



State of California – Natural Resources Agency

DEPARTMENT OF FISH AND WILDLIFE

Bay Delta Region

2825 Cordelia Road, Suite 100

Fairfield, CA 94534

(707) 428-2002

www.wildlife.ca.gov

GAVIN NEWSOM, Governor

CHARLTON H. BONHAM, Director



November 24, 2020

Governor's Office of Planning & Research

Nov 24 2020

Mr. Andrew Young, Planner

Alameda County Community Development Department

224 West Winton, Room 111

Hayward, CA 94544

andrew.young@acgov.org

STATE CLEARINGHOUSE

Subject: Aramis Solar Energy Generation and Storage Project, Final Environmental Impact Report, County Planning Application PLN2017-00174, SCH No. 2020059008, Alameda County

Dear Mr. Young:

The California Department of Fish and Wildlife (CDFW) has reviewed the Final Environmental Impact Report (FEIR) and Response to Comments for the Aramis Solar Energy Generation and Storage Project (Project). The Project is an application by IP Aramis, LLC, a subsidiary of Intersect Power, LLC (Aramis) for a Conditional Use Permit (CUP) to allow construction of a solar energy production facility (up to 100 megawatts, or MW) with associated battery storage using photovoltaic panels over a mostly contiguous 410-acre site.

CDFW previously submitted comments, in letters dated May 27, 2020 and October 30, 2020, on the Notice of Preparation (NOP) and Draft Environmental Impact Report (DEIR), respectively, to inform the County, as the Lead Agency, of our concerns regarding potentially significant impacts to sensitive biological resources associated with the proposed Project. CDFW is providing these additional comments and recommendations on the FEIR regarding some of the major issues and concerns CDFW raised in the previous letters that we believe were not adequately addressed in the FEIR. CDFW is providing these comments on issues within CDFW's area of expertise and relevant to its statutory and trustee 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 California Endangered Species Act (CESA) permit, a Lake or Streambed Alteration (LSA) Agreement, or other provisions of the Fish and Game Code that afford protection to the state's fish and wildlife trust resources.

Conserving California's Wildlife Since 1870

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REGULATORY REQUIREMENTS

California Endangered Species Act

The “take” of CESA listed plants and animals is prohibited without a CDFW-issued permit. 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. Fish and Game Code section 86 defines take as hunt, pursue, catch, capture, or kill or attempt to hunt, pursue, catch, capture or kill.

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, §§ 15065, 15380, and 15064). 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 substitute for or alter the force and effect of Fish and Game Code section 2080, which prohibits the “take” of a listed species without a CDFW-issued Permit.

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. An LSA Agreement may include measures that CDFW deems necessary to protect fish and wildlife resources. At its discretion, CDFW may choose to not execute the final LSA Agreement (or CESA Permit) 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 (PV) panels capable of generating, storing, and dispatching clean energy on up to 410 acres located in unincorporated Alameda County in the North Livermore area, approximately 2.25 miles north of the

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Livermore city limits and Interstate 580. The site is composed of large portions of four privately-owned parcels.

The FEIR states the individual PV modules would be arranged in rows onto a single-axis tracker racking system, which would in turn be affixed to steel piles. Each row (or array) would track the sun during the day, from east to west, to optimize power generation of the facility. The arrays would be connected by low-voltage underground or above-ground electrical wiring to a central inverter station or to string inverters located throughout the facility.

COMMENTS AND RECOMMENDATIONS

CDFW offers the below comments and recommendations on the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources, specifically the federally and State threatened California tiger salamander (*Ambystoma californiense*) and State Species of Special Concern western burrowing owl (*Athene cunicularia*), for the Administrative Record.

CDFW appreciates the FEIR acknowledging that the proposed Project will result in 253.33 acres of temporary impacts and 14.44 acres of permanent impacts to annual grassland habitat. As stated in both previous letters this habitat type may be used by several special-status species, including the CESA listed (threatened) California tiger salamander, the federally threatened and State Species of Special Concern California red-legged frog (*Rana draytonii*), grassland birds such as western burrowing owl, State Species of Special Concern northern harrier (*Circus cyaneus*), other species such as western meadowlark (*Sturnella neglecta*) and horned lark (*Eremophila alpestris praticola*), and mammals such as 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 County asserts, in the response to comments in the FEIR, Volume I, p. 92, that based on "years of biological surveys, including protocol surveys, the site is not known to be used by" California tiger salamander but acknowledges the site could potentially be used for dispersal and *upland refugia*.

First, based on the description of habitat located within the proposed Project area, CDFW would like to point out that, in Alameda County, thousands of occurrences of California tiger salamanders have been documented in grasslands similar to the habitat present on the Project site.

Second, known (CDFW 2020) or potential breeding ponds (Google Earth 2020) are located within dispersal distance (1.3 miles) of the Project site. For example, the Eagle Ridge Preserve which is located just over the western property boundary of the proposed Project documented California tiger salamander breeding during pond

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surveys in 2014. Also, less than one mile to the east of the proposed Project site over 110 California tiger salamanders were found between October 2017 and mid-February 2018, on the site of another project, which recognized their presence and obtained a CESA Permit for take of California tiger salamander. The tiger salamanders were found by biological monitors either in burrows during burrow excavations prior to ground disturbance or during evening surveys along the exclusion fence and straw wattles. The tiger salamanders were found along both sides of the fencing and wattles suggesting they were migrating to and away from an off-site breeding pond. The area where the tiger salamanders were found was characterized as “ruderal” and “dryland farmed.”

As described in the example above, the majority of the juvenile and adult tiger salamanders found on over two dozen project sites covered by CESA Permits in Alameda County have been along wildlife exclusion fencing or straw wattles. A minority have been found during ground disturbing activities (e.g. trenching, augering), under vehicles, or in anthropogenic refugia such as irrigation vaults. To our knowledge, CDFW has no record of any adult or juvenile tiger salamanders found in Alameda County during pre-construction surveys or habitat assessment surveys (botanical surveys or other biological surveys) except those conducted at breeding ponds. Therefore, it is not surprising that no tiger salamanders were found during the biological reconnaissance surveys, California red-legged frog protocol surveys [which according to the Biological Resources Technical Report, Appendix E, were limited to the aquatic (stream and wetland) habitat on and directly adjacent to the Project site], botanical surveys and burrowing owl surveys conducted at the Project site. While, based on the habitat assessment included in the DEIR, no suitable California tiger salamander breeding habitat is located on the Project site; however, as described above, known breeding ponds are located within tiger salamander dispersal distance and the surveys conducted as part of the proposed Project are not sufficient to confirm absence of salamanders on the Project site.

As stated in the CDFW comment letter on the DEIR, California tiger salamanders spend much of their lives in underground retreats, often in burrowing mammal (ground squirrel, pocket gopher, and other burrowing mammal) burrows (USFWS 2004). California tiger salamanders are only known to be active on the surface of the terrestrial habitat 1) during juvenile dispersal into the uplands and adult breeding during fall and winter rain events and 2) when metamorphs emerge from the pond in the spring and summer (Searcy and Shaffer 2011). Based on their life history, it is highly unlikely any salamanders would be found during pre-construction surveys unless the surveys included actions such as, burrow excavation, pitfall traps and drift fencing over multiple seasons, as authorized under CESA. Further, immature salamanders may not migrate to a breeding pond and instead remain in the upland until they are sexually mature, which could be between 3-5 years, so they would be undetected in a pre-construction survey and could be killed or injured during Project activities. Due to the close proximity of a number of potential breeding ponds, it is *highly likely* that tiger salamanders are

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dispersed throughout the entire Project site and would be killed or injured during Project activities. CDFW recommends that the Project proponent should therefore assume presence of California tiger salamander over the entire Project site and obtain federal and state take permits and provide compensatory mitigation for impacts to special-status species.

Therefore, due to the close proximity of breeding ponds, CDFW considers it highly likely that California tiger salamanders are dispersing throughout the Project site and would be present during Project construction.

The FEIR and response to comments asserts that if certain minimization measures are taken, no take would occur. CDFW advises that the minimization measures in the FEIR are not adequate to completely avoid take of California tiger salamander.

Exclusion fencing, for example, is not 100 percent effective in excluding tiger salamanders from a project site since the fencing can be knocked over by cattle or blown over during rain events and tiger salamanders can enter a project site before fence repairs are completed. There are several CESA permitted projects in Alameda County that have found eggs and larvae inside the exclusion fence on the Project site *after* the site had been mass graded. It is thought that the tiger salamanders entered the site during a rain event after part of the fence blew down, which allowed them to deposit eggs in ponded water.

Regarding the tiger salamanders that may already be on the site or come to be on the site, one-way funnels may be a helpful *minimization* measure, but evidence indicates they are not entirely effective at preventing take. It is incorrect to assume that escape funnels will always be used by every tiger salamander attempting to leave the site and that all tiger salamanders on the site will even attempt to leave. CDFW has documented instances on project sites where exclusion fencing with exit funnels were not used by tiger salamanders. One site conducted "pre-construction surveys" and found no tiger salamanders. In May, biological monitors began finding desiccated salamanders along the exclusion fence. Even after corrective measures were in place (installation of pit fall traps), by the end of the project (10 months later), they had observed over 1,000 tiger salamanders and had relocated 947 tiger salamanders with a mortality of 67 individuals. There are also anecdotal observations (Elias 2018) that tiger salamanders may enter an escape funnel when they have limited choices (like in a pen) but some may not exit the funnels. This same experiment also documented tiger salamanders climbing exclusion fencing. In addition, CDFW staff has also observed escape funnels improperly installed where the funnel is placed too high and out of sight or out of reach by tiger salamanders. Since tiger salamanders do not flee construction sites like a mammal might do when humans are present, we would expect them to only leave their underground refugia during nighttime rain events. Even if 100 percent of tiger salamanders within the Project site attempted to migrate to an off-site breeding pond it

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is highly likely some, if not all, could be trapped along the exclusion fence resulting in predation or desiccation. Furthermore, these situations typically involve capture and handling of tiger salamander individuals which is a form of take and must be covered under an Incidental Take Permit (ITP) to avoid a violation under CESA.

As stated above, 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. Due to the life history of California tiger salamanders and the fact that they spend a significant portion of their lives underground, it is difficult to determine the exact number of individuals killed by construction-related projects; however, it is probable that implementation of large-scale projects, such as the proposed Project, would result in mortality of tiger salamanders and reduce the population.

CDFW is also concerned with the FEIR's lack of fully addressing the proposed Project's potential impacts on burrowing owls and our concerns outlined in our previous comment letters and incorporating our recommendations. As previously stated, CDFW believes that the proposed Project may adversely impact burrowing owl by resulting in nest abandonment, loss of young and reduced health and vigor of chicks (resulting in reduced survival rates), permanent and/or temporary loss of nesting and foraging habitat, and breeding and foraging disturbance. To ensure impacts to burrowing owl are mitigated to less-than-significant levels, CDFW highly recommends inclusion of compensatory mitigation at a minimum of a 3:1 mitigation ratio (conservation to loss) for permanent impacts to habitat, and a 1:1 ratio for temporary impacts to burrowing owl habitats.

CDFW advises that the Project proponent obtain a CESA Permit (pursuant to Fish and Game Code Section 2080 et seq.) for California tiger salamander in advance of Project implementation. Seeking take authorization close to the start of Project construction could result in significant delays in implementing the Project. Issuance of a CESA Permit is subject to CEQA documentation; therefore, the FEIR should specify impacts, mitigation measures, and fully describe a mitigation, monitoring and reporting program.

More information on the CESA permitting process can be found on the CDFW website at <https://www.wildlife.ca.gov/Conservation/CESA>.

CONCLUSION

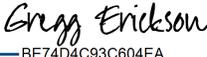
CDFW appreciates the opportunity to comment on the FEIR and add to the Administrative Record to assist the County in identifying and mitigating Project impacts on biological resources.

Questions regarding this letter or further coordination should be directed to Ms. Marcia Grefsrud, Environmental Scientist, at (707) 644-2812 or

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Marcia.Grefsrud@wildlife.ca.gov; or Ms. Brenda Blinn, Senior Environmental Scientist (Supervisory), at (707) 944-5541 or Brenda.Blinn@wildlife.ca.gov.

Sincerely,

DocuSigned by:

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Gregg Erickson
Regional Manager
Bay Delta Region

cc:

State Clearinghouse (SCH# 2018092012)
Ryan Olah, U.S. Fish and Wildlife Service – Ryan.Olah@fws.gov
Frank Imhof, East County Board of Zoning Adjustments – timhof@earthlink.net
Derek Eddy, East County Board of Zoning Adjustments – derek@purpleorchid.com
Scott Beyer, East County Board of Zoning Adjustments – scott.beyer@wentevineyards.com

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