# KITTITAS COUNTY, WASHINGTON

IN RE: CU 15-0006

# OneEnergy Iron Horse Solar Farm Applicant's Opening Legal Argument re Appeal of SEPA MDNS

### A. INTRODUCTION

OneEnergy Renewables (OneEnergy or applicant) proposes to build and operate the 47.5-acre solar facility (Iron Horse, or project), to be developed on 500-acre farm properties (non-contiguous acreages) owned by Kittitas County resident Bill Hanson. The project is proposed within the AG-20 zoning district, near the town of Kittitas. The facility is allowed by conditional use permit (CUP).

Appellants appeal the SEPA determination (an MDNS) issued by Kittitas County Community Development Services (CDS), acting as the "Responsible Official" under SEPA. The applicant (OneEnergy) prepared an environmental checklist, "expanded" to include specific studies and other information intended to best inform the Responsible Official. On November 12, 2015, OneEnergy submitted the checklist to CDS, along with its Conditional Use Permit (CUP) application (including a completed County application form, along with attached information) (Index Ex. 2 and 3). Prior to submittal, and throughout the entire application process, OneEnergy extensively consulted with CDS and the Washington Department of Fish & Wildlife (WDFW). (Appendix A). The CDS reviewed the expanded SEPA checklist, and on December 17, 2015 advised OneEnergy that the information was incomplete, requesting additional information. (Index Ex. 5). On March 3, 2016 OneEnergy submitted a new, revised application packet that included a new SEPA checklist (which was revised), and including a transportation concurrency management application. (Index Ex. 6 and 7).

On May 12, 2016, CDS determined the application was complete (Index Ex. 11), and on May 23, 2016, CDS issued a Notice of Application, providing an opportunity for public comment. (Index Ex. 24 and 25). The Notice of Application was not a SEPA threshold determination, but it did indicate that CDS "expects to issue a Determination of Non-

Significance (DNS)," indicating that mitigation measures "may be required," and that the project review "may incorporate or require mitigation measures, regardless of whether an EIS is prepared." (Index Ex. 24 and 25). On August 10, 2016, CDS issued a Mitigated Determination of Non-Significance (MDNS), which relied upon the applicable SEPA rules and process and took into consideration all of the public comments (including those provided by the appellants as well as OneEnergy), making the determination that *as mitigated*, through the imposition of 36 mitigation measures (conditions), the environmental impacts of the facility would be reduced, such that there would be no unmitigated probable significant adverse environmental impacts. (Index Ex. 110).

It is essential to emphasize that the County's review process complies with the requirements of RCW 36.70B.050. As stated in KCC 15A.03.090 and 15A.04.010, the County integrates all decisions and recommendations made into a single report. The single report includes "mitigation required or proposed under the development regulations or the agency's authority under RCW 43.21C.060." KCC 15A.03.090(5). KCC 15A.04.010(2) further establishes an integrated approach to permit issuance, integrating other applicable regulations and findings of compliance thereunder with SEPA review. Hence, the legal response to, and review of, the MDNS appeal is not exclusively limited to the SEPA MDNS itself, but must consider and take into account the overall environmental and permitting record established by CDS in reviewing the permits and MDNS in an integrated process. This includes the SEPA checklist, the CUP application narrative, public and agency comments, supplemental information provided by OneEnergy (Index Ex. 98; Appendix B), and CDS responses in Sections V and VI of the Staff Report, as well as the proposed Findings of Fact, Conclusions of Law and recommended conditions, which integrate SEPA MDNS mitigation measures with permit conditions. (Index Ex. 112).

The MDNS does not alone convey the depth of the County's consideration of environmental impacts. Read holistically in compliance with the mandatory legal framework, it is clear that the County's consideration of the Iron Horse Solar Farm, and the imposition of mitigation measures, greatly exceeds the characterizations of insufficiency selectively portrayed in the appeal.

# B. SEPA APPEAL; PROCEDURAL LEGAL STANDARDS; BURDEN OF PROOF

The County's process was entirely consistent with the requirements of SEPA, including issuance of the MDNS in accordance with RCW 43.21C.030(2)(c). The record is clear that OneEnergy provided "information reasonably sufficient to evaluate the environmental impact of [the] proposal." WAC 197-11-335. CDS then thoroughly considered the proposal's potential environmental significance as documented in the environmental checklist. WAC 197-11-315(1)(a). Based upon independent review of all relevant information and analysis, the Responsible Official considered whether the proposal would be "likely to have a probable significant adverse environmental impact." WAC 197-11-330(1)(b). CDS determined that a "determination of significance" (DS) was unnecessary.

The appellants' appeal rests on a misapplication and a misquote of the applicable SEPA rules, relating to how the MDNS process works. Purporting to quote WAC 197-11-340 (which explicitly applies to DNSs, not to the MDNS process), the appellants slip an "M" into the quoted language before "DNS," evidently to convince the reader that this rule applies to MDNSs. WAC 197-11-340 does not apply to the MDNS process. It refers to the DNS process, not the MDNS process. This is a material issue, and this deficiency in the appellants' argument undermines their appeal. WAC 197-11-340 provides:

- (3)(a) The lead agency shall withdraw a DNS if:
- (i) There are substantial changes to a proposal so that the proposal is likely to have significant adverse environmental impacts;
- (ii) There is significant new information indicating, or on, a proposal's probable significant adverse environmental impacts; or
- (iii) The DNS was procured by misrepresentation or lack of material disclosure; if such DNS resulted from the actions of an applicant, any subsequent environmental checklist on the proposal shall be prepared directly by the lead agency or its consultant at the expense of the applicant.

[inapplicable text omitted]

(c) If the lead agency withdraws a DNS, the agency shall make a new threshold determination and notify other agencies with jurisdiction of the withdrawal and new threshold determination. If a DS is issued, each agency with jurisdiction shall commence action to suspend, modify, or revoke any approvals until the necessary environmental review has occurred (see also WAC 197-11-070).

For a DNS, there is no process to modify the SEPA decision to include mitigation measures in order to reflect the applicant's efforts to mitigate impacts, and the modification process is limited. The applicable SEPA rule is WAC 197-11-350, quoted in its entirety below:

# **WAC 197-11-350 Mitigated DNS**

The purpose of this section is to allow clarifications or changes to a proposal prior to making the threshold determination.

- (1) In making threshold determinations, an agency may consider mitigation measures that the agency or applicant will implement.
- (2) After submission of an environmental checklist and prior to the lead agency's threshold determination on a proposal, an applicant may ask the lead agency to indicate whether it is considering a DS. If the lead agency indicates a DS is likely, the applicant may clarify or change features of the proposal to mitigate the impacts which led the agency to consider a DS likely. The applicant shall revise the environmental checklist as may be necessary to describe the clarifications or changes. The lead agency shall make its threshold determination based upon the changed or clarified proposal. If a proposal continues to have a probable significant adverse environmental impact, even with mitigation measures, an EIS shall be prepared.
- (3) Whether or not an applicant requests early notice under subsection (2), if the lead agency specifies mitigation measures on an applicant's proposal that would allow it to issue a DNS, and the proposal is clarified, changed, or conditioned to include those measures, the lead agency shall issue a DNS.
- (4) Environmental documents need not be revised and resubmitted if the clarifications or changes are stated in writing in documents that are attachments to, or incorporate by reference, the documents previously submitted. An addendum may be used, see Part Six.
- (5) Agencies may clarify or change features of their own proposal, and may specify mitigation measures in their DNSs, as a result of comments by other agencies or the public or as a result of additional agency planning.
- (6) An agency's indication under this section that a DS appears likely shall not be construed as a determination of significance. Likewise, the preliminary discussion of clarifications or changes to a proposal shall not bind the lead agency to a mitigated DNS.
- (7) Agencies may specify procedures for enforcement of mitigation measures in their agency SEPA procedures.

The applicability of WAC 197-11-350 is particularly important in Kittitas County, where the County follows the process in WAC 197-11-355 (optional DNS process). In accordance with WAC 197-11-355(2)(a), on May 23, 2016 the County issued a Notice of Application, which stated "on the first page of the notice" (*Id*) that the County expected to issue a DNS, inviting comment from the public.

The appellants confuse the Notice of Application (signaling consideration of issuing a DNS) with the final SEPA decision (an MDNS). This is important, because under WAC 197-11-

350 and -355, the entire purpose is to solicit information from OneEnergy and members of the public, for the purpose of the comprehensive consideration of probable significant adverse environmental impacts, aimed at mitigating impacts below the threshold of "significance." Hence, information received concerning environmental impacts does not require the withdrawal of a "DNS" under WAC 197-11-340, nor is there any bar, whatsoever, in the authority of the County to continue to work with OneEnergy toward the fundamental objective of mitigating probable significant adverse environmental impacts below the level of probability or significance. Indeed, that is the very purpose of the rules applicable to the MDNS process, particularly when applied through the optional process used by the County pursuant to WAC 197-11-355. In fact, as is abundantly clear from the County's record, as a consequence of public comment and other environmental information received after issuance of the Notice of Application, the County changed its "expectation" that it would issue a DNS, and instead, the SEPA Responsible Official issued an MDNS, which included 36 mitigation measures, recommended for imposition as conditions of CUP approval.

In summary, the County did not apply a legally deficient process as represented by the appellants. The process used was entirely consistent with the County Code and state law. The picture painted by the appellants is wrong, and reflects a distorted reading of the applicable SEPA rules and a lack of understanding of the process undertaken through the Notice of Application process. The process as applied by CDS defeats the appellants' procedural contentions.

# C. LEGAL STANDARDS FOR ISSUANCE AND SUBSTANTIVE CHALLENGE OF THE MDNS

The appellants confuse the SEPA process applied by the County, and request that an EIS be prepared for a relatively small renewable energy (solar) facility that has significant beneficial environmental attributes, with no countervailing probable significant adverse environmental impacts. Boiled down, the only real objection of the appellants is that they do not want to look at the facility, and they suggest that it should be situated in the "back yard" of unnamed others. Other contentions lack proof and are immaterial, and certainly do not rise to the level of probable significance.

The MDNS process is well established and perfectly suited to this application, and the appellants bear a high burden to prove its deficiency here. *Anderson v. Pierce County*, 86 Wn. App. 290, 936 P.2d 432 (1997), is the key case, reflecting the evolution of SEPA, as influenced by its modernization following the adoption of the Growth Management Act. In *Anderson*, the court recognized that the MDNS is an alternative to a DNS or EIS, explaining as follows:

An alternative threshold determination is the "mitigated determination of non-significance," or "MDNS," which involves changing or conditioning a project to eliminate its significant adverse environmental impacts. WAC 197-11-350. With a MDNS, promulgation of a formal EIS is not required, although, as here, environmental studies and analysis may be quite comprehensive. An applicant may clarify or change a proposal by revising the environmental checklist and permit application so that a MDNS can be issued for the revised project. WAC 197-11-350(2). Alternatively, the governmental agency may specify mitigation measures and issue a MDNS only if the proposal is changed to incorporate those measures. WAC 197-11-350(3).

86 Wn. App. at 301-02. The decision to issue an MDNS "is left to the sound discretion of the appropriate governing agency." *Id.* at 302. To overturn an MDNS, an appellant must demonstrate that the decision was "clearly erroneous." *Id.* 

A finding is "clearly erroneous" when, although there is evidence to support it, the reviewing court on the record is left with the definite and firm conviction that a mistake has been committed. Norway Hill Preservation & Protection Ass'n v. King County Council, 87 Wn.2d 267, 274, 552 P.2d 674 (1976) (quoting Ancheta v. Daly, 77 Wn.2d 255, 259-60, 461 P.2d 531 (1969)). For the MDNS to survive judicial scrutiny, the record must demonstrate that "environmental factors were adequately considered in a manner sufficient to establish prima facie compliance with SEPA," and that the decision to issue a MDNS was based on information sufficient to evaluate the proposal's environmental impact. Pease Hill, 62 Wn. App. at 810, 816 P.2d 37 (citing Sisley, 89 Wn.2d at 85, 569) P.2d 712; Brown v. City of Tacoma, 30 Wn. App. 762, 766, 637 P.2d 1005 (1981)). Moreover, the mitigation measures imposed must be reasonable and capable of being accomplished. RCW 43.21C.060; WAC 197-11-660(1)(c); Kiewit Constr. Group, Inc. v. Clark County, 83 Wn. App. 133, 143, 920 P.2d 1207 (1996). An agency's decision to issue a MDNS and not to require an EIS must be accorded substantial weight. RCW 43.21C.090; Indian Trail Property Owner's Assoc. v. City of Spokane, 76 Wn. App. 430, 442, 886 P.2d 209 (1994).

Id.

The *Anderson* court detailed the judicial, legislative and regulatory preference for applicants and agencies to work together to reduce environmental impacts; to "[u]se ...

mitigation to bring projects into compliance with SEPA, without promulgation of an EIS"; and to use the MDNS process "as conducive to efficient, cooperative reduction or avoidance of adverse environmental impacts." *Id.* at 303-04.

The propriety of bringing a proposal below the significance threshold by informally negotiating project modifications has been embraced by the SEPA Rules and reined in by the requirements of WAC 197-11-350. Settle, *The Washington State Environmental Policy Act—A Legal and Policy Analysis*, § 13(d)(vi), pg. 137-39. The SEPA Rules provide that if in the course of formulating a MDNS, the lead agency determines that "a proposal continues to have a probable significant adverse environmental impact, even with mitigation measures, an EIS shall be prepared." WAC 197-11-350(2). This touchstone of the SEPA review process provides protection from abuse. If a MDNS is issued and an appealing party proves that the project will still produce significant adverse environmental impacts, then the MDNS decision must be held to be "clearly erroneous" and an EIS must be promulgated.

*Id.* at 304.

Moreover, an MDNS does not require that all environmental impacts must be totally eliminated. The *Anderson* court favorably cited *Victoria Tower Partnership v. City of Seattle*, 59 Wn. App. 592, 603, 800 P.2d 380 (1990), as follows:

SEPA encourages compromise and accommodation by requiring that the decision-maker consider mitigation and state why it is inadequate to relieve the adverse impact. When the decision-maker imposes some mitigation measures, this does not necessarily mean that unmitigated impacts no longer exist or will be totally eradicated by mitigation, but merely that as mitigated, the project as a whole is acceptable.

Anderson, 86 Wn. App. at 303; see also Maranatha Mining, Inc. v. Pierce County, 59 Wn. App. 795, 804, 801 P.2d 985 (1990) ("The law does not require that all adverse impacts be eliminated; if it did, no change in land use would ever be possible.").

Finally, "community displeasure" and an appellant's "preference for an EIS" are inadequate grounds for overturning the MDNS. *Anderson*, 86 Wn. App. at 305 (citing *Maranatha Mining*, 59 Wn. App. at 804).

# **Summary of Legal Criteria for Consideration of the MDNS Appeal:**

In summary, the consideration of the MDNS on appeal must be guided by the following legal criteria and factors:

- (1) In considering the environmental record and the evidence at issue, the County's decision to issue an MDNS and not to require an EIS must be accorded substantial weight.
- (2) The County's decision is highly discretionary. As a discretionary act, proof by appellants that the County abused its discretion in issuing the MDNS is required.
- (3) The appellants have the burden to demonstrate that the MDNS was clearly wrong (erroneous); the Examiner, upon review of the appellants' evidence and the totality of the record, must be left with a "definite and firm conviction that a mistake has been committed."
- (4) The appellants must show that environmental factors were not adequately considered in a manner sufficient to establish prima facie compliance with the procedural requirements of SEPA.
- (5) The appellants must prove that the decision to issue the MDNS was not based on information sufficient to evaluate the proposal's environmental impact.
- (6) The mitigation measures imposed must be considered in evaluating probable significant adverse environmental impacts; these measures must be reasonable and/or capable of being accomplished.

# D. RESPONSE TO APPELLANTS' MDNS ADEQUACY CONTENTIONS

# D.1 Impacts to "Prime Farmlands" Are Sufficiently Evaluated, and Do Not Constitute a Probable Significant Adverse Impact

Citing WAC 197-11-330(3)(e)(i), the appellants contend that the facility will have significant impacts on "prime farmlands." First, the SEPA rule cited provides guidance in making a threshold determination, requiring that the Responsible Official "take into account" a number of considerations, including whether a proposal may, "to a significant degree" "[a]dversely affect environmentally sensitive or special areas, such as . . . prime farmlands." WAC 197-11-330(3)(e)(i). The rule continues, providing: "If after following WAC 197-11-080 [essentially, considering whether and how to proceed if "vital information" is unavailable] and 197-11-335 [requiring that "reasonably sufficient information" be made available to make the threshold determination] the lead agency reasonably believes that a proposal may have a significant adverse impact, an EIS is required." WAC 197-11-330(4).

No mistake was made with respect to consideration of whether this small solar generation facility would cause a probable significant adverse impact to prime farmland. First, without question, the County's SEPA record, Staff Report and MDNS demonstrate that OneEnergy and the County explicitly "took into account" and considered whether the project would "to a significant degree" "adversely affect" prime farmlands. The SEPA checklist, referenced and made a part of the MDNS, details the assessment of impacts to agricultural uses and proposes specific mitigation measures.

The checklist (Index Ex. 7) includes the following analyses, specific and material to the evaluation of *actual* agricultural impacts:

- (1) soil descriptions and evaluation for productivity;
- (2) erosion, including soil erosion plan;
- (3) soil compaction evaluation and mitigation measures;
- (4) analysis of dust and measures to mitigate it;
- (5) evaluation of, and avoidance of risks to, surface and groundwater and runoff;
- (6) evaluation and minimization of soil removal:
- (7) commitment to specific BMPs to avoid impacts from non-native invasive plants;
- (8) commitment to preparation of a Vegetation Resources Management Plan, developed in collaboration with the County, the County Weed Control Board and "any other identified stakeholders";
- (9) avoidance of using hazardous chemicals or conditions; evaluation and confirmation that the project would not negatively impact neighboring land uses, including the fact that it will not "force a significant change in accepted farm practice on surrounding lands";
- (10) evaluation of impacts on "working farmland," and committing to restore the land to farm use after the end of the project's life; and

(11) evaluation of transportation routes, truck trips, and other transportation impacts, and determination that the project will not affect or be affected by the movement of agricultural products.

Further, as noted above, the County uses the "optional" SEPA process, integrating the information and record of SEPA consideration with its evaluation of the land use application. The Staff Report explicitly details the County's consideration of the comments submitted by the appellants after issuance of the Notice of Application, integrates SEPA review and mitigation measures into the Staff Report and recommendation, and recommends findings of fact, conclusions and an affirmative decision. The Staff Report and recommendations make clear that the County's administrative record included consideration of the "Supplemental Materials" submitted to the County by OneEnergy on July 14. These materials include substantial additional evaluation of impacts to agricultural land uses.

In the Staff Report (p. 12), CDS states that the facility would remove 47 acres from agricultural production from an ownership of 500 acres (less than 10% of the working land of the property owner). The facility would remove 0.0009% of the County's agricultural land from production (and this is not the type of permanent conversion typical of non-agricultural uses such as surface mines and residential development). On its face, this temporary loss of farmland is neither a *probable*, nor is it a *significant*, nor is it an *adverse* impact, within the meaning of SEPA. It is de minimis.

In contrast, appellants offer no evidence that the facility would cause actual, tangible adverse impacts to the use and production of their farm properties, or to agricultural land uses in the local vicinity, or to the County in general. Such evidence, if it existed, should focus on the impact of this small solar facility to ongoing farm operations, such as disruption of farm-to-market roads during harvest; undisclosed and unmitigated dust and weed impacts; significant forces that impair ongoing, accepted farm practices; demonstrable probable, significant immitigable damage to sensitive crops; and pressure to convert such farm practices and properties to inconsistent and deleterious uses (such as high-density residential subdivisions or high-air-pollution sources that could damage crops and render farming impossible). No such evidence exists, and none can be produced by the appellants.

The appellants apparently contend that the mere removal of 47.5 acres of AG-20 lands from agricultural production, from a County total of 113,274.4 acres, somehow alone constitutes a probable significant adverse environmental impact, mandating the preparation of an EIS. That is not what WAC 197-11-330 requires. The County's AG-20 zone anticipates many land uses other than cultivated agricultural crop farming. If it were true that any land use that is not cultivated agricultural crop farming requires an EIS, then all of the non-farming uses allowed (either outright or by CUP) in the County's AG-20 zone would be considered to constitute a probable significant adverse environment impact to farming use, regardless of scale or the number of acres impacted. That is incompatible with fundamental concepts of regulatory certainty embedded in Washington's Regulatory Reform Act, codified at Ch. 36.70B RCW. That has never been the case in Kittitas County, and such an absurd result would undermine the County's sound decisions, made in compliance with the requirements of the Growth Management Act, Ch. 36.70A RCW. It would also commit the County to categorically prejudging such uses as requiring an EIS, merely because of removal of minor agricultural acreages for the temporary duration of a facility. Such a decision should be made carefully, given Kittitas County's policy that allows a range of non-farming uses in the AG-20 zoning district.

The record clearly demonstrates that OneEnergy submitted substantial and sufficient information addressing potential environmental impacts; the SEPA official considered that information, as well as information provided by appellants after issuance of the Notice of Application; and the County made an informed decision that the facility will not result in any unmitigated probable significant adverse environmental impacts to farming. No EIS is required. The environmental record demonstrates that the County's consideration of environmental factors satisfies SEPA's prima facie procedural requirements. No clear mistake was committed.

# **D.2** Alternative Site Analysis Is Not Required

The appellants cite RCW 43.21C.030(c) for the proposition that an analysis of "alternative sites" was required. This statute is applicable to "legislation and other major actions significantly affecting the quality of the environment" where a "detailed statement" (EIS) is required. RCW 43.21C.030(c). Appellants cannot cite any authority to support that this requirement is applicable to the MDNS at issue. In fact, pursuant to WAC 197-11-440(5)(d), for

a "private project on a specific site," alternative site analyses are not required in an EIS, and such analysis is particularly not required in an MDNS. In *Davis v. Thurston County*, 95 Wn. App. 1058 (table), 1999 WL 345159, at \*4 (1999) (unpublished opinion), the court held:

[T]he County is not required to consider other sites if it determines that the project will not have a significant impact on the environment. The Legislature created the MDNS process to encourage developers and the government to cooperate in reducing the environmental impact of development below the threshold level of significance. [Citation omitted]. An Environmental Impact Statement (EIS) is required only if a project will have a significant adverse impact on the environment. *See* WAC 197-11-330(4). Even if an EIS is required, an agency is not required to consider off-site alternative locations for a private project. *Citizens Alliance v. Auburn*, 126 Wn.2d 356, 364, 894 P.2d 1300 (1995); WAC 197-11-440(5)(d). In summary, when the project falls short of creating a significant adverse impact on the environment, the agency need not consider alternative sites for the proposed project.

The County's MDNS is not clearly erroneous in failing to undertake an alternative site analysis. Alternative site evaluation is simply not required for this small, private project.

# D.3 The Appellants Had a Full and Fair Opportunity to Comment on the MDNS

The appellants contend that they were "denied an opportunity to comment" upon "supplemental environmental information." Apparently, this argument boils down to a contention that OneEnergy may not continue to respond to questions raised by the public or an agency after the Notice of Application is issued and *before the SEPA environmental decision is issued*. There is no authority for this proposition, and appellants (now represented by competent legal counsel) were clearly not deprived of any opportunity to fully participate in the public process, to provide comment, or to pursue this appeal.

The Notice of Application is just that – a notice that an application has been filed. The Notice of Application is not an SEPA document; it is not the MDNS. It is a mandatory requirement under RCW 36.70B.110, to provide substantial and comprehensive notice to the public, providing an opportunity for comment prior to issuance of the SEPA decision and any other agency decision or recommendation. The comment deadline is statutory, intended to enable the local decision-maker to make its decisions informed by the public, other agencies, and the applicant. However, nothing in either SEPA or RCW 36.70B.110 prohibits the County from continuing to engage the public, other agencies, or OneEnergy in undertaking its responsibilities for informed environmental and regulatory review of development permit applications.

The law does not bar OneEnergy from submitting information responsive to public comments, especially under SEPA, where the County may continue to consider information to determine whether to issue an MDNS, or potentially require an EIS. Neither SEPA nor Ch. 36.70B RCW is intended to stifle the opportunity for OneEnergy to continue its efforts with the County to lessen environmental impacts, clarify the development proposal, or offer and agree to additional mitigation measures that can be made a part of an MDNS or permit conditions. To the contrary, WAC 197-11-335 encourages this ongoing exchange of information prior to issuance of the MDNS. WAC 197-11-330 authorizes and encourages clarifications and changes in the environmental documentation prior to issuance of the MDNS.

Even in the context of an EIS, and contemplating considerable flexibility in how an EIS is prepared, SEPA explicitly authorizes very active involvement of an applicant in preparing the SEPA document, including the opportunity for an applicant-prepared EIS. In an EIS process, an applicant may draft the DEIS, as well as the FEIS, responding to comments on the DEIS. *See* WAC 197-11-420. SEPA simply does not prohibit the ongoing and very active role of the applicant in working with the agencies to satisfy the procedural and substantive requirements of SEPA. SEPA encourages such engagement, for the betterment of environmental review.

There is no authority to stifle the exchange of environmental or other project-clarifying information at any time in order to best satisfy local and state policy and regulatory requirements, especially prior to issuance of the MDNS. In clearly adhering to the applicable SEPA rules, the County's MDNS is not clearly erroneous in its consideration of supplemental information supplied by OneEnergy after issuance of the Notice of Application and prior to issuance of the MDNS.

# D.4 Specific Decommissioning Plans May Be Required by Condition

The County requested information regarding decommissioning. Appendix I of the CUP application is an outline for the preparation of a detailed "Decommissioning and Site Restoration Plan." That framework and the content proposed reflect the same content, assurances, and commitments made by this applicant in the Osprey Solar Farm project, BOCC Resolution No. 2015-106, Ex. A, Condition 23. Similar to the Osprey facility, OneEnergy will supply the Project Decommissioning and Site Restoration Plan prior to final approval of the CUP, meaning prior to the commencement of construction. The Osprey decommissioning assurance was found

sufficient. OneEnergy certainly concurs that all representations, assurances and commitments made in the CUP application are tantamount to conditions of approval.

In its appeal, the appellants leave the false impression that no consideration of a decommission plan was provided, and they do not cite the applicable CUP application content. Instead they dismiss the very significant financial commitment required to *secure* that plan. The solar facility is not a nuclear plant. It is relatively simple in its construction, and the decommissioning is similarly a relatively simple operation, with no probable significant adverse environmental impacts that cannot be mitigated. The evaluation of decommissioning made a part of the CUP application is sufficient for SEPA compliance. The most important aspect is the financial commitment to secure that such future work will in fact be undertaken, and that the site will be restored. The County has required that commitment as a condition in the MDNS. Moreover, ultimately the success of decommissioning is an important interest of the landowner, secured by legal commitments made in the private property transaction documentation.

For SEPA purposes, the information submitted to the County provides sufficient clarity and commitments to guide and frame the decommission plan, when such a plan is needed. The information supplied to the County provides sufficient notice to agencies and the public to enable the future formation of a specific plan, to be provided prior to construction.

Contrary to the appellants' contention, the need for a decommissioning plan has been addressed, the evaluation and summary of content address environmental concerns, and the plan is intended to be sufficiently flexible to respond to conditions known at the time of project retirement. The plan is part of the combined CUP and SEPA record, and it is secured by a substantial financial commitment, made a condition of the MDNS. The County's SEPA decision to require a disclosure of the general content and framework of the decommissioning plan, backed up by substantial financial security, is well within the County's discretion, and it is the same approach taken in the Osprey Solar Farm project. The appellants do not prove any probable significant adverse environmental impact that is not addressed by legally sufficient mitigation measures. The County's MDNS is not clearly erroneous in its review and response to the need for a comprehensive decommissioning plan at this time. Consistent with the Osprey decision, the timing and security for such a plan is within the sound discretion of the County.

# D.5 Review of Light, Glare and Aesthetic Effects Is Sufficient

**D.5.1: Glare Effects.** OneEnergy evaluated the anticipated intensity of reflected light from the proposed solar facility at surrounding properties, in order to determine whether reflected light would constitute "glare." Glare is not the same as reflected light. Everything we see is made visible by reflected light. Glare is reflected light that is particularly bright and dazzling. In the CUP application, OneEnergy summarized its analysis of the potential effect of glare, as observed from surrounding properties. (Index Ex. 6; Application Appn. G, pp. 17-18). The effect of solar reflection and glare is further explained in OneEnergy's supplemental materials. (Index Ex. 98; Appn. B, pp. 10 - 13). The application explains that the solar panels are designed to absorb the maximum amount of light in order to generated the maximum amount of energy, resulting in the potential reflection of 30 percent of the sun reaching the panels. However, that does not mean that even 30 percent of the reflected light will be observed by surrounding properties. The orientation of the panels, as influenced by the mechanical tracking system, and the height of the panels in relation to surrounding properties influence this determination.

OneEnergy used an industry-standard tool (Solar Glare Hazard Analysis Tool, "SGHAT"), which is a web-based application available to the public, and accepted by the Federal Aviation Administration to meet FAA glare analysis requirements. In its filing with this legal response, OneEnergy has supplied a report titled "Glare Definition and Calculation, August 18, 2016" as further information detailing the findings in the CUP application. The analysis demonstrated that no glare impacts were found at surrounding properties.

OneEnergy is unaware of the specific effects of glare at the other solar facilities referenced in the appeal. OneEnergy did not study those facilities. However, the technology has evolved over time to minimize reflection and maximize electrical power generation. The angle, height and installation of mechanical tracking equipment also influences the potential impact of glare. Hence, the fact that highly reflective light (or glare) may be observed at certain times at other facilities does not mean that the properties surrounding the Iron Horse project will experience the same effects.

<sup>&</sup>lt;sup>1</sup> Glare is a "sensation caused by brightness within the visual field that is sufficiently greater than the luminance to which the eyes are adapted; results in annoyance, discomfort, and decreased visual performance." MediLexicon Dictionary (Online version, 2016).

**D.5.2:** General Visual Impacts: Essentially, as the Staff Report indicates (Index Ex. 112, p. 13), the principal contention regarding light and glare is that the solar facility would be better placed where these landowners will not see it, but someone else will. That is not a sufficient rationale to find the MDNS to be clearly erroneous. As is fully described in the CUP application and supplemental materials (Appn. B, pp. 7-13), the facility includes solar arrays that will operated at a height between 4.0 feet to 6.8 feet above grade (Id, p. 7). The tracking technology allows the solar arrays to follow the sun across the sky, at an elevation that minimizes visual effects on surrounding properties, and minimizes potentially annoying reflective light. The panels are made from materials engineered to substantially eliminate glare, and have considerably less glare impact than flat water, grass, bare soil, and snow (Id, p. 11). Unlike wind turbines, where visual simulations provide information to know how a facility will appear from a particular site or sensitive viewing areas, the appearance of a solar facility is well known in Kittitas County. Technology has substantially improved to reduce and largely eliminate glare impacts.

As noted in OneEnergy's supplemental materials, the County has approved a wide range of land uses in the AG-20 zone, including surface mining and large installations of greenhouses. (Id, pp. 8 - 10). The County has found the changes to "viewscapes" inherent in these uses have been found to have been acceptable. Yes, the landscape views will change, but such change was known when the County zoning code was approved, authorizing the development of solar energy facilities as a conditional use. The appellants have provided no evidence that there is any difference in the aesthetic impacts at the proposed location versus any other. They simply do not wish to see the project anywhere within their viewing areas.

In Residents Opposed to Kittitas Turbines v. State Energy Facility Site Evaluation Council, 165 Wn.2d 275, 312, 197 P.3d 1153 (2008), the Supreme Court acknowledged that the FEIS established the "elementary fact that greater distances mitigate the visual impacts of [wind energy] turbines," and that "locating turbines at greater distances from viewers reduces visual impact of those turbines." However, the SEPA "rule of reason" is not violated "merely because [the FEIS] does not list 'moving turbines away from every possible viewpoint' as a potential mitigation measure." *Id.* The SEPA document in that case "served its function of presenting the 'decisionmakers with a "reasonably thorough discussion" of the visual impact of the project."

*Id.* (citation omitted). Hence, the FEIS "did not fail to address the mitigation of visual impact of the [wind energy project]." *Id.* 

Here, it is an "elemental fact" that moving the solar facility to a different place, or further from these residents, would minimize subjective aesthetic effects on *these property owners*. The failure to document such varying locations in Kittitas County is not required by SEPA, and there is no deficiency in the County's evaluation of visual and aesthetic impacts. Moreover, the subjective judgment of aesthetic effects has no bearing upon the adjacent and/or neighboring land uses and their agricultural operations. This is simply not an issue of compatibility with adjacent and surrounding agricultural land uses.

**D.5.3: Property Values:** Somewhat in passing, the appellants appear to hypothecate that their property values will be "impacted negatively." Appellants provide no evidence to this effect. As is documented in the MDNS and Staff Report, the evidence and literature are much to the contrary. (Index Ex. 112, p. 13). The appeal does not raise "property value impacts" as a SEPA issue, and such contentions therefore are not subject to this appeal. Regardless, the law is clear – hypothetical contentions regarding property value impacts are not within the scope of SEPA. In *SEAPC v. Cammack II Orchards*, 49 Wn. App. 609, 616, 744 P.2d 1101 (1987), the court held:

[A]dverse impacts on surrounding property values are more related to "profits and personal income and wages" expressly exempted from EIS discussion by WAC 197-11-448(3). *See also In re Spring Vy. Dev.*, 300 A.2d 736, 751 (Me. 1973) (effects of development on property values was outside purposes of site location law). Thus, it was not error to decline to consider devaluation of surrounding private property."

See also WAC 197-11-448(2) ("The term 'socioeconomic' is not used in the statute or in these rules because the term does not have a uniform meaning and has caused a great deal of uncertainty."). In summary, the MDNS documents the County's consideration of visual and aesthetic impacts. The impacts of glare are mitigated by project design. The County's MDNS is not clearly erroneous in its review of visual and aesthetic impacts.

# D.6 The Vegetation Management Plan Conditions Are Sufficient and Adequate

As the Staff Report (p. 6) indicates, "the project site is currently covered with non-native agricultural crops," with no known noxious weeds. The MDNS includes two conditions (17 and 18) which reference OneEnergy's submitted Vegetation Management Plan, which "shall be used

as a foundational document for mitigation measures with respect to Vegetation Management, Weed Management, and Fire Protection." The MDNS requires OneEnergy to develop a specific plan in consultation with the Washington Department of Fish & Wildlife (WDFW) and the Kittitas County Noxious Weed Board. As noted in the County's Staff Report (p. 6), the mitigation measures were informed by the overall County record, including the SEPA checklist, the project narrative, and the supplemental materials submitted by OneEnergy.

The deficiencies alleged in the SEPA appeal do not amount to probable significant adverse environmental impacts, and the concerns addressed are readily capable of resolution through mitigation (the development of a specific mitigation plan in consultation with agencies and entities with specific expertise). This approach is sufficient, can be monitored and enforced by CDS, and provides adequate mitigation of these potential impacts in compliance with SEPA.

# D.7 The Information and Mitigation Regarding Critical Areas and Water Resources Are Sufficient

As previously noted in response to the appellants' accusation of insufficiency in other areas of their appeal, the 36 mitigation measures themselves do not holistically convey the depth of the environmental record at the foundation of the MDNS. The Staff Report (p. 6) documents the County's consideration and sources of CDS's consideration of potential water resource impacts, resulting in the imposition of 10 mitigation measures made a part of the proposed CUP conditions. In the Staff Report (p. 17), the County evaluates consistency with KCC Title 17A, Critical Areas. In doing so, the County completed a "Critical Areas Checklist" (Index Ex. 14) to identify potential impacts to critical areas, thereby signaling the potential need for a critical areas review.

These issues are addressed both through the County's Critical Areas Code, and through mitigation measures 1 and 2 in the MDNS. The County's approach to addressing these potential impacts complies with the process and requirements of KCC 15A.03.090(5) and KCC 15A.04.010(2), avoiding duplication of the more precise regulatory requirements for critical areas review undertaken through the environmental regulations adopted and enforced in KCC Title 17A. Duplicative review of environmental effects that are addressed in specific environmental regulations (*i.e.* the Critical Areas Ordinance) would be inconsistent with state and local legal provisions to the contrary.

# D.8 Information Regarding Habitat Impacts Is Sufficient

The site is a cultivated agricultural site. It is not sensitive habitat. WDFW identified a hypothetical *question*, which cannot be answered concretely at this time, of whether birds might be drawn to and impacted by the solar arrays. (WDFW letter, June 6, 2016). This is not an identified probable significant adverse environmental impact. OneEnergy considers such a risk to be highly remote and speculative. Nevertheless, OneEnergy has volunteered to monitor the site, to aid in the general biological knowledge regarding the effects of solar projects on birds. WDFW accepted this offer. (WDFW letters, June 6, 2016; July 15, 2016)<sup>2</sup>.

Pursuant to WAC 197-11-920, WDFW is an agency possessing "special expertise" in the areas of wildlife and habitat. The development of an avian monitoring plan (volunteered by the applicant) is well within the expertise of WDFW, and need not be developed at this time. It is entirely appropriate for CDS to defer the full development of this plan, to delegate its approval to WDFW, and to substantially defer to WDFW's expertise. Moreover, content of the plan itself is sufficiently framed by MDNS condition 15 to provide ample public notification and expectations of compliance for OneEnergy, and it is, in effect, a simple mitigation tool to monitor "the impact and tak[e] appropriate corrective measures," consistent with WAC 197-11-768(6).

# D.9 Consideration of "Precedent" of this Project is Unnecessary

Contending that the MDNS is deficient in failing to consider the "precedent set by this project," appellants contend that a precedent will be established "that large-scale quasi-industrial solar facilities may be constructed without significant environmental review for impacts of significant impacts on farmlands and alternative site considerations to scenic resources within the county."

OneEnergy disagrees with everything about this characterization of this facility, which is a relatively benign, relatively small, environmentally positive renewable energy facility, proposed in a rural area where such a land use is allowable, with no negative impacts on any designated scenic resource area, wilderness area, or other uniquely or particularly sensitive visual resources. OneEnergy disputes appellants' characterization of the County's environmental

<sup>&</sup>lt;sup>2</sup> Inclusion of the WDFW letters in the record should be verified.

review and, without repeating responses made above, emphasizes that the MDNS is entirely consistent with the requirements of SEPA, and is in line with the nature and attributes of this facility. Moreover, the environmental review here is not precedential for a future application. It is not precedential for any different facility that might *in fact* cause probable significant adverse environmental impacts to *actual farming operations* or *actually* cause demonstrable, substantial adverse impacts to designated, highly sensitive visual or scenic resources, subject to and protected by adopted management plans that *in fact* address and protect sensitive visual or aesthetic resources. Moreover, what definition should guide when a facility allowed by CUP is "too big?" Is it subjective community displeasure at a particular location (but not in another), or should the County review each application on its merits, applying known, objective environmental considerations, within the full context of the wide range of land uses considered to be acceptable within rural areas of Kittitas County?

What is important to note here is that this contention implies that the County should require an EIS for each and every rural solar facility, notwithstanding the County's zoning decision to allow such facilities as a conditional use within rural areas. It is entirely within the County's legislative discretion to continue to consider whether any particular land use is appropriate within the AG-20 zone, bounded by the requirements of RCW Ch. 36.70A and RCW Ch. 36.70.B, and subject to an appropriate application of the SEPA process.

It is the County's adoption of zoning that signals and determines uses that are considered acceptable within particular locations in the County. Solar facilities are such a land use, subject to a SEPA review that does not myopically and hypothetically focus on whether citizens in one area of the County would be more willing to look at a solar facility than citizens in another location, both sharing the same zoning, and without regard to any evidence of any actual impacts to farming operations or other rural land uses. If the County Commissioners wish to reconsider solar facilities or adopt specific rules for the regulation of such facilities, that is within their discretion. However, mid-course in reviewing a land use application is not the right time or place for such considerations.

As noted above, "community displeasure" and an appellant's "preference for an EIS" are inadequate grounds for overturning the MDNS. *Anderson*, 86 Wn. App. at 305 (citing *Maranatha Mining*, 59 Wn. App. at 804). That is precisely what is at issue in this appeal.

# D.10 Consideration of Cumulative Impacts Is Not Required

Similar to the consideration of alternative sites, in an MDNS, consideration of cumulative impacts is not required. Moreover, under SEPA, the consideration of cumulative impacts is narrow. As the *Boehm* court held:

A cumulative impact analysis need only occur when there is some evidence that the project under review will facilitate future action that will result in additional impacts. *Tucker v. Columbia River Gorge Comm'n*, 73 Wn. App. 74, 81-83, 867 P.2d 686 (1994).

*Boehm v. City of Vancouver*, 111 Wn. App. 711, 720, 47 P.3d 137 (2002). Finding that the appellants had failed to identify any evidence of cumulative impacts, the *Boehm* court agreed with Fred Meyer and the City of Vancouver that the project's cumulative impacts were merely "speculative" and, therefore, did not need to be considered in the MDNS. *Id*.

The *Boehm* court went further, and held that under SEPA, the cumulative impact argument must fail unless the appellants can demonstrate that the project is "dependent on subsequent proposed development." *Id.* As the *Boehm* court held, "there is no evidence that a cumulative impact analysis is required. The environmental impacts were assessed, found not to be significant, and there is no evidence to the contrary." *Id.* at 721. Hence, no cumulative impact analysis was warranted in *Boehm*, and it is not warranted here. The County's MDNS is not clearly erroneous in failing to undertake a cumulative impacts analysis, which if done, would be utterly hypothetical and entirely speculative, in violation of SEPA. WAC 197-11-060(4)(a); WAC 197-11-782.

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#### Ε. **CONCLUSION**

The County's SEPA process fully complies with Washington law. No mistake was made, either procedurally or substantively.

The appeal should be denied.

DATED: September 22, 2016.

STOEL RIVES LLP

By: /s/ *Timothy L. McMahan* Timothy L. McMahan, WSBA #16377 tim.mcmahan@stoel.com

# Appendix A – OneEnergy's Summary of Application Process and Agency Engagement

# **Step-by-Step Application Timeline**

- 11/12/15 CUP application submittal
- 11/12/15 SEPA checklist submittal
- 12/16/15 Pre-application meeting
- 12/17/15 Application deemed incomplete
- 3/3/16 CUP application resubmittal
- 3/3/16 Revised SEPA checklist submittal
- 3/3/16 Complete Transportation Concurrency Management Application filed
- 5/13/16 Application deemed complete
- 5/17/16 Blake Bjornson posts the land use sign; affidavit of posting signed
- 5/24/16 Public comment period starts
- 6/7/16 Public comment period ends
- 6/27/16 Applicant places hold on application (for time to provide additional materials)
- 7/14/16 Supplemental response submitted by applicant
- 8/10/16 County issues Notice of SEPA Determination and Public Hearing
- 8/23/15 County issues Staff Report
- 8/24/15 Appeal submitted by "Save Our Farms! Say No to Iron Horse"

# **Contents of Application (resubmittal)**

- o Application
- o Project narrative

## **Exhibits:**

- o Company overview
- o Site Map
- o Vegetation Management Plan
  - Kittitas County Weed List
  - Weed Management Plan IPM (Kittitas County)
- o WDFW Correspondence (letter from Scott Downes)
- o NWI Map
- o FEMA Map
- o Prelim Site Layout
- o Equipment spec sheets
- o PVSyst report
- o Construction and Operations Plan
  - Construction Effects on Groundwater, letter from geotechnical consultant Michael Place
- Mitigation Measures
- o Decommissioning and Restoration Plan

- o Supplemental Response Submitted (included info on zoning, aesthetics, glare, environmental impacts, HazMat, EMFS, noise, taxes/economics, jobs, property values, financial security, transportation)
  - Exhibit: WDFW Correspondence, Letter from Scott Downes

### **Consultations with WDFW**

Summary: OER has consulted with WDFW for all of its WA projects. OER began working with WDFW specifically for Iron Horse in July of 2015. Taylor has managed the relationships with Brent Renfrow and Scott Downes. OER has always been open and welcome to the suggestions by WDFW. Based on the WDFW recommendations from its 8/3/15 letter, OER recognized a 100 ft. riparian buffer in the Site Plan and CUP application.

Since the initial outreach in July of 2015, OER has stayed in contact with WDFW via phone and e-mail. In August of 2016, OER, WDFW, and Enerparc had a site visit to further discuss the project and potential impacts. OER and WDFW have had a strong relationship. WDFW stated, "You've done a great job reaching out to us" and has been appreciative of the project. OER has always been clear about its commitment to working with WDFW to the greatest extent possible.

7/16/15 – OER submits review request

7/17/16 – Brent Renfrow (WDFW) provides initial comments, which included:

- o Clarification surrounding the floodplain on site
- o "The habitat is not likely being used by sage grouse...Historically, when this valley had lots of sagebrush and wet meadows, there would have been sage grouse here, but that has long since changed"
- o "Caribou Creek is a significant concern for the site because of the need for a stream buffer area and the potential conflict between the solar arrays and streamside vegetation."

8/3/15 – Scott Downes (WDFW) provides a detailed project review letter. Recommendations include:

- o Include native forbs species in the weed-free native seed mix (to revegetate) to benefit insects and animals. WDFW can provide recommendations.
- o A riparian buffer should be created to provide shade to the creek and prevent erosion or damage.
- o Any construction or maintenance work affecting Caribou Creek will require a Hydraulic Permit Approval
- o WDFW recommends an avian monitoring plan.

6/2/16 – WDFW submits comments to Kittitas County during the public comment period with the above recommendations + a recommendation for a site visit.

6/22/16 – Conference call with OER/WDFW. Notes:

- o WDFW says, "We have had a good discussion on this project" and "You've done a great job reaching out to us"
- o Riparian Buffer Zone
  - Proposal is to plant native shrubs within the riparian buffer; low level shrubs would help to enhance the site
  - 100 ft is the upper level of what the County set for the buffer
  - "Of course you wouldn't be required"

- Vegetation Management Plan language discrepancies. WDFW recommended some clarifying language.
- o Avian monitoring:
  - "Not sure if it would be required"
  - Brent is envisioning an incidental reporting procedure, maintenance techs noticing and reporting fatalities; if significant numbers are found, meeting for further discussion
  - No consultants being hired, no rigorous repetitive stuff but a reporting protocol
  - "If visited so infrequently there may be no utility"
- Hydraulic Permit Approval is not anticipated to be necessary

## **8/15/16** – OER/WDFW/Enerparc Site Visit. Notes:

- O The creek banks are currently overgrown with reed canary grass, which is a tough species to compete with once established. Will need to take this into consideration when installing shrubs. One method is to place shrubs under a plastic cover which acts as a stabilizing mulch and helps outcompete reed canary.
  - Seed: WDFW wants to see as much diversity as possible to benefit various wildlife species. It is important to keep the topsoil on site during construction, as it holds the majority of nutrients.
  - Weed control: Noxious Weed Board will want to weigh in on the riparian plan once we have a draft.
  - Avian monitoring plan As discussed previously, this would simply be an incidental monitoring plan. Scott from WDFW would be willing to hold a two-hour training on site (at no cost) to operators that will be maintaining the project.

# Appendix B – OneEnergy's Supplemental Materials Supplied to CDS, July 14, 2016

**ONEENERGY RENEWABLES**\*\*

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Portland, OR 97232 Seattle, WA 98121 503.232.1989 206.922.7072

Suite 225

www.OneEnergyRenewables.com

July 14th, 2016

Kittitas County Community Development Services Attn: Jeff Watson 411 North Ruby Street, Suite 2 Ellensburg, WA 98926

RE: Iron Horse CUP Application, Supplemental Materials

Dear Mr. Jeff Watson,

OneEnergy Renewables ("OER"), is pleased to be participating in the land use permitting process with Kittitas County through the filing of a Conditional Use Permit application for Iron Horse Solar. We appreciate your ongoing consideration of our project.

OER recognizes the volume of comments received during the public comment period and is furnishing additional information to support the project application and address areas of public concern. The purpose of the enclosed documentation is to ensure that the record reflects OER's response to the comments received by Kittitas County Community Development Services ("KCCDS").

We respectfully request that KCCDS review our application with the additional materials. Please feel free to reach out to me directly with any questions you may have during the review process.

Thank you,

Taylor Steele

Associate, OneEnergy Renewables

# **ONEENERGY RENEWABLES®**

- 1. Zoning Compliance
- 2. Aesthetics
- 3. Glare
- 4. Environmental Impacts
- 5. Hazardous Materials
- 6. Electromagnetic Fields (EMFs)
- 7. Noise
- 8. Taxes, Subsidies and Economics
- 9. Jobs and Local Economy
- 10. Property Values
- 11. Financial Security
- 12. Transportation

## 1. Zoning Compliance

### **Kittitas County Zoning Code Compliance**

Zoning Designation: Agriculture-20 (Ag-20)

Iron Horse Solar (Project) consists of four parcels, identified by Kittitas County Assessor as parcels 269033, 279033, 19292, and 19293, totaling 67.8 acres of which 47.5 acres will be used for the Project. All parcels associated with the Project are zoned Agricultural use as Ag-20. Per Chapter 17.29 of the Kittitas County Code, Ag-20 is defined as "an area wherein farming, ranching and rural life styles are dominant characteristics. The intent of this zoning classification is to preserve fertile farmland from encroachment by nonagricultural land uses; and protect the rights and traditions of those engaged in agriculture."

Conditional Uses within Zoning Designation Ag-20

According to **Kittitas County Code (KCC) 17.61.010**, "a 'Major alternative energy facility' is defined as a hydroelectric plant, solar farm, or wind farm that is not a minor alternative energy facility." This code also specifies that a "minor alternative energy facility" is not more than 100kW. The Project will generate 4.5 megawatts (MW) of solar power and is thus considered a major alternative energy facility in Kittitas County.

KCC 17.61.020 states that, "Major alternative energy facilities may be authorized in the Ag-20, forest and range, commercial agriculture, and commercial forest zones as follows:

- a. Wind farms may be authorized pursuant to the provisions of KCC Chapter 17.61A;
- b. All other major alternative energy facilities may be authorized as a conditional use."

The Kittitas County Code clearly states that solar facilities, similar to that of this Project, are conditionally allowed uses within the Ag-20 zoning. As such, the Project is allowed, subject to conditions that would address impacts related to the specific site and setting.

Per KCC 17.15.030.1, conditional uses in Rural Non-LAMIRD Ag-20 Resource land (i.e. land zoned and classified the same as the property underlying the Project) include:

- Animal boarding
- Agricultural processing

- Agricultural sales
- Dairy
- Feedlot
- Riding academics
- Small scale event facility
- Libraries
- Religious institutions
- Hospital, animal or veterinary
- Shooting range
- Airport
- Forest product processing (portable)
- Forest product processing (permanent)
- Refuse disposal/recycle
- · Warehousing and distribution
- Campground
- Golf course
- Guest ranch or guest farm
- Recreational vehicle park
- Group home
- Mining and excavation
- Rock crushing
- Utilities

When compared to some alternative uses allowed conditionally in Ag-20, such as a sampling of those listed above—forest product processing, shooting range, mining and excavation, refuse disposal and recycling, and others—solar power generation is less obstructive to the view sheds and rural character with low-lying panels (as further described in the CUP application, under eight feet) and minimal activity during operation.

Kittitas County has approved a wide variety of conditional uses within the Ag-20 zone. Approved developments in the county include but are not limited to:

- 45 Acre Basalt Excavation Operation (CU-09-00006)<sup>1</sup>
- 50 Acre Small Scale Event Facility (CU-14-00004)<sup>2</sup>
- 182 Acre Shooting Range (CU-11-00003)<sup>3</sup>
- 8 Acre Campsite (CU-11-00002)4
- 10 Acre Marijuana Processing and Production (CU-14-0002)<sup>5</sup>
- 13.6 Acre Photovoltaic Solar Power Generation facility (CU-14-00003)<sup>6</sup>

Furthermore, Kittitas County has set a precedent for solar power generation in Ag-20 zoning with its approval of Osprey Solar in July of 2015. The community has also set a precedent for local solar power generation through the development, expansion and continued support of Ellensburg Community Renewable Park.

### **Farmland Impacts**

According to the US Department of Agriculture (USDA) 2012 Census of Agriculture, there are approximately 183,124 acres of farmland in Kittitas County. According to Table 2-1 of the Kittitas

<sup>2</sup> CU-14-00004. McIntosh. 2014.

<sup>&</sup>lt;sup>1</sup> CU-09-00006. Clerf. 2009.

<sup>&</sup>lt;sup>3</sup> CU-11-00003. Cascade Field and Stream Club. 2001.

<sup>&</sup>lt;sup>4</sup> CU-11-00003. Maughan. 2011.

<sup>&</sup>lt;sup>5</sup> CU-14-00002. Graham. 2014.

<sup>&</sup>lt;sup>6</sup> CU-14-0003. Osprey. 2014.

Comprehensive Plan, Land Use Designations and Corresponding Zoning Classifications with Acreage, there are approximately 113,274.4 acres of land designated in Ag-20, which is not the only zone dedicated to agricultural production. Subtracting 47.5 acres (at most) of land in this zone from crop production will be a roughly .04% reduction in potentially productive farmland over the next 25-35 years in Kittitas County. After that time, the land will likely be restored to an agriculture-ready state. Additionally, there are roughly 14,748,107 acres of farmland within Washington State and the Project will result in a temporary (during the life of the facility) reduction of farmland by 0.0003%.

# Kittitas County Comprehensive Growth Plan Compliance

OneEnergy Renewables (OER) has reviewed the Kittitas County Comprehensive Plan (Kittitas County, 2016) to assess the Project's consistency with county policies. At this time, the plan does not contain policies specifically related to solar power projects. The Project is consistent with the intent, goals, policies, and objectives of the Kittitas County Comprehensive Plan (GPO).<sup>7</sup> A few highlights can be found below:

<u>GPO 2.15</u> "The development of resource based industries and processing should be encouraged in all areas of Kittitas County. When such uses are located in rural and resource lands, criteria shall be developed to ensure the protection of these lands to ensure compatibility with rural character. Consider adding a definition for "resource based industry" to the definitions in Title 17, Zoning."

Response: According to KCC 17.08.468, "Resource based industry" means an industry based on natural resources including but not limited to recreation-related tourism, agriculture, fisheries, forestry and mining. Solar, relying on the sun, is a natural resource based industry and fits squarely with the development recommendations of GPO 2.15 above.

The Project will be fully compatible with the rural character of Kittitas Valley as proven by the compliance with RCW 36.70A.030 addressed below.

<u>GPO 6.7</u> "Decisions made by Kittitas County regarding utility facilities will be made in a manner consistent with and complementary to regional demands and resources."

Response: The Project will draw upon the natural, locally abundant solar resource to generate renewable alternative energy as a means to meet regional power demands. The Project will be consistent with, and complementary to, regional utility demands and local resources. Additionally, the Project will reinforce and bolster Puget Sound Energy's (PSE) regional distribution grid and benefit the local electrical system given the infrastructure upgrades being paid for by the Project to facilitate interconnection.

<u>GPO 8.14</u> "Allow for a variety of rural densities which maintain and recognize rural character, agricultural activities, rural community and development patterns, open spaces and recreational opportunities."

Response: The Project will maintain and conform with rural character, agricultural activities, rural community and development patterns, and open spaces through the following means:

- The low-lying nature of the panels and native grasses will perpetuate the visual landscapes of open space and vegetation that are traditionally found in this rural area.
- No trees or forested areas will be removed in the development of this Project.
- This Project has been sited on previously disturbed parcels, in order to further minimize potential impacts on local wildlife.

<sup>&</sup>lt;sup>7</sup> This response to comprehensive plan provisions is intended to address comments submitted to the County. However, while the Comprehensive Plan sheds light on County policies, and informed the County's decisions made in its land use regulations, OER does not agree that comprehensive plan policies control over adopted County Code provisions.

- This development will not impact any adjacent farming or ranching operations, nor will it affect the neighboring residences.
- Economically, this Project will foster traditional rural lifestyles and opportunities by
  offering the landowner a long-term, predictable annual revenue stream to supplement the
  financial impacts of vacillating market forces inherent in farming.
- This Project will not lead to any sprawling, low-density development.
- The Project will not impede the view of open spaces, mountains or other natural landscapes in the area.
- The impacts to both surface water and ground water will be minimal to non-existent.
- At the end of the Project life, the ground will be returned to its previous state, at which time the land can act as an agricultural resource.

<u>GPO 8.44</u> "Growth and development in Rural lands will be planned to minimize impacts upon adjacent natural resource lands."

Response: All impacts associated with the Project will be limited to the Project site. There are no anticipated impacts to any adjacent resource lands.

The Project is sited on previously-disturbed agricultural land impacted by regular tilling, crop production and harvest, installation of fences, road construction and ditching. The Project is designed to be a low impact development. Reclamation measures will be implemented to restore the temporarily disturbed surface soils at the Project Site. Permanent impacts from Project construction will be minimized whenever possible, enabling the land to return to pasture or other agricultural uses at the end of its useful life.

# **Growth Management Act Rural Policies and Guidance**

Under the Growth Management Act (GMA), Washington State has developed a guide to the development and adoption of comprehensive plans and development regulations that most Washington counties, including Kittitas County, have adopted. The GMA requires that counties include measures that apply to rural development and protect the rural character of the area as established by the County.

In addition to zoning designations, Kittitas County designates land use for each parcel. All parcels associated with the Project are designated as Rural Working Land Use. As per Section 2.4.1 of the Kittitas Comprehensive Plan, "Rural Working lands, generally encourage farming, ranching and storage of agriculture products, and some commercial and industrial uses compatible with rural environment and supporting agriculture and/or forest activities. Areas in this designation often have low population densities and larger parcel sizes compared to Rural Residential areas. Agriculture and forestry activities are generally less in scope than in the Resource lands."

In the GMA, in relation to Rural Development, RCW 36.70A.070 outlines that "Counties shall include a rural element including lands that are not designated for urban growth, agriculture, forest, or mineral resources". All parcels associated with the Project have been classified as Resource Land by Kittitas County and are generally described as, "the commercial agriculture lands, the commercial forested lands and mineral lands" in Section 8.1 of the Kittitas Comprehensive Plan. Due to the agricultural Resource designation of the subject parcels, this development is not subject to rural element provisions as outlined in RCW 36.70A.070.

Although this Project is not obligated to directly meet the GMA's requirements regarding development in rural areas, the Project is consistent with the GMA's definition of rural character. The County has complied with these provisions in its adoption of its zoning code. According to RCW 36.70A.030, "Rural character" refers to the patterns of land use and development established by a county in the rural element of its comprehensive plan and is defined in A-G below.

(a) In which open space, the natural landscape, and vegetation predominate over the built environment;

At a height not to exceed 8.0 feet, the solar panels will not impede the view of open spaces, mountains or other natural landscapes in the area. Currently, this site and many surrounding farms are growing Timothy and Alfalfa Hay. According to the USDA, Timothy (*Pheleum pratense*) ranges from 1.6 to 3.3 feet in height while Alfalfa (*Medicago sativa*) ranges from 2.0 to 3.0 feet.<sup>89</sup> Other Top Crop Items in the County, as listed in the 2012 Census of Agriculture commonly found in rural Kittitas landscape include Wheat (ranging 2.0 to 10 feet<sup>10</sup>) and Sweet Corn (10 feet or more<sup>11</sup>).<sup>12</sup> Hay bales, another common component to the local rural landscape, can range in height from roughtly 1.0 feet to 4.0 feet with round bales up to 7.0 feet in diameter.<sup>13</sup>

Again, no trees or forested areas will be removed in the development of this Project.

(b) That foster traditional rural lifestyles, rural-based economies, and opportunities to both live and work in rural areas;

Local farming, ranching and rural life styles will not be affected by this Project. The only farming practices that will be impacted are those that originally occurred on the leased 47.5 acres sited for the Project.

Additionally, the Project landowner, Bill Hanson, will continue to farm the remaining 450 acres of his farm and uphold the agricultural traditions in this area.

This development will not impact any adjacent farming or ranching operations nor will it negatively affect the neighboring residences.

Economically, this Project will foster traditional rural lifestyles and opportunities by offering the Landowner a long-term, predictable annual revenue stream. This diversified income will allow the landowner to invest in his ongoing farming operations. Additionally, this Project will act as an economic engine for local businesses, jobs and the tax base.

(c) That provide visual landscapes that are traditionally found in rural areas and communities;

Rural areas include many different visual elements and uses, including surface mines, large commercial greenhouse structures, silos, barns, wind generation facilities, etc. Such an array of rural uses is anticipated by the County's zoning code. On the Project site, native grasses

<sup>&</sup>lt;sup>8</sup> Plant Guide: Timothy Hay Phleum pratense L. US Department of Agriculture. Ogle, et al. 2011.

<sup>&</sup>lt;sup>9</sup> Plant Guide: Tall Wheat Grass Thinopyrum ponticum. US Department of Agriculture. Scheinost, et al.

<sup>10</sup> Ibid.

<sup>11</sup> Sweet Corn Production, National Corn Handbook, The Corn Crop, Purdue University Cooperative Extension Service. Waters et

<sup>&</sup>lt;sup>12</sup> Kittitas County Profile, 2012 Census of Agriculture, US Department of Agriculture. 2012.

<sup>&</sup>lt;sup>13</sup> Anderson Hay & Grain Co., Inc. Anderson Hay. 2014.

will be planted beneath the panels. The low-lying nature of the panels and native grasses will perpetuate the visual landscapes of open space and vegetation that are traditionally found in this rural area.

(d) That are compatible with the use of the land by wildlife and for fish and wildlife habitat;

The Project has been, and will continue to be reviewed according to all relevant local, state and federal laws and regulations for potential environmental impacts. This Project is proposed on previously disturbed parcels in order to minimize potential impacts on local wildlife. By temporarily developing on a previously disturbed agricultural plot rather than undisturbed sage brush, a solar farm requires significantly less clearing, grading, and infrastructure to access a habitat type typically populated by fewer known endangered species. OER will implement Best Management Practices (BMPs) in the construction and maintenance of this Project.

OER will continue to work with the Washington Department of Fish and Wildlife (WDFW) to address any potential concerns related to existing wildlife habitat.

(e) That reduce the inappropriate conversion of undeveloped land into sprawling, low-density development;

This Project will temporarily change the use of no more than 47.5 acres of land currently used for agriculture to alternative energy generation. As outlined above, this is an allowed use in the Ag-20 zone, subject to conditions that address localized impacts. Given that this land has been identified as Resource Land by Kittitas County, this is an appropriate temporary conversion of agricultural land. This Project will not lead to any sprawling, low-density development. OER does not have any plans for future additions or expansion at the facility.

Further, projects of this nature that are allowed as a conditional uses disincentivize landowners from pursuing conversions to residential development because they offer opportunities for landowners to generate diversified income while retaining traditional agricultural land uses. The Project will provide the landowner with a steady, long-term supplemental revenue that will allow and encourage the family to continue their traditional farming practices while the site generates electricity.

At the end of the Project life, the ground will be returned to its previous state, at which time the land can be returned to use as a purely agricultural resource.

(f) That generally do not require the extension of urban governmental services; and

The Project requires only rural government services such as, but not limited to, police and fire protection services. Any additional services required will be provided by the Project. This Project will not require the extension of urban governmental services.

(g) That are consistent with the protection of natural surface water flows and groundwater and surface water recharge and discharge areas.

The impacts to both surface water and ground water will be minimal to non-existent. Per a letter provided by the Project's principal geotechnical consultant (Michael Place, PE, Professional Service Industries, Inc.) and found in OER's application, "the arrays will shield soil immediately below the panels from rain, but will only have a small foundation in contact with the ground leaving mostly vegetated ground below it. Any water running off the panels will still come in contact with the exposed soil below and infiltrate in virtually the same manner as before since the actual reduction of surface soils for water to infiltrate into will be minimal."

Additionally, the Project will have no impacts to ground water since it will not draw water out of the ground for this Project. Further, cutting and grading will not exceed two feet in depth.

In summary, RCW 36.70A.030 requires local governments to adopt land use regulations that allow and protect ongoing agricultural land uses. The direction to local governments requires consideration of uses that would not disrupt the ongoing use of land for traditional agricultural practices. The Project will not disrupt the surrounding area's rural characteristics including, but not limited to farming, ranching and rural life styles. Furthermore, there will be no impact to the neighboring farming operations. Potential impacts such as weed control and transportation issues are appropriately addressed through the conditions in a conditional use permit.

#### 2. Aesthetics

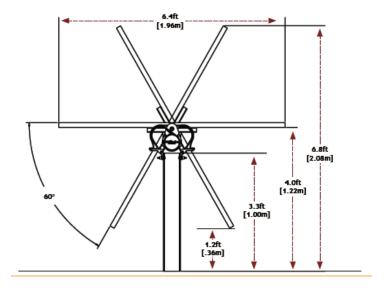
Visual impacts created by the Project will be limited to the view shed in close proximity to the Site and are not anticipated to be significant due to the low profile of the proposed facilities. Specific to the tracking technology, as currently designed: when the panels are oriented horizontally to the ground with a 0° tilt, the entire panel will be approximately 4.0 feet above grade. When the module is fully tilted in either direction at approximately 60°, the leading edge height (bottom edge of panels) will be approximately 1.2 feet from grade, and the top edge of the modules will be approximately 6.8 feet from grade. <sup>15</sup> See Figure 1 below.

Figure 1. NX Horizon Self-Powered Tracker – Diagram of Height Ranges

7

<sup>&</sup>lt;sup>14</sup> G2\_Construction Effects on Groundwater, OneEnergy Renewables Caribou Site. Application materials. 2015.

<sup>&</sup>lt;sup>15</sup> NX Horizon Self-Powered Tracker. NeXtTracker. 2016.



Agricultural equipment and infrastructure are often much higher than any part of the proposed Project. For example, pivot irrigation systems found on similar lands average approximately 11 feet in height to allow for crop clearance and can range from 660 to 1,350 feet in length. Additionally, hay barns—much like the ones adjacent the Project site—can range between 16 feet and 20 feet in height; grain silos, commonly found in the Kittitas Valley, can range from 15 feet to 54 feet in height. Infrastructure of these heights is common across the Kittitas County landscape. Therefore, any visual impacts by the Project will be minimal, and are consistent with, and often lower than current view sheds. Figure 2 below shows the current proposed site and nearby agricultural infrastructure.

Figure 2. Project Site with Adjacent 20+ Foot Hay Barn



<sup>&</sup>lt;sup>16</sup> Irrigation Systems Product Guide. Lindsey. 2011.

<sup>&</sup>lt;sup>17</sup> Planning and Building Barns that Work. Wilkerson. Department of Biosystems and Agricultural Engineering, University of Kentucky.

<sup>&</sup>lt;sup>18</sup> Brock On-Farm Grain Storage Bins. Brock. 2016.

Furthermore, when compared to other uses allowed and active in the Ag-20 zone, such as forest product processing, shooting range, mining and excavation and others highlighted previously, solar power facilities are less obstructive to the view sheds with their low-lying panels and minimal activity.

For example, a typical view of a gravel excavation operation, much like the one under conditional use approval on Ag-20 land and located approximately two miles southwest of the Project site, may include heavy equipment and machinery, including but not limited to: mass excavators, trenchers and dump trucks. <sup>19</sup> There is a second active gravel excavation site under a conditional use permit located roughly 2.5 miles southeast of the Project, that is also sited in Ag-20 (see Figures 3, 4 and 5 below). <sup>20</sup> In addition to visual impacts caused by equipment and activity "Excavation and associated working resulting in loss of landscape feature e.g. topographical changes, loss of vegetation (woodland, hedges), interruption of field pattern (hedge/wall removal) which causes changes in landscape character". <sup>21</sup>

Figures 3 and 4. Gravel mine of Parke Creek Road, Ellensburg WA





Figure 5. Rock and Gravel Pit<sup>22</sup>



<sup>&</sup>lt;sup>19</sup> Excavation and Trenching. Heavy Equipment. 2016.

9

<sup>&</sup>lt;sup>20</sup> Gibson Land Use Petition. Superior Court of Washington for Kittitas County. 2010.

<sup>&</sup>lt;sup>21</sup> Landscape and Visual Impact (Operational). Sustainable Aggregates.

<sup>22</sup> Rock and Gravel. Gibson and Son. 2004.

Previous real estate appraisals of utility-scale solar farms have identified larger greenhouses as a "very reasonable comparison" in terms of appearance given that a greenhouse is essentially another method for collecting passive solar energy. 23 Greenhouses are well received in both residential and rural areas and have more visual impact on a landscape when compared to a solar farm in terms of height and glare (shown in Figure 6 below). The visual impact of the solar panels will be less high than a typical greenhouse or even a single-story residential dwelling. Kittitas County Code allows for greenhouses and nurseries in all agriculturally-zoned land, including Ag-20. Currently, according to the USDA, at least five agricultural scale greenhouses are in operation within Kittitas County that could be used to gauge visual impacts of the Project. 24

Figure 6. Greenhouse in Kittitas Valley.<sup>25</sup>



If the Project site were to be developed with single-family housing, it would have a far greater visual and noise impact on the surrounding area given that a two-story home could be four times as high as these proposed panels. Additionally, the land on which any housing structure is constructed is then permanently taken out of agricultural production.

#### 3. Glare

PV panels are designed to absorb, not reflect, sunlight. Surface color and physical composition are the two factors in determining the reflectivity of an object or surface. White surfaces are the most reflective while darker colors absorb more light. Current solar panel technologies utilize a layer of anti-reflective material that allows sunlight to pass through while minimizing reflection and also includes an anti-

<sup>&</sup>lt;sup>23</sup> Real Property Appraisal Report, including Matched Pair Analysis, Kirkland Appraisals, LLC. 2014.

<sup>&</sup>lt;sup>24</sup> Agricultural Census: Nursery, Greenhouse, and Floriculture, U.S. Department of Agriculture. 2012.

<sup>&</sup>lt;sup>25</sup> Kittitas Valley Greenhouse. Kittitas Valley Greenhouse. 2012.

reflective material on the outer surface to further limit reflection. In a Federal Aviation Administration sponsored report investigating the safety of energy technologies at airports and in aviation, the authors noted that these design improvements have enabled today's PV panels to reflect as little as 2% of incoming sunlight.<sup>26</sup> <sup>27</sup>

The percentage of sunlight that is reflected from solar panels is significantly lower than many common materials, including roughly 60% less than flat water and roughly 50% less than grass and vegetation (what is currently located on the Project site). Other comparisons of readily found materials that reflect sunlight at appreciably higher levels than solar panels include: bare soil (roughly 30% more), rural environments (roughly 50% more), snow (roughly 80% more), and even wood shingles (18% more). (See Figures 1 and 2 below.) <sup>28</sup> <sup>29</sup>

Given the very limited glare reflected from solar farms, numerous solar projects have been successfully sited on or near major US and international airports, including Indianapolis, Boston, New York, San Jose and Denver, just to name a few. The biggest glare hazard in aviation is the sun itself–particularly when it is low on the horizon and it is worth noting that glare assessments are only required by the FAA for solar projects developed within two miles of airport runways. <sup>30</sup> <sup>31</sup> The Project was submitted for review to the FAA by the Obstruction Evaluation Group and received a Determination of No Hazard to Air Navigation result in the aeronautical study review.

When designing solar farms, OER uses the publically-available Solar Glare Hazard Analysis Tool (SGHAT) developed by the Sandia National Laboratory (available at <a href="www.sandia.gov/glare">www.sandia.gov/glare</a>) to determine the potential for glare from any given project. SGHAT is widely used tool within the solar industry. OER has undertaken multiple glare analysis studies of the Project. These studies estimate the intensity, time-of-day and duration of reflective glare upon stationary observation points and views (including multi-story homes and other stationary objects). OER's glare studies included view points from I-90, Clerf Road, Caribou Road, Hemingston Road, Hazel Lane, and Vantage Hwy.

Using Project data, including the height of the arrays, simulation results from SGHAT suggest that in no case is glare produced from the Project considered significant, meaning that glare, to the extent it is even experienced, is not expected to be bright enough to remain in one's vision after the exposure to the original image has ceased. Given these observations, while the potential exists for glint or glare, the likelihood of reflective glare from the Project being perceived on nearby public roads and residential properties is minimal at best.

11

 <sup>&</sup>lt;sup>26</sup> Solar and PV Glare Fact Sheet, Meister Consultants Group, Inc. and supported by U.S. Department of Energy's SunShot program. 2014.
 <sup>27</sup> Investigating Safety Impacts of Energy Technologies on Airports and Aviation, Airport Cooperative Research Program, Sponsored

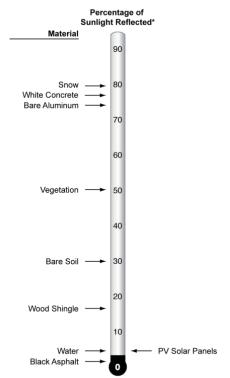
<sup>27</sup> Investigating Safety Impacts of Energy Technologies on Airports and Aviation, Airport Cooperative Research Program, Sponsored by the FAA. 2011.
28 Ibid

<sup>&</sup>lt;sup>29</sup> Solar farm projects near airports: Is glare an issue?, Solar Choice, 2013

<sup>&</sup>lt;sup>30</sup> Solar Community Engagement Strategies for Planners-2012, American Planning Association. 2012

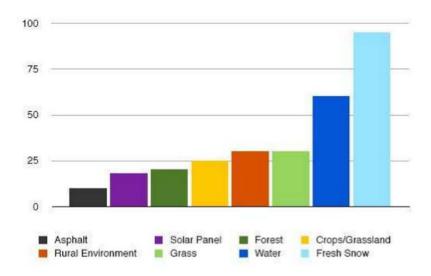
<sup>&</sup>lt;sup>31</sup> Solar Glare Hazard Analysis Tool, Sandia National Laboratories. 2016.

Figures 1 and 2. Materials Comparison - Percentage of Sunlight Reflected<sup>32</sup>



\* Sunlight is measured as watts per squared meter (W/m2). The amount of incoming sunlight is generally considered to be 1,000 W/m2. The percentage of sunlight reflected from each surface can be calculated from this baseline.

<sup>32</sup> Figure 1 source: <u>HMMH</u>; Figure 2 source: <u>Solar farm projects near airports: Is glare an issue?</u>, Solar Choice. 2013



### 4. Environmental Impacts

OER's experienced development team employs rigorous site analysis and abides by low impact development practices. OER generally sites its solar projects on previously disturbed parcels, such as agriculture, in order to further minimize potential impacts on local wildlife. Temporarily developing on a previously disturbed and regularly tilled agricultural plot, such as the site selected for the Project rather than undisturbed sage brush, requires significantly less clearing and grading, given that such activities are already occurring to support farming practices on-site. According to the Washington Department of Fish and Wildlife (WDFW) in their July 31, 2015 comment letter, the Project "will have only minor impacts on terrestrial wildlife" and "no additional native vegetation (shrub steppe habitat) will need to be converted for this project.".<sup>33</sup>

While placing ground-mounted photovoltaic panels in accordance with the required safety and electric codes will have some environmental impacts, once a site is rigorously reviewed according to all relevant state and local laws for possible impacts, the County can assume the following:

- The impacts of the Project has been reviewed by state and federal agencies to ensure wildlife will not be negatively affected.
- b) This Project will be managed to mitigate invasive plant species.
- c) OER has both selected and designed the Project to minimize all foreseeable negative impacts to both the local wildlife and Caribou Creek.

These assurances can be secured in both the SEPA MDNS as well as conditions imposed in the CUP.

As it relates to potential avian impacts, there is no scientific evidence to suggest PV panels cause significant bird fatalities when compared to other anthropogenic land uses.<sup>34</sup> In fact, there are a number of documented accounts of birds nesting on the structures that support ground-mounted PV solar panels. It is reasonable to hypothesize that some ground-nesting birds, such as quails, would be attracted to solar farms due to the availability of safe nesting area and the deterred predation within security fencing.<sup>35</sup> <sup>36</sup>

<sup>&</sup>lt;sup>33</sup> D\_IHSolar WDFW Comments to OneEnergy Renewables. Application materials. 2015.

<sup>&</sup>lt;sup>34</sup> Potential ecological impacts of ground-mounted PV solar panel in UK, BSG Ecology.2014.

<sup>35</sup> Environmental Impacts of Utility-Scale Solar Energy. Renewable and Sustainable Energy Reviews. Hernandez, et al. 2013.

OER has already provided WDFW an opportunity to preliminary review the Project site and both parties are enthusiastic about further discussions concerning how to monitor and prevent avian impacts. Due diligence review of the wildlife impacts through the use of the U.S. Fish and Wildlife Service Information for Planning and Conservation (IPaC) Trust Resource Report tool identified no threatened or endangered species known to be on or near the site.

OER has designed a weed management plan to abide with both the Washington State weed control requirements and Integrated Pest Management Guide as defined by Northwest Weed Management Partnership, as detailed further in the CUP submittal appendices. To illustrate its commitment to designing solar farms that support native vegetation, OER has recently partnered with Fresh Energy, a Minnesota non-profit committed to designing solar farms that also provide critical native pollinator habitat. At the Project, OER will continue to work with WDFW for local expertise on appropriate native seed mixes for the site and to improve the riparian area along Caribou Creek. According to WDFW, revegetation of the site to some native plant species will "not only offset habitat impacts but actually improve habitat."

OER continues to engage WDFW in discussions related to impacts at the Project site and the parties are actively working together to resolve issues that we raised in WDFW's June 6, 2016 letter to the County. See Appendix A.

#### 5. Hazardous Materials

Photovoltaic solar panels do not produce any emissions, radiation, or leaching during normal operation conditions.<sup>37</sup> Unless exposed to excessive heat (greater than 1000 degrees Celsius) for an extended amount of time, there is no risk of chemicals leaching from the PV modules. For comparison, the typical roof-level temperatures observed during residential fires have been documented between 800-900 degrees Celsius. A fire sufficiently hot enough to produce these types of conditions is highly unlikely to occur in the vicinity of the Project.<sup>38</sup>

The basic component of a PV solar cell is made of silicon (referred to as the crystalline solar cell) and is not considered to be hazardous to the environment.<sup>39</sup> To provide electrical insulation and protection against environmental corrosion, the solar cells are encased in a transparent material referred to as an encapsulate (typically ethylene vinyl acetate, which is nontoxic) and are mounted on top of a rigid flat surface or substrate (typically polyvinyl fluoride, which is also nontoxic). All of these nontoxic components ensure that PV panel and its semiconductor material are enclosed, do not mix with rain or other water sources, and/or vaporize into the air. PV panels pass hail tests and are regularly installed in Arctic and Antarctic conditions. Therefore, there is little, if any, risk of chemical releases to the environment during operation under normal conditions.<sup>40</sup>

Although PV panels themselves are not flammable, OER makes the provision of adequate fire protection a fundamental aspect for each project. This includes design measures such as minimum driveway widths, ground clearance, and accessibility to all areas of the Project as defined by county-specific codes, the National Fire Protection Association (NFPA) 1 Fire Code Handbook §11.12.3, and the NFPA 70 National Electrical Code, which provide fire prevention guidance specific to ground-mounted photovoltaic installations.41

# 6. Electromagnetic Fields (EMFs)

<sup>37</sup> Overview of Potential Hazards in Practical Handbook of Photovoltaics: Fundamentals and Applications, U.S. Department of Energy's Brookhaven National Laboratory. Fthenakis. 2003.

<sup>38</sup> Questions & Answers Ground-Mounted Solar Photovoltaic Systems, Massachusetts Department of Energy. 2015.

<sup>&</sup>lt;sup>39</sup> Report No. NREL/FS-520-24618, National Renewable Energy Laboratory. 1999.

<sup>&</sup>lt;sup>41</sup> Codes and Standards for the Built Environment, National Fire Protection Association. 2012

Solar PV projects like this Project generate low level electromagnetic fields (EMFs) through two specific components of the Project: the inverters, which convert the energy generated by the sun through the solar panels from DC current to a form that can connect to the electrical grid (alternating current); and the interconnection points on the electrical poles outside the property—this is the point where the power from the Project is connected to the electrical grid. EMFs are only generated during daylight hours when the sun is shining and they are not produced at night when the Project is not generating electricity via the sun's rays.

EMFs created by the Project, even if standing directly next to an inverter, will measure drastically below the minimum thresholds established by the most rigorous exposure guidelines to date (see below International Commission on Non-Ionizing Radiation Protection guidelines). Exposure to EMFs when standing just outside the fence of the Project, would be the same as standing a full mile away from an individual's personal cell phone, according a study completed by the U.S. Naval Facilities Engineering Command. <sup>42</sup>

Based upon county setbacks and solar array designs at the Project, inverter placement will be a significant distance from any public access point and EMF measurements at the fenced boundary of the solar Project will measure at less than one-tenth of one percent of the safe exposure limit to the general public.<sup>43</sup>

While there are no federal, state or local regulatory exposure limits in the U.S. for EMFs applicable to solar farms, EMFs from utility-scale solar projects have undergone extensive formal scientific study, including by the U.S. Department of Energy, the Federal Aviation Administration and others. These studies have shown that EMFs are measured between 0.2 to 0.4 milli-Gauss (mG) at the perimeter of a Project. When measured at 50 to 150 feet from the fence line of a project, EMFs were not elevated above background levels (background levels are the base standard levels of EMF in any regular environment). This Project will be no different. 44 45 46

To put these measurements in perspective, the International Commission on Non-Ionizing Radiation Protection (ICNIRP) has a recommended exposure limit to EMFs of 833 mG for the general public. <sup>47</sup> The ICNIRP is an organization of 15,000 scientists in 40 nations and their recommendations are routinely used in EMF exposure studies.

Examples of average EMF values found in everyday life can be found below.<sup>48</sup>

<sup>&</sup>lt;sup>42</sup>Renewable Energy, Photovoltaic Systems Near Airfields: Electromagnetic Interference Report. Dann, et al. 2012.

<sup>43</sup> Study of Acoustic and EMF Levels from Solar Photovoltaic Projects. Guldberg. 2012.

<sup>&</sup>lt;sup>44</sup> Department of Energy letter to Allison Hamilton of the Oregon Department of Transportation. Department of Energy. 2009.

<sup>45</sup> Ibid.

<sup>46</sup> Ibid.

<sup>&</sup>lt;sup>47</sup> Guidelines for limiting exposer to time-varying electric, magnetic, and electromagnetic fields. ICNIRP. 1998.

<sup>&</sup>lt;sup>48</sup> Magnetic Field Levels Around Homes, Long Island Power Authority via University of San Diego, California. 2005.

	(in mG) Mid-point 1 ft.	(in mG) Mid-point 3 ft.		(in mG) Mid-point 1 ft.	(in mG) Mid-point 3 ft.
Clothes Dryer	15	<1	Blender	11.1	1
Clothes Washer	1.9	<1	TV	10.2	<1
Coffee Maker	1.05	<1	Fluorescent		
Toaster	3.8	<1	Desk Lamp	13	1.15
Can Opener	115.5	3.75	Microwave	60	5.5
Mixer	52.5	1.08	Electric Range	22	3.55
Refrigerator	1.5	<1	· ·		

The Federal Aviation Administration (FAA) has also studied whether a solar project can interfere with community communication systems. According to the FAA, solar PV systems have been found to be compatible near airports and communication system interferences are most commonly a result of a physical structure being placed between the transmitter and receiver. Due to their low profiles, solar PV systems represent little risk of interfering with radar transmissions.<sup>49</sup>

#### 7. Noise

The low level operational noise created by the Project is primarily limited to daytime hours and would occur within the Project site, with little noise spillover into adjacent properties. The Project noise level is not expected to result in adverse permanent increases to ambient noise levels. Studies conducted on other solar PV projects have concluded that daytime project noise level increases from solar PV project would not exceed 3 dB (decibels) above the ambient noise level. In general, a difference of 3 dBA or (a-weighted decibels) less is not a perceptible change in environmental noise. <sup>50</sup>

Outdoor ambient noise in rural and urban areas comes from transportation, construction, industrial, and human and animal sources, with road traffic being the major source of most noise. Noise can be highly variable and it is common that Day-Night sound (defined by the U.S. Environmental Protection Agency as an equivalent sound level for a 24-hour period<sup>51</sup>) may vary by 50 dB. For example, outdoor ambient noise is generally 85-90 dB in urban areas and may be as low as 30-40 dB in the certain wilderness areas.<sup>52</sup>

Ambient noise in the vicinity of the Project, among other rural and suburban daily noise, includes agricultural noise and traffic noise from both Vantage Highway which is .5 miles from the Project, and from Interstate 90, which is less than 1.0 mile from the Project.

Solar panels, themselves, do not make noise. However, the inverters, which convert solar energy into a form the electrical grid can use, can produce a low noise comparable in volume to a normal conversation taking place three to five feet away from you, and is inaudible at 50 to 150 feet from the boundary of project (Table 1).<sup>53</sup> The Kittitas substation, located approximately 1.25 miles west of the Project, will experience little to no increased noise.

Tracking equipment allows solar modules to face the sun over the course of the day and can also generate a low level of noise as they gently move with the sun's trajectory. The noise associated with the

<sup>52</sup> Outdoor Ambient Sound Levels. Engineering Toolbox.

<sup>&</sup>lt;sup>49</sup> Technical Guidance for Evaluating Selected Solar Technologies on Airports, Federal Aviation Administration. 2010.

<sup>&</sup>lt;sup>50</sup> Noise Study, SCE West of Devers Upgrade Project, U.S. Bureau of Land Management. 2015.

<sup>&</sup>lt;sup>51</sup> Day and Night Sound Level. Engineering Toolbox.

<sup>&</sup>lt;sup>53</sup> NEMA Standards Publication No. TR 1-2013. Transformers, Regulators and Reactors. 2014

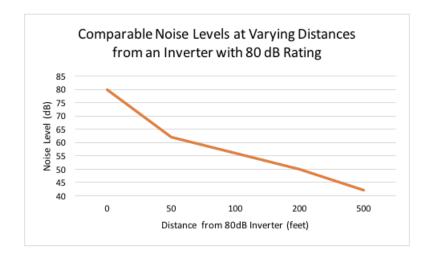
inverters and tracking equipment occurs during the daytime when solar arrays are generating electricity and are silent at night when the sun is below the horizon.<sup>54</sup>

The below graphic illustrates how a decibel rating of 80dB is influenced over distance (Table 1 and Figure 1). Noise reduction occurs at 6dB per doubling of distance. Specific to the Project, the noise produced by the inverter at the source of generation (0 feet from the inverter) will be equal that of a household appliance such as a vacuum cleaner or coffee grinder. The decibel level decreases across distance. Therefore, at the Project boundary fence line (150-200 feet from the inverter), the decibel level will decrease to a decibel level equivalent to that of the sound of rainfall or a small window air conditioning unit. Any noise created by the Project will be completely imperceptible from neighboring parcels (500+feet). During the construction phase, intermittent noise levels will not exceed the daytime allowable use of 90dB as mandated by Washington State law.

Table 1. Electric Inverter Noise across Distance

Distance from Inverter (ft)	Noise Level (dB)	Comparable Noise Levels <sup>56</sup>
0	80	Vacuum cleaner, coffee grinder, dial tone
50	62	Normal conversation, dishwasher
100	56	Office environment, quiet suburb
200	50	Window air conditioning unit, rainfall
500	42	Library, bird calls, computer, whispering

Figure 1. Decibel Level of Inverter at Varying Distances



<sup>&</sup>lt;sup>54</sup> Study of Acoustic and EMF Levels from Solar Photovoltaic Projects. Massachusetts Clean Energy Center. December 2012

<sup>&</sup>lt;sup>56</sup> Noise Sources and Their Effects, Purdue University, Department of Chemistry, February 2000

## 8. Taxes, Subsidies and Economics

No taxpayer money is being used to develop this Project.

The Project will not benefit from the Washington State Sales Tax Exemption for Solar PV (WAC 458-20-263). As it is currently designed, this Project will also not qualify for the Washington State Production Incentive (RCW 82.16.110).

This Project will benefit from the Federal Investment Tax Credit (ITC). The ITC is a federal policy that incentivizes the deployment of both rooftop and utility-scale solar energy in the United States. The ITC offers a 30% **tax credit** applicable to the income taxes that the system owner would typically have to pay the federal government. A tax credit is a reduction in the amount of federal taxes owed by the project owner and does not reflect any taxpayer contributions.

This Project is estimated to increase average property tax revenues collected in Kittitas County by \$24,000 annually, which amounts to more than \$950,000 supporting the county tax base over the anticipated lifespan of the Project, or 36 years. The table below details anticipated property tax benefits resultant from the solar project improvements in comparison to use of the property for agricultural purposes only.

	Scenario 1: Solar Project <sup>57</sup>	Scenario 2: No Project
	Solar Use	Ag Only
Tax Due per Year	\$3,848.24	\$2,348.24
Life of Project (years)	36	36
Removal Tax	\$19,048.00	\$-
Personal Property Tax from Equipment	\$800,000.00	\$-
Estimated Property Tax Revenues	\$957,584.64	\$84,536.64

Not only do solar projects generate property tax **revenues**, but they also provide consistent additional and diversified income opportunities for landowners.

The National Renewable Energy Laboratory (NREL) proposes that co-location of solar installations and agriculture has the potential to benefit agricultural areas, especially those where continuing agricultural production is a high priority. Specifically, temporarily incorporating solar technologies on existing grazing or agricultural land could provide an additional income stream to land owners and provide diversification of revenue for years when agricultural productivity is low or for crops that are relatively low value, such as hay.<sup>58</sup> These benefits have already been demonstrated with wind developments on agricultural land and similar benefits have been speculated upon for solar supporting the next generation of farmers.<sup>59</sup>

The economics of utility-scale solar have become increasingly cost-competitive with conventional generation technologies. Its cost of generation, or levelized cost of energy (LCOE), has decreased by 82 percent in the last six years due to the declining cost of system components (e.g., panels, inverters,

<sup>59</sup> Why are Californian Farmers Adopting More (and Larger) renewable Energy Operations?" Beckman, et al. 2012.

<sup>&</sup>lt;sup>57</sup> Personal and Industrial Property Valuation Guidelines 2016. Washington State Department of Revenue. 2016.

<sup>&</sup>lt;sup>58</sup> Overview of Opportunities for Co-Location of Solar Energy Technologies. Macknick, et al. 2013.

racking systems, etc.), and dramatic improvements in efficiency, among other factors.<sup>60</sup> For example, the unsubsidized LCOE of utility-scale crystalline solar panels, which will be used for this Project, range from \$58 to \$70 whereas that of coal ranges from \$65 to \$150.61

#### 9. Jobs and Iron Horse Solar

The renewable energy sector has been responsible for significant job growth across the globe and here in the United States. According to research conducted by the International Renewable Energy Agency in the Renewable Energy and Jobs – Annual Review 2016.62 8.1 million people, worldwide were directly or indirectly employed in renewables in 2015. In the United States alone, renewable energy employment increased by 6% in 2015 with a total number of 769,000 jobs. Growth specifically in the solar sector was nearly 22% in 2015 for a total of 209,000 jobs.

The development of this Project is directly contributing to regional jobs in the Pacific Northwest. The development company, OER is headquartered in Seattle, WA with a development office in Portland, OR where project developers are employed. OER has further utilized several local contractors, consultants and engineers to assist with the development of the Project.

The vast majority of jobs will occur during the installation. It is estimated that approximately 40-60 jobs will be created during the construction phase of this Project and are anticipated to last for 4-6 months. Where feasible, local labor will be hired for the Project installation contingent upon the availability of a qualified labor pool. As further detailed on page 21 in the "Farming Impacts" section of the conditional use permit narrative, the Project will not inhibit traditional rural lifestyles, rural-based economies, and opportunities to both live and work in rural areas as local farming practices will continue and no job opportunities will be lost. Once installed, job opportunities will include vegetative maintenance and solar panel operations, including panel washing.

#### 10. Property Values

The landowner, Mr. Bill Hanson, owns several parcels totaling approximately 500 acres that are being used for agriculture. The Project area will not exceed 47.5 acres, or less than 10% of his property and will not substantially impact the personnel required to operate his farm.

Although limited in number, current studies and real estate valuations concerning solar projects and their potential impacts on adjacent property values have consistently found that:

- a.) Utility-scale solar farms have no negative impact on the market values of surrounding or adjacent properties.
- b.) Comparably sized, utility-scale wind farms have no negative impact on the market values of surrounding or adjacent properties, including those already in Kittitas County.
- c.) Comparable solar technology implemented at the residential scale dramatically improves property values.

Given the fact that solar PV facilities are a relatively new land use, limited peer-reviewed studies exist regarding potential impacts on the values of adjacent and surrounding properties. However, substantial peer-reviewed data does exist on other land uses, including wind generation facilities operating in rural areas. Concerning solar facilities, a recent external obsolescence study conducted in Chatham County, North Carolina of multiple solar farms and the potential impact of solar farms on adjacent property values concluded that "there is no impact in sale price for residential, agricultural or vacant residential land that adjoins existing or proposed solar farms." Further, the study noted that the "matched pair analysis shows no impact in home values due to the adjacency to the solar farm as well as no impact to adjacent vacant,

<sup>&</sup>lt;sup>60</sup> <u>Lazard's Levelized Cost of Energy Analysis – Version 9.0</u>. Lazard. 2015.

<sup>62</sup> Renewable Energy and Jobs-Annual Review 2016. International Renewable Energy Agency. 2016.

residential, or agricultural land." And, finally, that "adjoining agricultural uses are consistent with a solar farm." The study concluded that the solar farms would have "no negative impact on the adjoining properties" and were "a compatible and harmonious use with the area." <sup>63</sup>

Within the past year, a report was issued by The Massachusetts Department of Energy Resources, Massachusetts Department of Environmental Protection, and the Massachusetts Clean Energy Center stating that "A review of literature nationwide shows little evidence that solar arrays influence nearby property values." <sup>64</sup>

The United States Department of Energy (DOE) has historically noted that "the concern that property values will be adversely affected by wind energy facilities is commonly put forth by stakeholders." <sup>65</sup> To address this concern, previous investigations of utility-scale wind farms have organized stakeholder concerns into three specific categories of potential impacts: scenic vista stigma (property devalued due to view of wind farm), area stigma (property devalued due to general area appears more developed), and nuisance stigma (property devalued due to adverse impacts such as sound or shadows). However, across 50,000 sales of single family homes situated within 10 miles of 67 existing wind facilities in nine different U.S. states, the DOE found that there is no statistical evidence that home values near wind turbines were affected in the post-construction or post-announcement/pre-construction periods. <sup>66</sup> Further, no significant evidence was found to support the presence of any of three stigmas across 24 wind facilities and 7,500 real estate transactions, which included Benton and Walla Walla Counties. <sup>67</sup> Specific to Kittitas County, the views of wind turbines were previously projected to not impact property values based on surveyed tax assessors and have not been proven to have had a significant impact since installation. <sup>68</sup>

Further, a series of analyses focused on the impact of wind power projects on residential home values by the United Stated DOE Berkeley National Laboratory concludes that there is no statistical evidence that home values near wind turbines were affected in the post-construction or post-announcement/preconstruction periods.<sup>69</sup>

Considering the significantly smaller impact of solar farms, in terms of height, noise, and moving parts, it is logical to assume the absence of significant impacts for wind farms on property values will be shared by solar farms.

## 11. Transportation

During normal operations there will be limited traffic to and from the Project. Seasonal vegetation maintenance and quarterly to yearly maintenance on the solar array components are the most likely reasons for occasional visits.

As discussed in the CUP Application, the Project will generate the greatest volume of traffic during the construction phases when workers are onsite for four to six months during the process of completing site preparation, panel and electrical equipment installation.

All construction traffic will use the designated transporter route, which was selected based on its proximity to the site, existing interstate exit, and the minimization of traffic on state and local roads. Daily

<sup>63</sup> Real Property Appraisal Report, including Matched Pair Analysis, Kirkland Appraisals, LLC. 2014.

<sup>&</sup>lt;sup>64</sup> Questions & Answers: Ground Mounted Solar Photovoltaic Systems, Massachusetts Department of Energy Resources, Massachusetts Department of Environmental Protection, and the Massachusetts Clean Energy Center. 2015.

<sup>65</sup> Wind Energy Facilities and Residential Properties: The effect of proximity and view on sale prices. Hoen, et al. 2011.

<sup>&</sup>lt;sup>66</sup> A Spatial Hedonic Analysis of the Effects of Wind Energy Facilities on Surrounding Property Values in the United States. LBNL. 2013.

<sup>&</sup>lt;sup>67</sup> Ibid.

<sup>&</sup>lt;sup>68</sup> The Economic Impacts of a Proposes Wind Power Plant in Kittitas County, WA. Grover. 2013.

<sup>&</sup>lt;sup>69</sup> A Spatial Hedonic Analysis of the Effects of Wind Energy Facilities on Surrounding Property Values in the United States. Hoen, et al. 2013.

construction traffic will include grading and excavation equipment, general construction equipment, and other individual vehicles, which is not expected to cause any traffic delays on either highways or local roadways. The SEPA checklist provided in OER's CUP submittal further details any potential traffic impacts.

# 12. Financial Security and Iron Horse Solar

OER's proposal on financial security is detailed further in the Decommissioning and Site Restoration Plan of the CUP submittal.

"Financial assurance to cover the cost of implementing the Decommissioning and Site Restoration Plan shall be secured to ensure that the decommissioning costs are not borne by the County and/or State at the end of the useful life of the Project. The performance and financial assurance guarantees may be comprised of, but not limited to, one or more of the following: a corporate guarantee; a surety bond; a suitable insurance policy; or an irrevocable letter of credit. With respect to system removal, the Project company will commit that at the expiry of the term of December 31, 2030 of the initial Power Purchase Agreement signed by Puget Sound Energy on December 21, 2015, Project shall have obtained and maintained decommissioning insurance, or otherwise provided adequate financial assurance (which may include a bond that builds in equal increments over a ten year period to reflect the full value of the expected cost of decommissioning by November 2046) for one hundred and twenty-five percent (125%) of the estimated costs of the decommissioning efforts."

# ONEENERGY RENEWABLES®

# Appendix A

**WDFW** Correspondence

Please see the following page



# DEPARTMENT OF FISH AND WILDLIFE

South Central Region • Region 3 • 1701 South 24<sup>th</sup> Avenue, Yakima, WA 98902-5720 Telephone: (509) 575-2740 • Fax: (509) 575-2474

July 15, 2016

Jeff Watson Kittitas County Community Development Services, Planner II 411 North Ruby St., Suite 2 Ellensburg, WA 98926

RE: CU-15-00006 Iron Horse Solar Application update to WDFW concerns on the project

Dear Mr. Watson,

This is correspondence as requested by One Energy to be sent to Kittitas County that One Energy and WDFW is proceeding with working together to resolve issues that we raised in our June 6, 2016 letter to the county. We will be coordinating further on the riparian planting plan, vegetation restoration plan and incidental avian monitoring plan. WDFW will review the updated exhibits C and G that One Energy provided to WDFW on July 13 and will plan on submitting comments back to One Energy by the end of next week, July 22, 2016.

Please contact me at (509) 457-9307 or <u>Scott.downes@dfw.wa.gov</u>, if you have any questions or concerns regarding these comments.

Sincerely,

Scott Downes Area Habitat Biologist

Cc: Brent Renfrow, WDFW

colt Deines

Taylor Steele, One Energy