State of Washington
DEPARTMENT OF FISH AND WILDLIFE
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December 5, 2017

Stephen Posner
EFSEC Manager
1300 S Evergreen Park Drive SW
P.O. Box 43172
Olympia, WA 98504-3172

RE: WDFW Comments on the Columbia Solar Application for Site Certification to the Energy Facility Site Evaluation Council (EFSEC) and determination of significance for the proposed project pursuant to Inter-agency Agreement

Dear Mr. Posner,

Thank you for the opportunity to comment on Application for Site Certification and the determination of significance for the proposed Columbia Solar Project. The Columbia Solar Project is located in the Kittitas Valley on five project locations surrounding Ellensburg, Washington. The Washington Department of Fish and Wildlife (WDFW) was contacted early in the review process by the applicant and their environmental consultants. Region 3 WDFW Habitat Program staff met with the applicant's environmental consultants on April 12, 2017 to review the project sites and provide initial guidance on minimization and avoidance of fish and wildlife and their associated habitats. Following that initial meeting, a series of correspondence and ability to review drafts of the critical area reports were provided to WDFW staff involved with the project. WDFW is appreciative of the outreach by the applicant towards WDFW and believes it to be in the nature of looking to minimize and avoid habitat impacts for these projects.

WDFW staff reviewed the documents provided to EFSEC for the application for site certification, focusing particularly on the sections relevant to fish and wildlife and their associated habitats. WDFW agrees with the applicant's documents that much of the fish and wildlife habitat impacts have been minimized and avoided, particularly through their choice of site selection of previously modified habitat areas. WDFW also agrees that the mitigation measures proposed for the habitat areas will help to further reduce habitat impacts. However, WDFW would support additional mitigation measures including compensatory mitigation as proposed minimization, avoidance, and mitigation measures are unlikely to fully reduce all of the impacts for fish and wildlife and their associated habitat without additional measures including compensatory mitigation. Below are additional measures that WDFW is requesting of the applicant to fully mitigate the project's impact on fish and wildlife and their habitat. If these additional measures are adopted, along with the measures already proposed in the application for site certification, WDFW would agree that it would be appropriate to issue a Mitigated

Determination of Non-significance (MDNS) in regards to fish and wildlife habitat impacts for Columbia Solar Project.

Proposed additional mitigation measures to offset impacts to fish and wildlife habitat

1. Table 1.10-1 summarizes mitigation measures that the applicant TUUSSO plans to implement during construction and operation of the Columbia Solar Projects. Under the habitat vegetation, fish and wildlife section the following comments should be addressed:
    - Under Design and Construction Techniques, it states "Avoid, when possible, construction in sensitive areas such as riparian zones and wetlands." This is vague and gives the applicant too much latitude to potentially impact riparian zones and wetlands with no oversight. Recommended change would be to add the sentence, "If impacts to riparian and wetlands are scheduled to occur, the applicant must consult with EFSEC to discuss impacts and to prepare a mitigation strategy to compensate for the impacts to riparian zones and wetlands."
    - Under Design and Construction Techniques, it states "For poles installed by TUUSSO, when feasible": and gives mitigation measures to reduce electrocution hazards to raptors. The phrase "when feasible" is vague and gives the applicant too much discretion to make decisions where factors other than raptor safety may be an influence. WDFW requests that the applicant follow measures listed by Avian Power Line Interaction Committee (APLIC) guidelines on any new poles installed and if those measures are not feasible on a pole, then the applicant shall have to present those reasons to EFSEC.
    - Under Restoration and Noxious Weed Control, it states "Reseed all temporarily disturbed habitats with an appropriate mix of native plant species". As most of these sites are in non-native habitat (except for the Fumaria site), WDFW recommends using plants that are adapted to local site conditions and will become established quickly, including but not limited to native plants. WDFW would only request that native plants be revegetated in areas of existing native vegetation or in areas such as riparian or wetland where native plants should be installed if doing site restoration.
    - Under Shorelines of the State, Construction and Operation it addresses the distance from the existing shoreline of the Yakima River to the project boundary. During the April 2017 site visit WDFW documented evidence of shoreline erosion in this area and recommended to the applicant's environmental consultants that either the landowner or the applicant (lease) may want to consider installing some bank protection measures. Without these measures, the shoreline may continue to erode in that area. To perform that work, consultation and permitting of a Hydraulic Project Application (HPA) would be required.

2. Section 2.3.2.6. Infrastructure. The fence design is proposed as a six-eight-foot-high chain link fence topped by razor wire. WDFW has concerns that both the height of the fence and the razor wire at the top of the fence may cause impacts to wildlife. There are deer and elk in the area of these project sites, particularly deer. Both species have been documented jumping over a six-foot fence and WDFW is concerned that if an animal were to enter the facility, it would likely get trapped and potentially harm itself. WDFW

recommends setting the fence height at a minimum of eight foot. Razor wire at the top of the fence may cause injury to wildlife such as raptors perching on the fence, WDFW recommends not using razor wire on top of the fence and if any barbs must be used, only a single line of barbed wire should be installed on top of the fence.

3. Section 2.3.3 regarding layout of the proposed facilities. WDFW has concerns over the buffers proposed for the floodplains, riparian areas and wetlands. Each of those concerns are addressed below.

   Floodplains:
   Though the footprint of the project sites in the floodplain has been minimized, some of the sites still have road and fence footprint in the floodplain. WDFW requests that if structures (including roads and fences) are placed in the floodplain that they shall be designed so as to not restrict or redirect flows from their natural flow path. Further if impervious surfaces such as roads are placed in the floodplain, that mitigation measures are taken to compensate for the lack of floodplain storage from these impacts.

   Riparian Areas:
   The riparian area buffers proposed for the streams around the project area are based on the current Kittitas County Critical Areas Ordinance (CAO) which is more than twenty years old and not consistent with current Best Available Science (BAS). Kittitas County CAO is currently being updated and revised. WDFW recommends using recommendations in the current draft as guidelines to more adequately protect these riparian areas. In that draft document, the riparian buffer on Type F (fish-bearing streams) is proposed 100-foot. WDFW requests that a 100-foot riparian buffer be applied for the Type F streams in the project areas. Further, to adequately protect the streams in terms of habitat these buffers need to be vegetated. Details are elaborated below under compensatory mitigation, but WDFW proposes that these riparian buffers within the project boundary be planted with a suitable mix of riparian plants including shrubs as compensatory mitigation for some of the habitat impacts that cannot be avoided or minimized by these projects.

   Wetlands:
   The proposed buffers of the wetlands within the project footprint are not consistent with current BAS and if the buffers are not expanded the wetland habitats may be reduced and impacted by this project. Wetlands are often vital habitat to both fish and wildlife species and their continued existence in these areas are critical to maintaining healthy populations of animals. Wetlands listed in the project areas range from Category II-IV. WDFW requests that the applicant work with the Department of Ecology who has technical expertise in wetland impacts to determine the appropriate buffers on these wetlands to avoid impacts. Some of these wetland buffers have been degraded through agricultural practices and if compensatory mitigation is needed for impacts to wetlands, these buffers could be revegetated to help restore their function and habitat value.

4. Section 3.4.5.1. Construction Impacts to Fish and Wildlife. Seasonal avoidance buffers are referenced as suggested by WDFW for nesting raptors and the great blue heron

colony. WDFW requests that the project sites be surveyed for nesting activity in the spring of the year of construction and if found to be active, a seasonal work avoidance buffer for disturbance during the nesting season as outlined in the application for site certification.

5. Section 3.4.5.2. Operation Impacts to Fish and Wildlife. As summarized in Section G of Section 3.4.5.2, there have been documentation of avian fatalities at Photovoltaic (PV) solar facilities. The risk does increase when projects are placed near concentration areas of avian use such as wetlands and riparian areas. WDFW requests that the United States Fish and Wildlife Service (USFWS) be consulted to determine if an avian monitoring plan is required to assess and determine the impacts of avian collisions from these projects. If the USFWS determines that some monitoring is needed, WDFW requests that it be involved in the review of that plan.

6. Section 3.4.6. Mitigation for Habitat and Species. The applicant states that no compensatory mitigation for the project is proposed to offset impacts to habitat. While WDFW agrees that the project has greatly reduced and avoided impacts to the habitats, WDFW does not agree with the statement that no additional compensatory mitigation is required. After the avoidance and minimization, some habitat impacts will still be unavoidable. The Fumaria site is a mixture of native habitats, though currently in a state of degraded condition. Further, putting these projects near riparian areas will have some impact on the fish and wildlife that use them, though impacts have been greatly reduced. WDFW proposes as a measure of compensatory mitigation that the riparian buffers within the project boundary be restored in their vegetative state. As referenced above, to do that, native riparian plants (including shrubs) would be planted within the riparian areas buffers where the current vegetation has either been reduced or eliminated based on agricultural practices. The restoration would be monitored to ensure success. This restoration would increase habitat functionality along these creeks and offset habitat impacts that could not be avoided or minimized.

Again, thank you for the opportunity to provide these comments and recommendations. WDFW believes that with these additional mitigation measures in place that both the fish and wildlife habitats as well as energy production from the solar projects can be accomplished. If you have further questions on these comments or need additional clarification, please contact Scott Downes, Area Habitat Biologist, who has been involved with this project. He can be reached at 509-457-9307 or Scott.Downes@dfw.wa.gov.

Sincerely,

Justin Allegro
Major Projects and Restoration Divisions Manager
WA Deparment of Fish and Wildlife