



State of California – Natural Resources Agency

DEPARTMENT OF FISH AND WILDLIFE

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**GAVIN NEWSOM, Governor**

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May 27, 2020

Governor's Office of Planning & Research

**MAY 29 2020**

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**STATE CLEARINGHOUSE**

Subject: Aramis Solar Energy Generation and Storage Project PLN2017-00174,  
Notice of Preparation of an Environmental Impact Report, SCH #2020059008,  
Alameda County

Dear Mr. Young:

The California Department of Fish and Wildlife (CDFW) has reviewed Alameda County's (County) Notice of Preparation (NOP) for an Environmental Impact Report (EIR) for Aramis Solar Energy Generation and Storage Project (Project). The Project is an application for a Conditional Use Permit (CUP) to allow construction of a solar energy production (up to 100 megawatts, or MW) facility with associated battery storage using photovoltaic panels over a mostly contiguous 533-acre site (of which 350 acres would be developed as part of the Project). The purpose of the EIR will be to evaluate the specific environmental effects of the Project as proposed by IP Aramis, LLC, a subsidiary of Intersect Power, LLC (Aramis).

CDFW is therefore submitting comments on the NOP to inform the County, as the Lead Agency, of our concerns regarding potentially significant impacts to sensitive resources associated with the proposed Project. CDFW is providing these comments and recommendations regarding those activities involved in the Project that are within CDFW's area of expertise and relevant to its statutory responsibilities (Fish and Game Code, § 1802), and/or which are required to be approved by CDFW (CEQA Guidelines, §§ 15086, 15096 and 15204).

### **CDFW ROLE**

CDFW is a Trustee Agency with responsibility under the California Environmental Quality Act (CEQA; Pub. Resources Code, § 21000 et seq.) pursuant to CEQA Guidelines section 15386 for commenting on projects that could impact fish, plant, and wildlife resources. CDFW is also considered a Responsible Agency if a project would require discretionary approval, such as a permit issued under the California Endangered Species Act (CESA), the Lake and Streambed Alteration (LSA) Program, or other provisions of the Fish and Game Code that afford protection to the state's fish and wildlife trust resources.

### **REGULATORY REQUIREMENTS**

#### *California Endangered Species Act*

Please be advised that a CESA Permit must be obtained if the Project has the potential to result in "take" of plants or animals listed under CESA, either during construction or over the life of the

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Project. Issuance of a CESA Permit is subject to CEQA documentation; the CEQA document must specify impacts, mitigation measures, and a mitigation monitoring and reporting program. If the Project will impact CESA listed species, early consultation is encouraged, as significant modification to the Project and mitigation measures may be required in order to obtain a CESA Permit.

CEQA requires a Mandatory Finding of Significance if a project is likely to substantially restrict the range or reduce the population of a threatened or endangered species. (Pub. Resources Code, §§ 21001, subd. (c), 21083; CEQA Guidelines, §§ 15380, 15064, and 15065). Impacts must be avoided or mitigated to less-than-significant levels unless the CEQA Lead Agency makes and supports Findings of Overriding Consideration (FOC). The CEQA Lead Agency's FOC does not eliminate the Project proponent's obligation to comply with Fish and Game Code section 2080.

#### *Lake and Streambed Alteration*

CDFW requires an LSA Notification, pursuant to Fish and Game Code section 1600 et. seq., for Project activities affecting lakes or streams and associated riparian habitat. Notification is required for any activity that may substantially divert or obstruct the natural flow; change or use material from the bed, channel, or bank including associated riparian or wetland resources; or deposit or dispose of material where it may pass into a river, lake or stream. Work within ephemeral streams, washes, watercourses with a subsurface flow, and floodplains are subject to notification requirements. CDFW will consider the CEQA document for the Project and may issue an LSA Agreement. CDFW may not execute the final LSA Agreement [or Incidental Take Permit (ITP)] until it has complied with CEQA as a Responsible Agency.

## **PROJECT DESCRIPTION SUMMARY**

**Proponent:** IP Aramis, LLC, a subsidiary of Intersect Power, LLC

**Description and Location:** The Project includes construction and operation of a mixed-use renewable energy project using photovoltaic panels capable of generating, storing, and dispatching clean energy on up to 539 acres located in unincorporated Alameda County in the North Livermore area. The site is composed of large portions of four privately-owned parcels in the unincorporated North Livermore area of Alameda County, approximately 2.25 miles north of the Livermore city limits and Interstate 580.

The largest parcel (536 acres) bears the address of 1815 Manning Road (903-0006-001-02) and lies directly west of North Livermore Avenue and south of Manning Road where these roads terminate at an L-intersection with each other. Approximately 350 acres of this large parcel is proposed for Project development; an estimated 150 acres to the northwestern is moderately to steeply sloped, and is proposed to be subdivided to legally separate it from the real property affiliated with the proposed Project development. Another estimated 36 acres of this parcel is not suitable for development of Project uses and is thus not included in the overall Project development area. To the south of this parcel is the roughly 101-acre Stanley Ranch at 4400 North Livermore Avenue (APN 903-0006-003-07), of which about 30 acres would be used for the Project. The remainder of the Ranch is used for intensive crop production, some residences and other agricultural operations and structures.

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The NOP, p. 5, states, that Aramis has designed the facility such that all structures are proposed to be placed outside of the 100-year floodplain of Cayetano Creek as determined through hydrologic modeling, outside areas designated Water Management in the East County Area Plan, and no closer than 50 feet from the banks of Cayetano Creek or its tributaries as determined by a qualified biologist.

The NOP also states that Aramis proposes, as a part of the large parcel subdivision, to offer dedication of an easement to Alameda County (or the Livermore Parks and Recreation District, which manages open space and trail development in conjunction with the East Bay Regional Park District) for use as a public hiking trail along Cayetano Creek outside of the Project's development footprint.

## **COMMENTS AND RECOMMENDATIONS**

CDFW offers the below comments and recommendations to assist the County in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources.

### *General Avian and Bat Impacts*

The EIR should evaluate the cumulative effects of loss of habitat as an indirect cause of avian mortality for grassland birds. Breeding Bird Surveys (BBS) conducted by the U.S. Geological Survey Biological Resources Division and volunteers throughout the country show that grassland birds, as a group, have declined more than other groups, such as forest and wetland birds (Brennan and Kuvlesky 2005; NRCS 1999). The BBS shows that in California, grassland birds such as western meadowlark (*Sturnella neglecta*), State Species of Special Concern northern harrier (*Circus cyaneus*), horned lark (*Eremophila alpestris praticola*), and State Species of Special Concern western burrowing owl (*Athene cunicularia*), have shown population declines since 1966 (Sauer et al. 2017). CDFW recommends at a minimum an equal amount of land with primary purpose of habitat conservation should be enhanced and conserved elsewhere to offset the loss of habitat for grassland birds.

In addition, although avian interactions with photovoltaic facilities are not well researched, the primary threats appear to be from collisions and electrocutions. Collisions with photovoltaic equipment can include direct collisions into guy wires or transmission lines. Other collisions are less understood such as the "lake effect", first described in Horvath et al. (2009). Utility-scale photovoltaic facilities may attract migrating waterfowl and shorebirds through the "lake effect", where birds and/or insects can mistake a reflective solar facility for a water body and collide with the structures as they attempt to land on the panels. Injuries from collisions with collectors/reflectors may result in immediate death due to fatal blunt trauma (Kagan et al. 2014), or stranding. Stranding can occur when an individual is injured by collision impact and is unable to take off or when they require a running start on the water's surface. The EIR should include measures to reduce the risks of avian collisions such as adding special patterns to the photovoltaic panels.

Linear features such as generator-tie lines, collector lines, and interior and perimeter fences present collision hazard to birds, and electric lines represent a potential electrocution hazard (Huso, et al. 2016). The EIR should include measures that require all powerlines to be placed

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underground, if feasible. All aboveground lines should be fitted with bird flight diverters or visibility enhancement devices. When lines cannot be placed underground, appropriate avian protection designs should be employed. As a minimum requirement, the collection system should conform with the most current edition of the Avian Power Line Interaction Committee guidelines to prevent electrocutions.

The EIR should include a requirement for weekly or twice-weekly avian mortality surveys to meet the following objectives:

- Estimate the total number of birds and bats killed at the Project site within a specified time period.
- Determine whether there are spatial or temporal/seasonal patterns of total bird fatality.
- Evaluate species composition and which taxonomic groups may be at risk.
- Provide results that allow comparisons with other solar sites and to evaluate changes in fatality due to adaptive management.

The EIR should include a requirement to develop an Avian and Bat Protection Plan or Bird and Bat Conservation Strategy (BBCS) in coordination with the U.S. Fish and Wildlife Service (USFWS) and CDFW. The purpose of the BBCS is to:

- Describe baseline conditions for bird and bat species present within the Project site, including results of site-specific surveys;
- Assess potential risk to birds and bats based on the proposed activities
- Specify conservation measures that will be employed to avoid, minimize, and/or mitigate any potential adverse effects to these species;
- Describe the incidental monitoring and reporting that will take place during construction; and provide details for post-construction monitoring; and specify the adaptive management process that will be used to address potential adverse effects on avian and bat species.

#### *East Alameda County Conservation Strategy*

The Project site is located within the Conservation Zone 4 of the Eastern Alameda County Conservation Strategy (EACCS). The EACCS provides a baseline inventory of biological resources and conservation priorities to be utilized by local agencies and resource agencies during project-level planning and environmental permitting. It was designed to convey project-level permitting and environmental compliance of the federal and state endangered species acts, CEQA, the National Environmental Policy Act, and other applicable laws for all projects within the study area with impacts on biological resources. The EACCS was a joint effort including, but not limited to, the cities of Pleasanton, Dublin, and Livermore; Zone 7, Alameda County, East Bay Regional Park District, USFWS and CDFW. The EACCS is intended support and streamline the permitting process. EACCS does not create new regulations or change the process by which a project applicant obtains permits for authorization to impact biological resources, but it has, in fact, been accepted as a guidance document by several agencies including USFWS and CDFW.

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Several of the species potentially impacted by this Project are included as focal species in the EACCS, such as the federally threatened and State Species of Special Concern California red-legged frog (*Rana draytonii*), the federally and State threatened California tiger salamander (*Ambystoma californiense*), western burrowing owl, the federally endangered and State threatened San Joaquin kit fox (*Vulpes macrotis mutica*), and the State Species of Special concern American badger (*Taxidea taxus*). The EACCS mitigation guidance sections (Chapter 3), for grassland, California tiger salamander, western burrowing owl, California red-legged frog, San Joaquin kit fox, and American badger all include mitigation in the form of habitat conservation for the loss of species habitat when it cannot be avoided. To be consistent with the EACCS and to offset permanent habitat loss or conversion, the EIR should include permanent habitat conservation as an enforceable mitigation measure.

#### *California red-legged frog*

The Project Description in the NOP includes avoidance and minimization measures for California red-legged frog, but provides no mitigation for loss of habitat. The avoidance and minimization measures include pre-construction surveys to ensure that California red-legged frog is “not actively using the project site as a dispersal corridor” by surveying all suitable aquatic habitat on the Project site. California red-legged frog are not limited to use of aquatic habitat. The USFWS Recovery Plan for California Red-Legged Frog (USFWS 2002) beginning on p. 12 describes a variety of habitats used by the California red-legged frog such as upland areas used as important dispersal, estivation and summer habitat for this species. During periods of wet weather, starting with the first rains of fall, some individuals may make overland excursions through upland habitats. They have been observed to make long-distance movements (up to 1.7 miles) that are straight-line, point to point migrations rather than using corridors for moving in between habitats. California red-legged frog are also known to use small mammal burrows and moist leaf litter as refuge (USFWS 2002). Because the actual movement patterns of California red-legged frog are generally not known and there are known occurrences of California red-legged frog on adjacent lands, the entire Project site should be considered suitable habitat for the species. Given their wide variety of habitat usage during different times of the year, it is highly unlikely all California red-legged frogs would be located during pre-construction surveys. The EIR should therefore assume presence and, in addition to including avoidance and minimization measures, should include compensatory mitigation for loss of suitable California red-legged frog habitat in accordance with the EACCS for California Red-legged frog section 3.5.3.5.

#### *Western Burrowing Owl*

The EIR should evaluate the potential for burrowing owls to be present within and adjacent to the Project area by documenting the extent of fossorial mammals that may provide burrows used by owls during the nesting and/or wintering seasons. Based on our records, burrowing owls have been documented less than one mile from the Project site. Burrowing owls may also use unnatural features such as debris piles, culverts and pipes for nesting, roosting or cover. If suitable burrowing owl habitat is present, CDFW recommends that surveys be conducted following the methodology described in Appendix D: Breeding and Non-breeding Season Surveys of the CDFW Staff Report on Burrowing Owl Mitigation (Staff Report), which is available at <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843>.

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Burrowing owl surveys should be conducted by a qualified CDFW-approved biologist. In accordance with the Staff Report, a minimum of four survey visits should be conducted within 500 feet of the Project area during the owl breeding season which is typically between February 1 and August 31. A minimum of three survey visits, at least three weeks apart, should be conducted during the peak nesting period, which is between April 15 and July 15, with at least one visit after June 15. Pre-construction surveys should be conducted no-less-than 14 days prior to the start of construction activities with a final survey conducted within 24 hours prior to ground disturbance.

Please be advised that CDFW does not consider exclusion of burrowing owls or “passive relocation” as a “take” avoidance, minimization or mitigation method, and considers exclusion as a significant impact. The long-term demographic consequences of exclusion techniques have not been thoroughly evaluated, and the survival rate of evicted or excluded owls is unknown. All possible avoidance and minimization measures should be considered before temporary or permanent exclusion and closure of burrows is implemented in order to avoid “take”.

The EIR should also include measures to avoid or minimize loss of burrowing owl foraging habitat, and mitigation for loss of habitat that cannot be fully avoided. The EACCS Mitigation Guidance (p.3-66) for burrowing owl recommends mitigating the loss of habitat by protecting habitat in accordance with the mitigation guidelines outlined in Table 3-10 (BUOW-3) through acquiring parcels, through fee title purchase or conservation easement, where known nesting sites occur or where nesting sites have occurred in the previous three nesting seasons (BUOW-1 and BUOW-2).

#### *California Tiger Salamander*

The Project site is located within dispersal distance of at least nine known and/or potential California tiger salamander breeding ponds. Based on our records, California tiger salamanders have been found less than one mile from the proposed Project site on properties both east and west of the Project site. California tiger salamander are known to be able to travel 1.3 miles from upland habitat to breeding ponds. Given the historical and extant California tiger salamander detections within 1.3 miles of the Project site, and without evidence such as protocol-level presence/negative finding surveys, the EIR should assume presence.

Due to the potential presence of this listed species and the potential for Project-related take, including but not limited to, installation of exclusion fencing, grading, trenching, and use of water trucks, CDFW advises that the Project proponent obtain a CESA Permit (pursuant to Fish and Game Code Section 2080 et seq.) in advance of Project implementation. Issuance of a CESA Permit is subject to CEQA documentation; therefore, the CEQA document should specify impacts, mitigation measures, and fully describe a mitigation, monitoring and reporting program. If the proposed Project will impact any CESA-listed species, early consultation is encouraged, as significant modification to the Project and mitigation measures may be required in order to obtain a CESA Permit. More information on the CESA permitting process can be found on the CDFW website at <https://www.wildlife.ca.gov/Conservation/CESA>.

#### *Pollinators*

The EIR should include measures to increase use by pollinators such as dual use farming. The Project should be designed to optimize a balance between electrical generation and agricultural

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production (Jossi 2018) or native plants. Solar sites can be planted with deep-rooted native flowers and grasses that capture and filter storm water, build topsoil, and provide abundant and healthy food for bees and other insects that provide critical services to our food and agricultural systems as described on the Fresh Energy website at <https://fresh-energy.org/beeslovesolar/>.

## FILING FEES

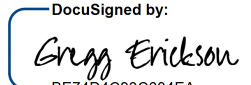
The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs., tit. 14, § 753.5; Fish and Game Code, § 711.4; Pub. Resources Code, § 21089).

## CONCLUSION

CDFW appreciates the opportunity to comment on the IS/MND to assist the County in identifying and mitigating Project impacts on biological resources.

Questions regarding this letter or further coordination should be directed to Ms. Marcia Grefsrud, Environmental Scientist, at (707) 644-2812 or [Marcia.Grefsrud@wildlife.ca.gov](mailto:Marcia.Grefsrud@wildlife.ca.gov); or Ms. Brenda Blinn, Senior Environmental Scientist (Supervisory), at (707) 944-5541 or [Brenda.Blinn@wildlife.ca.gov](mailto:Brenda.Blinn@wildlife.ca.gov).

Sincerely,

DocuSigned by:  
  
BE74D4C93C604EA  
Gregg Erickson  
Regional Manager  
Bay Delta Region

cc: State Clearinghouse, SCH# 2018092012  
Ryan Olah, U.S. Fish and Wildlife Service – [Ryan.Olah@fws.gov](mailto:Ryan.Olah@fws.gov)

## REFERENCES

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