA EMAIL

Chase McVeigh-Walker
Oregon Department of Energy
550 Capitol St. NE, 1st Floor
Salem, OR 97301

Re: Certificate Holder Response to Public Comments on Amendment Request #4

Dear Chase:

On behalf of Montague Wind Power Facility, LLC ("Montague"), this letter provides Montague's response to public comments received on the Draft Proposed Order ("DPO") for Request for Amendment 4 of the Site Certificate for the Montague Wind Power Facility, dated April 5, 2019 ("RFA4").

The public comments raise questions of whether Montague properly addressed and analyzed potential adverse impacts under Energy Facility Siting Council's ("EFSC") noise, scenic, recreational, land use, and historic standards for resources near the community of Olex. Montague provides the following responses to demonstrate that notwithstanding the questions raised in the public comments, the proposed Facility amendments in RFA4 meet the applicable EFSC standards, subject to conditions proposed in the DPO and below.

Noise, Exhibit X and OAR 340-035-0035

Public comments questioned whether Montague satisfies the DEQ noise regulations for Phase 2, particularly for residences near the community of Olex. RFA4 contained a noise analysis demonstrating that Phase 2 can meet the DEQ noise regulations but Montague will need to obtain noise easement from owners of specific noise sensitive properties, including residences near the community of Olex before it may construct certain turbines in the proposed expanded site boundary. Ms. Mayra Irby's residence is one of those noise sensitive properties.

Ms. Irby's residence was inadvertently omitted from Figure X-1 that shows the locations of noise sensitive receptors within 2 miles of the site boundary. A revised Figure X-1 is provided as Attachment A to include receptor R381 on the Irby's property located southwest of the proposed expanded site boundary. Ms. Mayra Irby's residence would require a noise easement for development of the wind turbine layouts proposed under Design Scenarios A and B. Ms. Mayra Irby's residence is located approximately 3,150 feet south of the proposed solar inverters in the solar micrositing corridor, and

complies with the DEQ noise regulation and does not require a noise easement under the solar only option proposed in Design Scenario C. Montague maintains that Condition 107 is sufficient to ensure that if Montague cannot obtain the necessary noise easements from property owners, Montague cannot construct the turbines in proximity to the Olex residences. Once Montague selects the equipment and finalizes the Phase 2 layout, consistent with the previously approved Condition 107 filing for Phase 1, Montague will provide ODOE with evidence that any additional noise easements necessary for noise-sensitive receptors have been secured.

Public comments also questioned whether the Olex Cemetery it is a noise sensitive property. Olex Cemetery is not a "noise sensitive property" or a "quiet area" within the meaning of OAR 340-035-0015(36) and -0015(50) and therefore was not required to be addressed in Exhibit X. The DEQ regulations are clear on what amounts to a noise sensitive property and cemeteries are not included in the enumerated list, which includes homes, hospitals, and schools. Consequently, public comments concerning the Olex Cemetery under Exhibit X and OAR 340-035-0035 are irrelevant to the Council's decision.

Scenic Resources, Exhibit R and OAR 345-022-0080

The EFSC Scenic Resource Standard considers scenic resources and values identified as significant or important in local land use plans, tribal land management plans, or state and federal land management plans for any land located within the analysis area. The analysis area is the site boundary plus 10 miles from the site boundaries. Exhibit R, Table R-1 identified those scenic resources or values identified as significant or important in the applicable land use and management plans.

Gilliam County Comprehensive Plan (GCCP), Goal 5 identifies no specific scenic resources or values in Gilliam County as important except for portions of the John Day River. Rock outcroppings marking the "rim and walls of steep canyon slopes" are identified as important characteristic of the County's landscape but no specific geographic features or locations are referenced or identified as significant. Page 143 of the DPO identifies the closest rock outcropping rising to the level of important or significant as being located approximately 7 miles from the proposed amended site boundary. See also Montague's public hearing PowerPoint presentation, slides 18-19 (dated May 16, 2019). No public comments raised with any degree of specificity what geographic areas near the community of Olex may rise to the level of an important or significant scenic resource under the GCCP. There is no evidence in the record showing photographs or identifying locations by mile marker or intersection of any rock outcropping marking a rim or wall of steep canyon slopes. Therefore, Montague maintains that EFSC may rely on the proposed findings in the DPO to conclude that RFA4 satisfies OAR 345-022-0080.

Recreational Facilities and Opportunities, Exhibit T and OAR 345-022-0100

The analysis area for impacts on recreational opportunities includes the Facility site boundary and the area within 5 miles of the Facility site boundary. Montague evaluated 23 recreational resources in Exhibit T. Montague considered six resources as potentially important recreation resources (see Table T-1) within the analysis area for recreational opportunities. Two previously identified important recreational opportunities are the Oregon National Historic Trail (ONHT) McDonald and John Day Crossing interpretive site, and the ONHT Fourmile Canyon interpretive site. Four newly identified important recreational opportunities are the John Day River, Cottonwood Canyon State Park, John Day Wildlife Refuge, and Blue Mountain Scenic Byway. Exhibit T incorporates evaluation criteria from

Exhibits R, U and X to evaluate the "importance" of recreational areas relative to the factors listed in OAR 345-022-0100(1). Based on these screening criteria, six of the 23 resources were determined to be important recreational facilities or opportunities.

Public comments questioned whether private hunting lands outside of the analysis area (as far as 7 miles) should be considered as important recreational resource. Recreational activities occurring outside the analysis area for recreational opportunities are not considered in Exhibit T. Nonetheless, based on the criteria provided in Exhibit T, Montague concludes that private hunting lodges are not important recreational resources because they do not provide open public access. Furthermore, hunting opportunities are not unusual, rare, or irreplaceable in the region.

Goal 5 Historic Resources, Exhibit K and OAR 345-022-0030

The EFSC Land Use Standard considers whether Montague demonstrated compliance with the applicable substantive criteria from the Gilliam County Zoning Ordinance ("GCZO"), including applicable goals and policies from the GCCP. The analysis area for purposes of Exhibit K and the EFSC Land Use Standard is the site boundary plus 0.5 miles from the site boundary.

Public comments questioned whether Montague properly analyzed Goal 5 historic resources, specifically four sites identified on the "1988 Historic Resource Inventory List" referenced in Goal 5, Finding 19 ("1988 List"). The 1988 List is not incorporated as an exhibit or appendix to the acknowledged GCCP. It is also not available online or with the official GCCP in the County planning office. A copy of the 1988 List was only found after the County planning director conducted a search of the department's files; no map or findings documenting the County's adopting the 1988 list as the acknowledged, inventoried Goal 5 historic resources was found. Therefore, it is questionable whether the 1988 List is even the acknowledged, inventoried historic resource list referenced in Goal 5, Finding 19. Nonetheless, for purposes of responding to public comments, Montague treats it as the official list.

Public comments identified four sites in Olex as possible Goal 5 resources: Olex townsite, Olex School, Olex Cemetery, and Olex Loading Platform. Only one of the sites, the Olex Cemetery, is within the analysis area for Exhibit K. A portion of the Olex townsite is within the analysis area but the majority is excluded. The Olex Schoolhouse is outside of the analysis area and the location of the referenced Olex Loading Platform is unknown. See Montague public hearing PowerPoint presentation, slide 24 (dated May 16, 2019).

GCZO 4.100 Significant Resource (SR) Combining Zone is the overlay zone that protects significant County resources under Goal 5. See GCZO 4.100(A). When looking at the County's zoning map, there is no land mapped with the SR combining zone within the analysis area as confirmed in Exhibit K via a personal communication with Michelle Colby, Gilliam County Planning Director. There is a question of whether GCZO 4.100 even amounts to applicable substantive criteria under the EFSC Land Use Standard because it excludes historic resources from the list of resources protected by the SR overlay zone in GCZO 4.100(A). It also does not identify any conflicting uses or activities with historic resource sites in GCZO 4.100(E). This is important because under GCZO 4.100(C)(2), only those conflicting uses or activities identified in GCZO 4.100(E) are required to be evaluated under GCZO 4.100(C)(2)(a)-(c), which require an applicant to consult with the applicable resource agency and demonstrate that the proposed activity will have no significant negative impacts to the resource site or that the reduced preservation

review criteria. The only provision in GCZO 4.100 that may apply to RFA4 is GCZO 4.100(G) providing the procedure and approval criteria for alteration/demolition permits involving historic buildings and sites. However, because Montague is not proposing to alter or demolish the Olex Cemetery or the Olex Townsite (assuming for purposes of the analysis, the entirety of the townsite is included in the land use analysis), GCZO 4.100(G) does not apply either.[1] For these reasons, Montague maintains that it is not required to analyze further any of the four Olex sites listed on the 1988 List to demonstrate compliance with the EFSC Land Use Standard.

Historic, Cultural, and Archaeological Resources, Exhibit S and OAR 345-022-0090

The EFSC Historic, Cultural, and Archaeological Resources Standard considers historic and cultural resources within the analysis area that have been listed, or would likely be eligible for listing, on the National Register of Historic Places (NRHP). The analysis area for historic and cultural resources is the area within the site boundary. As described above, public comments identified four sites in Olex as possible historic resources: Olex townsite, Olex School, Olex Cemetery, and Olex Loading Platform. While these sites are outside the Exhibit S analysis area, in response to public comments, Montague conducted additional analysis.

Montague searched SHPO's Oregon Historic Sites Database to determine whether any of the sites listed on the County's Goal 5 historic inventory were also included in the SHPO database.
The Olex townsite and the Olex Schoolhouse were listed on the SHPO database but the Olex Cometary and the Olex Loading Platform were not. The SHPO database has the Olex townsite listed but it was not considered for NRHP eligibility. The Olex Schoolhouse was considered NRHP eligible in 1976. Using this information, Montague conducted a field investigation of these two sites, as documented on the Oregon Inventory of Historic Properties – Section 106 Documentation Forms provided in Attachment B.

The investigation revealed that while the community of Olex still exists, much of what made up the original townsite is gone. The commercial hub has been demolished and the area is now considered an unincorporated community, not a town. The town was formally platted in April 1903 by H.S. and Ordelia Randall. The property at 66350 Upper Rock Creek Road is the only property with remaining structures in the originally platted area. The property at 66350 Upper Rock Creek Road is a rural residence that contains three residential buildings and a carport. The structures consist of a primary residence, secondary residence which appears to be converted from a garage/workshop, third residence which was constructed at a later date as a utility shed, and carport. The Gilliam County Assessor's Office listed the construction date as 1947, which is accurate for the primary residence and secondary residence. The date of construction for the third residence and carport are unknown, but appear to date to the late twentieth century. As described in Attachment B, the property at 66350 Upper Rock Creek Road is not eligible for listing in the NRHP because it does not meet any of the NRHP eligibility criteria.

The potential historic resource described as the Olex schoolhouse is the property at 66325 Upper Rock Creek Road. This property is a rural residence. The structures consist of two residential buildings, one

[1] Someone may argue that the proposed amendment "alters" a historic site, but GCZO is very clear on what alteration means for purposes of GCZO 4.100. GCZO 4.100(G)(1)(a) defines "alteration" as "any addition to, removal of, or change to the *exterior part of a structure* and shall include modification of the surface texture, material, or architectural detail of the *exterior part of the structure* but shall not include paint color."

barn and one stable, a corral, and sheds. All but the original building, which was previously a school but is now a residence, are modern structures. The build dates range from 1996 to 2010. Though this building has associations with broad patterns of history under NRHP Criterion A as a rural one room school house, its integrity has been compromised to the extent that as a remodeled residence it does not convey its significance under this criterion. To be eligible for the NRHP under Criterion B, a property must be directly associated with a person considered significant within the historic context whose specific contribution to history has been both identified and documented. No such person who meets that definition is linked to this property. The property is not eligible for the NRHP under Criterion C as it is an unremarkable collection of buildings from the early-to-late-twentieth century and does not embody the distinctive characteristics of a type, period, or method of construction; the property is not the work of a master and does not possess high artistic value. The Montague maintains that this property is no longer eligible for listing in the NRHP because it does not meet any of the eligibility criteria and the original schoolhouse building has been significantly altered by the replacement of roofing, windows, and cladding. The setting of the school house has also been altered by the addition of barns, corrals, and other utilitarian structures. The property retains integrity of location, but no longer retains integrity of setting, materials, workmanship, design, feeling, or association. As described in Attachment B, the property at 66325 Upper Rock Creek Road (Olex Schoolhouse) does not meet any of the NRHP eligibility criteria; therefore, is not eligible for listing in the NRHP.

Montague has filed the forms in Attachment B with the Oregon SHPO for concurrence, seeking to confirm that the Olex townsite and Olex Schoolhouse do not meet the NRNP eligibility criteria. Given the timing of SHPO's review, Montague proposes the following voluntary condition:

> *The Certificate Holder will not construct Turbines K7 to K13 until Certificate Holder has received concurrence from SPHO that Olex Schoolhouse and Olex Townsite are not eligible for listing on the NRHP, or if eligible, the Certificate Holder has received SPHO concurrence on a mitigation agreement before constructing Turbines K7 to K13.*

Other Comment Topics

There were other issues raised in the public comments but none with sufficient specificity that allows Montague to respond in detail. Unless otherwise addressed above, Montague considers the other raised issues insufficient raised or not relevant under the EFSC standards.

However, Montague does address what appeared to be a common theme among the public comments related to notice. Many public comments and testimony suggested that adequate notice was not provided to nearby landowners. As provided in Exhibit F to RFA 4, Attachment F-1 contains two tables and a figure. Table F-1 contains the names and mailing addresses of the property owners within 500 feet of the Facility site boundary. Table F-2 contains the names and mailing addresses of the property owners adjacent to Facility tax lots (between 500 and 1,000 feet of the site boundary). Figure F-1 shows the property owner tax lots within 500 feet of the Facility site boundary and, in a separate color, the property owner tax lots between 500 and 1,000 feet of the site boundary. Montague obtained current property tax assessment rolls for Gilliam and Morrow counties to prepare Attachment F-1. The accessor information was collected on March 29, 2019. Figure F-1 (Sheet 10 of 12) attached shows that Ms. Mayra Irby's Tax Lot 200 (01S21E0000-00200) was included within the requisite 500-foot notification boundary.

Thank you for providing Montague the opportunity to provide a written response to comments and legal argument to support approval of RFA4 subject to conditions. We maintain that all substantive public comments are addressed and there are no new issues of fact or law that further analysis to approve the Fourth Amended Site Certificate for the Montague Wind Power Facility.

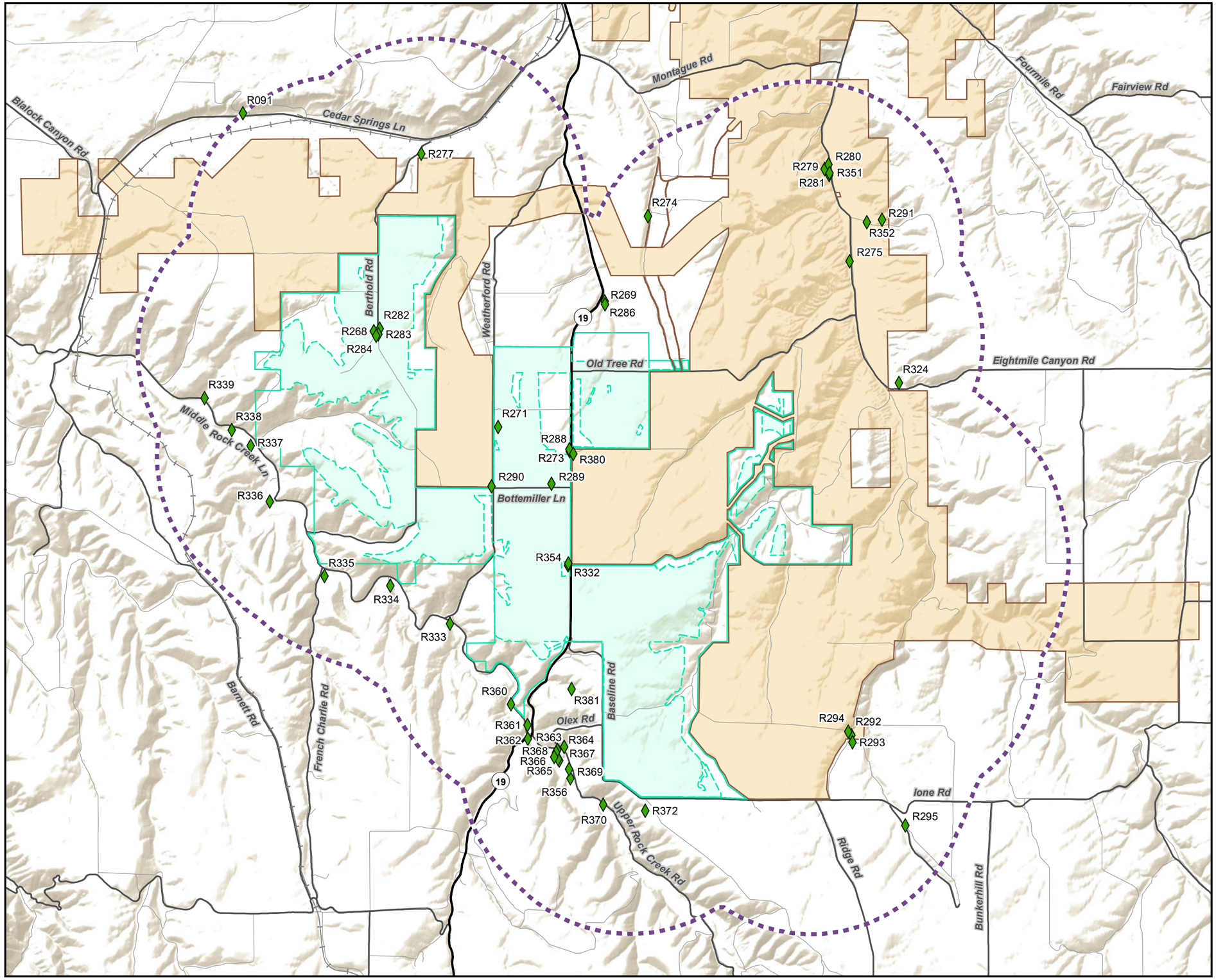
Very truly yours,

Elaine R. Albrich

Enclosures

cc: Brian Walsh/Matt Hutchinson
Paul Hicks

Figure X-1
Noise-sensitive Receptors within 2 Miles of Planned Turbine Locations
Montague Wind Power Facility



Legend

- Approved Site Boundary
- Approved Micrositing Corridor
- Proposed Expanded Site Boundary
- Proposed Expanded Micrositing Corridor
- Noise-sensitive Receptor
- 2-mile Buffer of Planned Turbine Locations

Basemap Features

- Interstate/Highway
- Public Road
- Other Road
- Major Railroad Line

N
W E
S

0 0.625 1.25 2.5
Miles

AVANGRID RENEWABLES

ch2m

\\galt\proj\Avangrid\683329\MapFiles\RFA4\Exhibit_X\Figure_X1_190528.mxd 5/28/2019 1:53:47 PM kgrant1

Basemap Source: ESRI World Terrain Base

OREGON INVENTORY OF HISTORIC PROPERTIES

SECTION 106 DOCUMENTATION FORM

Individual Properties

Property Name:	Street Address:	City, County:
Residence	66350 Upper Rock Creek Road	Arlington, Gilliam

Project Name: Montague Wind Farm Project - Phase II	Agency project #:
Agency: Energy Facility Siting Council (EFSC)	SHPO Case#: 10-0378
Location Coordinates (to sixth decimal place): Latitude: 45.497381 Longitude: -120.168937	Is the property listed in the National Register of Historic Places? ☐ YES – Individually ☒ NO ☐ YES – In a district

Facing southeast, looking at north elevation of Resource 1.

Surveyor: Marcia Montgomery - Jacobs Engineering Group Inc.	Date Recorded: 5/20/2019

National Register Findings:

☐ **Eligible:** ☐Individually ☐As part of District NR Criteria: ☐A ☐B ☐C ☐D

☒ **Not Eligible:** ☐Irretrievable integrity loss ☐Not 50 Years ☐Fails to meet NR Criteria

Finding of Effect:

☐ No Effect
☐ No Adverse Effect
☐ Adverse Effect

State Historic Preservation Office Comments – *Official Use Only*:

Eligibility: ☐**Concur** ☐**Do Not Concur:**

Effect: ☐**Concur** ☐**Do Not Concur:**

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Signed _____ Date _____

CONTACT INFORMATION STAMP

Comments:

OREGON INVENTORY OF HISTORIC PROPERTIES

SECTION 106 DOCUMENTATION FORM

Individual Properties

Property Name:	Street Address:	City, County:
Residence	66350 Upper Rock Creek Road	Arlington, Gilliam

Original Use: Single Dwelling	Number of Associated Resources: 4
Architectural Classification / Resource Type: Vernacular — Building	Owner: ☒Private ☐Local Government ☐State ☐Federal
Window type and Materials: Single hung metal Roof Type and Materials: Gable; corrugated metal	Exterior Surface Materials: Primary: Concrete: Other/undefined Secondary: Brick: Other/undefined Decorative: Horizontal Board
Integrity: ☐Excellent ☒Good ☐Fair ☐Poor	Construction Date: 1947 (☐Circa) Architect/Builder (if known): Unknown

Description of Property (including previous alterations & approximate dates):

The property at 66350 Upper Rock Creek Road is a rural residence that contains three residential buildings and a carport. The structures consist of a primary residence, secondary residence which appears to be converted from a garage/ workshop, third residence which was constructed at a later date as a utility shed, and carport. The Gilliam County Assessor's Office listed the construction date as 1947, which is accurate for the primary residence and secondary residence. The date of construction for the third residence and carport are unknown, but appear to date to the late twentieth century.

See continuation sheet - Description of Property.

Determination of Eligibility, Justification, and Sources (Use continuation sheets if necessary):

Gilliam County encompasses 1,223-square miles and is bordered by the Columbia River to the north, Wasco and Sherman counties to the west, Morro and Grant counties to the east, and Wheeler County to the south. Originally located within the eastern region of Wasco County, the Legislative Assembly established Gilliam County on February 25, 1885. After the county was established, the town of Arlington, formerly known as Alkali, which had been platted in 1882, was named the county seat (Portland State University and the Oregon Historical Society, 2017). However, the county seat was moved to Condon, Oregon (formerly known as Summit Springs) in 1890. The county is known as the “heart of the Columbia Basin wheat area” (Oregon Historical County Records Guide, 2017). Wheat, barley, and beef cattle serve as the foundation to the area’s economy. Other industries have emerged in more recent years including irrigated crops, tourism, waste management, hunting, fishing, and wind turbine farms (Oregon Historical County Records Guide, 2017).

The property at 66350 Upper Rock Creek Road is located in Township 1S, Range 21E, Section 10.

A 1934 Metsker Map of the area shows that Section 10 was part of N.W. Ries property (Metsker Map, 1934). Highway 19 is labeled as John Day Highway (Condon Road). None of the extant buildings appear on the 1934 map.

See continuation sheet - Determination of Eligibility, Justification, and Sources.

OREGON INVENTORY OF HISTORIC PROPERTIES

SECTION 106 DOCUMENTATION FORM

Individual Properties

Property Name:	Street Address:	City, County:
Residence	66350 Upper Rock Creek Road	Arlington, Gilliam

Description of project scope, and nature and extent of impacts:

Montague Wind Power Facility, LLC (Montague) obtained a Site Certificate for the Montague Wind Power Facility (Facility) from the Oregon Energy Facility Siting Council (EFSC; Council) on September 10, 2010, approving construction of the Facility in Gilliam County, Oregon, with up to 269 turbines and a generating capacity of up to 404 megawatts (MW). Montague is constructing the Facility in phases and began construction on Phase 1 of the Facility on September 14, 2017. Phase 1 consists of up to 81 wind turbines generating 202 MW of power, or half of the approved 404-MW generating capacity, within the approved site boundary.

Environmental constraints within the approved Facility site boundary have limited Montague's ability to site turbines under the original layout. Montague seeks to amend the Site Certificate to expand the approved site boundary onto adjacent lands in Gilliam County, Oregon to develop Phase 2 of the Facility. Phase 2 consists of an expanded site boundary, modification of turbine types and construction schedule, and addition of a solar array and battery storage.

Montague plans to construct Phase 2 within portions of both the approved Facility site boundary and within a proposed 13,339-acre expansion of the site boundary. Phase 2 may include a combination of wind and solar electrical generation, along with battery storage, to meet the remaining approved 202-MW generating capacity.

Finding of Effect and justification:

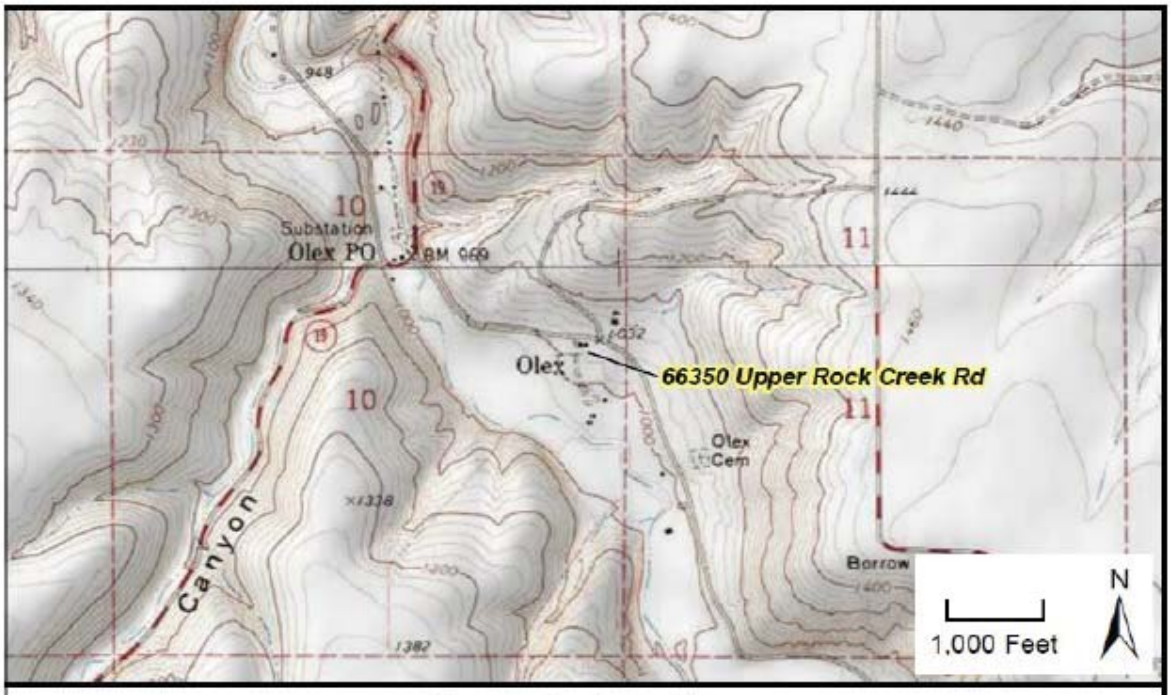
No historic properties are affected.

Property Name:	Street Address:	City, County:
Residence	66350 Upper Rock Creek Road	Arlington, Gilliam

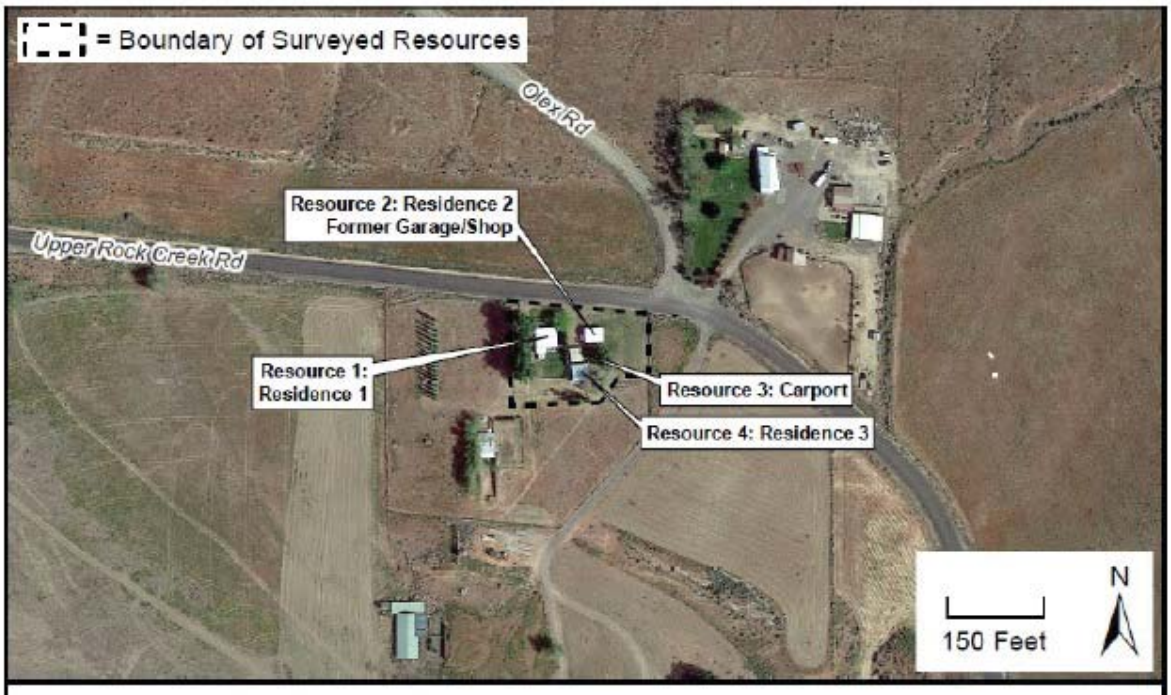
View: Facing southeast, looking at north elevation of Resource 1

View: Facing southwest, view of Resource 2 in foreground and resources 1, 3, and 4 in background

Property Name:	Street Address:	City, County:
Residence	66350 Upper Rock Creek Road	Arlington, Gilliam



Property Location
USGS 7.5' Topographic Map: Mikkalo, OR 1970



Site Plan - 66350 Upper Rock Creek Road

Property Name:	Street Address:	City, County:
Residence	66350 Upper Rock Creek Road	Arlington, Gilliam

(Cont.)

Determination of Eligibility

The Olex townsite was established in 1874 in Gilliam County, Oregon. The town of Olex was the site of the first post office established east of the Dalles, which opened in 1874. The town was originally named "Alex" after local resident Alex Smith, but a misspelling when the Post Office name was applied for meant the town was called Olex (Weatherford, n.d.). The post office operated from 1874 to 1976. The first public school in Gilliam County opened in 1875 near the Conrad Shott Ranch, on Rock Creek three miles east of Olex. Mrs. Emma Alderman was the first teacher (Shaver, Rose, and Steel, 1905). The 1886 election for the county seat was described as "one of the most bitter and exciting contests in the history of Eastern Oregon". Five towns in the county entered the election: Arlington, Condon, Fossil, Olex, and Mayville. Olex came in in fourth place with 92 votes (Shaver, Rose, and Steel, 1905).

The town was formally platted in April 1903 by H.S. and Ordelia Randall, a farmer and large land owner in the area (Shaver, Rose, and Steel, 1905). A 1916 USGS map shows many more buildings located in the vicinity of 66350 Upper Rock Creek Road (USGS, 1916). It is undetermined when these original buildings in Olex were removed. Articles of incorporation for the town were filed with the Gilliam County clerk in December 1903. The incorporators were listed as W.C. Morris and H.S. and Ordelia Randall. The town had approximately fifty residents and was predominately a farming community. Alfalfa, fruits and vegetables were the primary crops and were sold in Olex, Condon, and Arlington (Western Historical Publishing Company, 1905). Olex is notable as the birthplace of Earl Snell, the Governor of Oregon from 1943 to 1947 (Oregon State Archives, n.d.).

The first election for the City was held March 11, 1903 and the first mayor – W.L. Tobey was elected, as were J.F. Thomas for marshal, Charles Martin as the recorder, and F. Little, Grant Wade, and F. Tobey as Councilmen (Western Historical Publishing Company, 1905). While the town of Olex still exists, much of what made up the original townsite is gone. The commercial hub has been demolished, though several residences and the Olex School and cemetery still exist (Weatherford, 1). Olex is now considered an unincorporated community. The area is still rural and the main industry remains farming.

The property at 66350 Upper Rock Creek Road is not eligible for listing in the NRHP. The property is not eligible for the NRHP under Criterion A, which applies to buildings that are associated with events that have made a significant contribution to the broad patterns of history. The property is not a particularly early or otherwise noteworthy example of a residential property. Therefore, the property does not meet Criterion A. To be eligible for the NRHP under Criterion B, a property must be directly associated with a person considered significant within a historic context whose specific contribution to history has been both identified and documented. No such person who meets that definition is linked to this property. The property is not eligible for the NRHP under Criterion C as it is an unremarkable collection of buildings from the mid-to-late-twentieth century and does not embody the distinctive characteristics of a type, period, or method of construction; the property is not the work of a master and does not possess high artistic value. Therefore, the property is not eligible for listing in the NRHP because it does not meet any of the eligibility criteria. In addition, Resource 1, the main structure on the property, has been altered, including the replacement of roofing and a large rear addition. The property has also been altered overall, with the conversion of the original garage, and addition of other utilitarian structures. As a result, the property lacks integrity of materials, workmanship, design, and some integrity of feeling. The property retains integrity of location, association, and setting. The property at 66350 Upper Rock Creek Road does not meet any of the NRHP criteria; therefore, the property is not eligible for listing in the NRHP.

Property Name:	Street Address:	City, County:
Residence	66350 Upper Rock Creek Road	Arlington, Gilliam

(Cont.)

References

"An Illustrated History of Central Oregon: Embracing Wasco, Sherman, Gilliam, Wheeler, Crook, Lake and Klamath Counties". Western Historical Publishing Company, 1905. Transcribed by Cathy Danielson.

"Governor Earl W. Snell Administration: January 11, 1943 to October 28, 1947." Oregon State Archives. https://sos.oregon.gov/archives/Documents/records/governors/governor-earl-w-snell.pdf. Accessed 28 May 2019.

Nolan-Wheatley, MaryNell. Weedman Farms Oregon Inventory of Historic Properties Historic Resource Survey Form. July 2017.

Weatherford, Marion T. Olex Townsite Inventory Form. Oregon Inventory of Historic Properties Historic Resource Survey Form. N.D.

Shaver, F.A., Arthur P. Rose, & Richard F. Steele, An Illustrated history of central Oregon, embracing Wasco, Sherman, Gilliam, Wheeler, Crook, Lake and Klamath counties, state of Oregon 1905, Western Historical Publishing Company, Spokane, Washing, 1905.

OREGON INVENTORY OF HISTORIC PROPERTIES

SECTION 106 DOCUMENTATION FORM

Individual Properties

Property Name:	Street Address:	City, County:
Residence	66325 Upper Rock Creek Road	Arlington, Gilliam

Project Name: Montague Wind Farm Project - Phase II	Agency project #:
Agency: Energy Facility Siting Council (EFSC)	SHPO Case#: 10-0378
Location Coordinates (to sixth decimal place): Latitude: 45.498280 Longitude: 120.167909	Is the property listed in the National Register of Historic Places? ☐ YES – Individually ☒ NO ☐ YES – In a district

Facing Northeast

Surveyor: Marcia Montgomery - Jacobs Engineering Group Inc.	Date Recorded: 5/20/2019

National Register Findings:

☐ **Eligible:** ☐Individually ☐As part of District NR Criteria: ☐A ☐B ☐C ☐D

☒ **Not Eligible:** ☒Irretrievable integrity loss ☐Not 50 Years ☐Fails to meet NR Criteria

Finding of Effect:

☐ No Effect
☐ No Adverse Effect
☐ Adverse Effect

State Historic Preservation Office Comments – *Official Use Only*:

Eligibility: ☐**Concur** ☐**Do Not Concur:**

Effect: ☐**Concur** ☐**Do Not Concur:**

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Signed _____ Date _____

CONTACT INFORMATION STAMP

Comments:

OREGON INVENTORY OF HISTORIC PROPERTIES

SECTION 106 DOCUMENTATION FORM

Individual Properties

Property Name: Residence	Street Address: 66325 Upper Rock Creek Road	City, County: Arlington, Gilliam

Original Use: Education-related	Number of Associated Resources: 8
Architectural Classification / Resource Type: Classical Revival: other — Building	Owner: ☒Private ☐Local Government ☐State ☐Federal
Window type and Materials: Fixed and Single-Hung, Metal Roof Type and Materials: Front Gable, Hipped, Shed; Corrugated Metal	Exterior Surface Materials: Primary: Vinyl Siding Secondary: Poured Concrete Decorative: -select materials-
Integrity: ☐Excellent ☐Good ☐Fair ☒Poor	Construction Date: 1904 (☐Circa) Architect/Builder (if known):

Description of Property (including previous alterations & approximate dates):

The property at 66325 Upper Rock Creek Road is a rural residence that contains eight resources. The structures consist of two residential buildings, one barn and one stable, a corral, and sheds. All but the original building, which was previously a school but is now a residence, are modern structures. The build dates range from 1996 to 2010.

See continuation sheet - Description of Property.

Determination of Eligibility, Justification, and Sources (Use continuation sheets if necessary):

Gilliam County encompasses 1,223-square miles and is bordered by the Columbia River to the north, Wasco and Sherman counties to the west, Morro and Grant counties to the east, and Wheeler County to the south. Originally located within the eastern region of Wasco County, the Legislative Assembly established Gilliam County on February 25, 1885. After the county was established, the town of Arlington, formerly known as Alkali, which had been platted in 1882, was named the county seat (Portland State University and the Oregon Historical Society, 2017). However, the county seat was moved to Condon, Oregon (formerly known as Summit Springs) in 1890. The county is known as the “heart of the Columbia Basin wheat area” (Oregon Historical County Records Guide, 2017). Wheat, barley, and beef cattle serve as the foundation to the area’s economy. Other industries have emerged in more recent years including irrigated crops, tourism, waste management, hunting, fishing, and wind turbine farms (Oregon Historical County Records Guide, 2017).

The property at 66350 Upper Rock Creek Road is located in Township 1S, Range 21E, Section 11.

A 1934 Metsker Map of the area shows that Section 11 was part of G.S. Dudek (Metsker Map, 1934). Highway 19 is labeled as John Day Highway (Condon Road). None of the extant buildings appear on the 1934 map.

See continuation sheet - Determination of Eligibility, Justification, and Sources.

Property Name:	Street Address:	City, County:
Residence	66325 Upper Rock Creek Road	Arlington, Gilliam

Description of project scope, and nature and extent of impacts:

Montague Wind Power Facility, LLC (Montague) obtained a Site Certificate for the Montague Wind Power Facility (Facility) from the Oregon Energy Facility Siting Council (EFSC; Council) on September 10, 2010, approving construction of the Facility in Gilliam County, Oregon, with up to 269 turbines and a generating capacity of up to 404 megawatts (MW). Montague is constructing the Facility in phases and began construction on Phase 1 of the Facility on September 14, 2017. Phase 1 consists of up to 81 wind turbines generating 202 MW of power, or half of the approved 404-MW generating capacity, within the approved site boundary.

Environmental constraints within the approved Facility site boundary have limited Montague's ability to site turbines under the original layout. Montague seeks to amend the Site Certificate to expand the approved site boundary onto adjacent lands in Gilliam County, Oregon to develop Phase 2 of the Facility. Phase 2 consists of an expanded site boundary, modification of turbine types and construction schedule, and addition of a solar array and battery storage.

Montague plans to construct Phase 2 within portions of both the approved Facility site boundary and within a proposed 13,339-acre expansion of the site boundary. Phase 2 may include a combination of wind and solar electrical generation, along with battery storage, to meet the remaining approved 202-MW generating capacity.

Finding of Effect and justification:

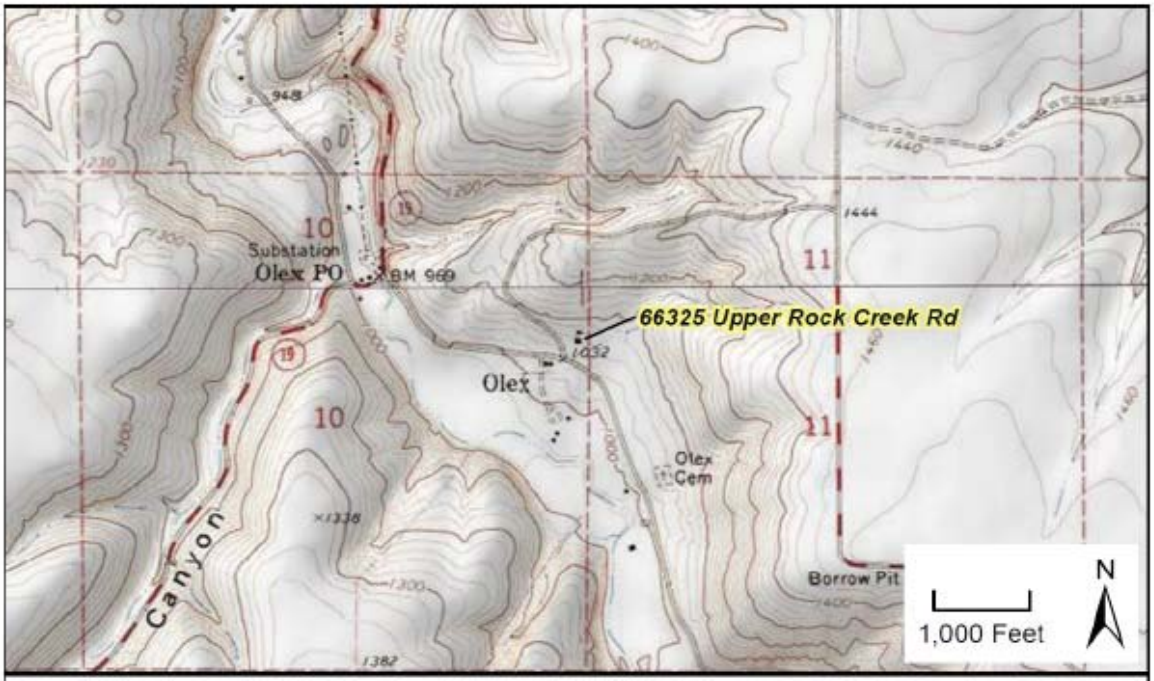
No historic properties are affected.

Property Name:	Street Address:	City, County:
Residence	66325 Upper Rock Creek Road	Arlington, Gilliam

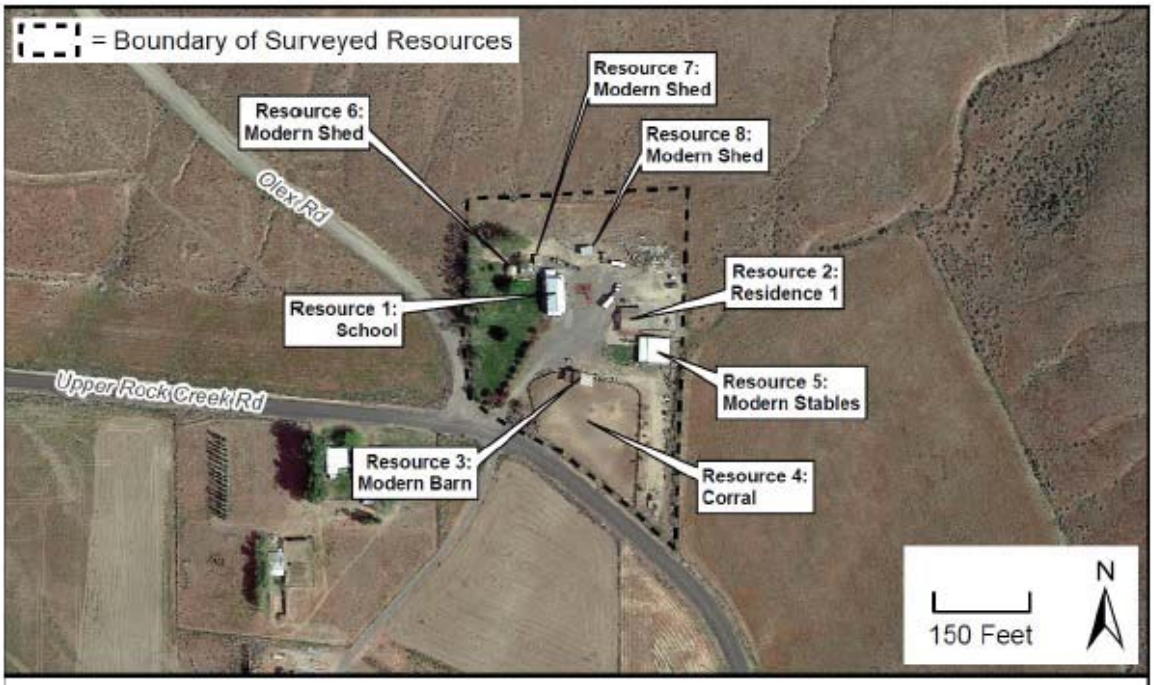
View: Facing Northeast

View: Facing northwest

Property Name:	Street Address:	City, County:
Residence	66325 Upper Rock Creek Road	Arlington, Gilliam



Property Location
USGS 7.5' Topographic Map: Mikkalo, OR 1970



Site Plan - 66325 Upper Rock Creek Road

Property Name:	Street Address:	City, County:
Residence	66325 Upper Rock Creek Road	Arlington, Gilliam

(Cont.)

Determination of Eligibility

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The town was formally platted in April 1903 by H.S. and Ordelia Randall. The Randalls owned one of the largest estates in the area, an 800-acre property in Olex. The estate included an "imposing structure of modern architectural design," surrounded by shade trees, 500-acres of cultivated land, and 300-acres of pasture (Shaver, Rose, and Steel, 1905).

Articles of incorporation for the town were filed with the Gilliam County clerk in December 1903. The incorporators were listed as W.C. Morris and H.S. and Ordelia Randall. The town had approximately fifty residents and was predominately a farming community. Alfalfa, fruits and vegetables were the primary crops and were sold in Olex, Condon, and Arlington (Western Historical Publishing Company, 1905). The first election for the City was held March 11, 1903 and the first mayor – W.L. Tobey was elected, as were J.F. Thomas for marshal, Charles Martin as the recorder, and F. Little, Grant Wade, and F. Tobey as Councilmen (Western Historical Publishing Company, 1905). Olex is notable as the birthplace of Earl Snell, the Governor of Oregon from 1943 to 1947 (Oregon State Archives, n.d.).

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Though this property has associations with broad patterns of history under NRHP Criterion A as a rural one room school house, its integrity has been compromised to the extent that as a remodeled residence it does not convey its significance under this criterion. To be eligible for the NRHP under Criterion B, a property must be directly associated with a person considered significant within the historic context whose specific contribution to history has been both identified and documented. No such person who meets that definition is linked to this property. The property is not eligible for the NRHP under Criterion C as it is an unremarkable collection of buildings from the early-to-late-twentieth century and does not embody the distinctive characteristics of a type, period, or method of construction; the property is not the work of a master and does not possess high artistic value. This property is not eligible for listing in the NRHP because it does not meet any of the eligibility criteria and the original schoolhouse building has been significantly altered by the replacement of roofing, windows, and cladding. The setting of the school house has also been altered by the addition of barns, corrals, and other utilitarian structures. The property retains integrity of location, but no longer retains integrity of setting, materials, workmanship, design, feeling, or association. The property at 66325 Upper Rock Creek Road (Olex Schoolhouse) does not meet any of the NRHP eligibility criteria; therefore, is not eligible for listing in the NRHP.

Property Name:	Street Address:	City, County:
Residence	66325 Upper Rock Creek Road	Arlington, Gilliam

(Cont.)

References:

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"Governor Earl W. Snell Administration: January 11, 1943 to October 28, 1947." Oregon State Archives. https://sos.oregon.gov/archives/Documents/records/governors/governor-earl-w-snell.pdf. Accessed 28 May 2019.

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Property Name:	Street Address:	City, County:
Residence	66325 Upper Rock Creek Road	Arlington, Gilliam County

View: Looking north at modern corral, stables and barn.

View: Looking east from the south end of 66325 Upper Rock Creek Road property.