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ATLiS Project (Project) Draft Environmental Assessment
SCH# 2024110237

Dear Ms. Cobbs:

The California Department of Fish and Wildlife (CDFW) received a Draft Environmental Assessment (EA) from U.S. Department of Energy (Lead Agency) for the Project pursuant to the National Environmental Policy Act (NEPA) and NEPA guidelines.

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

CDFW ROLE

CDFW is California's **Trustee Agency** for fish and wildlife resources and holds those resources in trust by statute for all the people of the State. (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a).) CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. (Id., § 1802.) Similarly, for purposes of California Environmental Quality Act (CEQA), CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW is also submitting comments as a **Responsible Agency** under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381.) CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority. (Fish & G. Code, § 1600 et seq.) Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), the project proponent may seek related take authorization as provided by the Fish and Game Code.

PROJECT DESCRIPTION SUMMARY

Proponent: Energy Source Minerals LLC (ESM)

Objective:

The objective of the Project is to construct a lithium production facility to extract commercially viable substances from geothermal brine. The plant will be capable of producing lithium carbonate (Li_2CO_3), lithium hydroxide (LiOH), and other commercially viable substances.

Primary Project activities include construction and operation of a production plant to extract Li, manganese (Mn), zinc (Zn), and other commercially viable substances from geothermal brine and then process the extracted substances to produce commercial quantities of Li products; construction and operation of brine supply and return pipelines and a steam/steam condensate delivery pipeline, with interconnections to the adjacent Hudson Ranch 1 (HR1) power plant; construction of an underground power interconnection line from the existing Imperial Irrigation District (IID) and Hudson Ranch 1 (HR1) substation located at the northeast corner of the HR1 site; installation of a fire suppression system designed to meet the overall fire protection requirements for the plant; construction of a laydown yard that will also support temporary offices during construction and serve as a truck management yard during operations; and construction of offices, repair facilities, shipping and receiving facilities, and other infrastructure. The HR1 plant will supply feedstock brine for the Project. The facility will consist of approximately 730,000 square feet of processing, operations, and warehouse buildings.

Location:

The Project site is located at 477 West McDonald Road, Calipatria, California 92233, Imperial County. The project site consists of approximately 79 acres of land adjacent to the western and southern boundaries of the existing John L. Featherstone Geothermal Plant.

Timeframe:

The construction schedule is anticipated to cover 28 months. The installation of the manufacturing equipment is planned for the second quarter of 2025. This will be completed in phases to ramp up production in response to the availability of skilled workers, with initial equipment arriving on-site in mid- to late 2025 and continuing through 2026. Following the installation of the manufacturing equipment, trials and debugging will be performed in phases. Startup for trial operations, debugging, and validation will occur sequentially as process systems are completed, beginning in 2026, with the facility becoming partially operational in late 2027. Full production is expected in the fourth quarter of 2027. Project ATLiS is planned to operate for 30 to 40 years.

COMMENTS AND RECOMMENDATIONS

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

COMMENT #1: Special-Status Species:

Sections:

EA Section # *3.7.2*, Page # 30
The EA Section 3.7.2 indicates:
"Of the 27 wildlife species identified, only one species, burrowing owl (*Athene cunicularia* [state species of concern]), was present within or directly adjacent to the Project site during the October 2020 survey (Chambers Group 2020 and Strand 2023). In addition, this species has been recorded nesting in areas within or surrounding the Project site. Approximately 10 artificial burrowing owl burrows are located within 130 feet of the Project's western boundary. These burrows were installed as mitigation for other projects in the surrounding area. The artificial burrows are outside the Project boundary and therefore would be avoided during construction activities, consistent with CEQA mitigation monitoring and reporting program requirements."

EA *Appendix C*, Page # C-1, C-2
The EA Appendix C indicates:
"The Applicant shall conduct a preconstruction survey within 30 days of groundbreaking activities to identify any burrowing owls on site."
"If burrowing owls are found within the Project site, a Burrowing Owl Mitigation Plan must be prepared by a qualified biologist and approved by CDFW prior to any ground-disturbing activities."

And

"The construction or site manager shall ensure that no construction occurs within 250 feet of the artificial burrows or other active or occupied burrows unless active or occupied burrows are sheltered with hay bales and monitored by a qualified biologist; if this is done, work may occur within 20 feet of active or occupied burrows. If qualified biologists observe burrowing owls' agitation, work in the vicinity will stop. Additional shelter materials can be added until burrowing owls remain calm during construction activities."

"If passive relocation is required, it shall be done by a qualified biologist from September 1 to January 31 and will follow the CDFW Staff Report on Burrowing Owl Mitigation Guidelines (CDFW 2012)."

Issues:

Based on the potential for the Project to have a significant impact on biological resources, CDFW recommends that the EA fully analyze the Project's potential to impact special-status species, including California Endangered Species Act (CESA) candidate western

burrowing owl (*Athene cunicularia hypugaea,* BUOW), and should incorporate avoidance, minimization, and mitigation measures for each species based on an assumption of species presence or based on focused surveys, following professionally accepted methods (protocol level surveys) in the EA. CDFW recommends these actions based on the following species-specific considerations:

- Positive detection of BUOW and burrows at and adjacent to Project site;
- Failure to conduct focused BUOW surveys utilizing methodologies described in CDFW's 2012 Staff Report on Burrowing Owl Mitigation;
- Age of the survey data (October 2020);
- Absence of data on whether all surveyed burrows were occupied or not occupied;
- Potential take of BUOW and CESA permitting options.

Specific impact:

The Project would have a substantial adverse effect, either directly or through habitat modifications, on BUOW. As of October 25, 2024, the BUOW is officially a candidate species for listing under CESA. Project construction and activities may result in injury or mortality of BUOW, disrupt natural BUOW breeding behavior, and reduce reproductive capacity. The Project may impact breeding, wintering, and foraging habitat for the species. Project-related habitat loss could result in local extirpation of the species and contribute to local, regional, and statewide declines of BUOW including indirect impacts to existing BUOW mitigation 130-feet west of the Project's western boundary.

Why impact would occur:

The EA identifies that BUOW has the potential to occur within and adjacent to the Project site. In considerations related to when take is likely to occur, CDFW recommends an ITP. within the context of an ITP, compensatory mitigation would likely be needed to reach full mitigation. The 2012 California Department of Fish and Wildlife's Staff Report on Burrowing Owl mitigation includes the following definition: Occupied site or occupancy means a site that is assumed occupied if at least one BUOW has been observed occupying a burrow within the last three years. Occupancy of suitable BUOW habitat may also be indicated by owl sign including its molted feathers, cast pellets, prey remains, eggshell fragments, or excrement at or near a burrow entrance or perch site.

BUOW was present within or directly adjacent to the Project site during the October 2020 survey. In addition, this species has been recorded nesting in areas within or surrounding the Project site. Approximately 10 artificial BUOW burrows are located within 130 feet of the Project's western boundary. The Project includes potential BUOW habitat, including two vegetation communities, ruderal and bare ground, were within the Project site during the October 2020 reconnaissance survey. Ruderal habitat covers 10.24 acres of the southern portion of the site, which was previously used as a duck hunting club. Two species were observed during the October 2020 survey: scattered iodine bush (*Allenrolfea occidentalis*) and a few scattered Mediterranean tamarisk (*Tamarix ramosissima),* a nonnative species.

The EA relies on incomplete survey results to base its analysis of Project impacts to BUOW. The EA relies on a general, reconnaissance biological survey on the October 2020 which is not intended to adequately inventory and document the presence of nesting or overwintering BUOW within the Project. CDFW recommends that the Project proponent follow the recommendations and guidelines provided in the 2012 California Department of Fish and Wildlife's Staff Report; available for download from CDFW's website: Survey and Monitoring Protocols and Guidelines. The Staff Report on Burrowing Owl Mitigation, specifies three steps for project impact evaluations:

a. A habitat assessment;
b. Surveys; and
c. An impact assessment

The three progressive steps above facilitates an effective analysis of a project's potential to result in impacts to BUOW, and utilizes the information gained to inform subsequent avoidance, minimization, and mitigation measures. Habitat assessments are conducted to evaluate the likelihood that a site supports BUOW. BUOW surveys provide information needed to determine the potential effects of proposed projects and activities on BUOWs, and to avoid take in accordance with Fish and Game Code. Impact assessments evaluate the extent to which BUOWs and their habitat may be impacted, directly or indirectly, on and within a reasonable distance of a proposed CEQA
project activity or non-CEQA project.

Evidence impact would be significant:

Habitat loss is a threat to BUOWs (CDFG, 2012). BUOWs are dependent on burrows at all times of the year for survival and/or reproduction, evicting them from nesting, roosting, satellite burrows may lead to indirect impacts or take. Loss of access to burrows will likely result in varying levels of increased stress on BUOWs and could depress reproduction, increase predation, increase energetic costs, and introduce risks posed by having to find and compete for available burrows (CDFG, 2012). BUOWs are also dependent on adjacent habitat, and forage within 600 meters of nest burrows (Rosenberg and Haley, 2004). As a candidate species, Western BUOW is granted full protection of a threatened species under CESA. Take is defined in Fish and Game Code section 86 as "hunt, pursue, catch, capture or kill, or attempt to hunt, pursue, catch, capture or kill." CESA allows CDFW to authorize project proponents to take state-listed threatened, endangered, or candidate species if certain conditions are met. Take must be incidental to an otherwise lawful activity. The issuance of a permit cannot jeopardize the continued existence of the species, and the impacts must be minimized and fully mitigated.

Recommended Measures:

CDFW recommends that the EA incorporates the following mitigation to the existing measures.

Mitigation Measure BIO 1:

If complete avoidance cannot be achieved an Incidental Take Permit (ITP) for BUOW shall be obtained prior to initiation of ground disturbing activities. The Project proponent shall adhere to measures and conditions set forth within the ITP. Compensatory mitigation for direct impacts to BUOW shall be fulfilled through conservation of suitable BUOW habitat.

Mitigation Measure BIO 2:

At least 45 days prior to construction the Qualified Biologist shall conduct a survey of the project site to determine if BUOWs are present. If BUOW are present, the Project proponent shall prepare a BUOW Plan that shall be submitted to CDFW for review and approval at least 30 days prior to initiation of ground disturbing activities. The BUOW Plan shall include 1) impact assessment that details the number and location of occupied burrow sites, and acres of BUOW habitat; 2) if avoidance of impacts is proposed, details on avoidance actions and monitoring such as proposed buffers, visual barriers and other actions; 3) site monitoring to be conducted prior to, during, and after any exclusion of BUOWs from their burrows sufficient to ensure take is avoided, daily monitoring with cameras and direct observation for one week to confirm young of the year have fledged if the exclusion will occur immediately after the end of the breeding season, and process to document any excluded BUOWs use of artificial or natural burrows on an adjoining mitigation site (if able to confirm by band resight), 4) details of mitigation for impacts to occupied burrows and habitat. The proposed implementation of burrow exclusion and closure should only be considered as a last resort. If impacts to occupied burrows cannot be avoided, information shall be provided regarding adjacent or nearby suitable habitat available to owls. If no suitable habitat is available nearby, details regarding the creation and funding of artificial burrows (numbers, location, and type of burrows) and management activities for relocated owls shall also be included in the BUOW Plan. The Project proponent shall implement the BUOW Plan following CDFW review and approval.

Mitigation Measure BIO 3:

If BUOW are detected on-site, a non-disturbance buffer following the 2012 Staff Report shall be established around all BUOW burrows such as roosting and satellite burrows within the Project area with an appropriate buffer surrounding the project area determined by a Qualified Biologist. The buffer shall be established, restricting all ground-disturbing activities, such as vegetation clearance or grading, from occurring within the buffer. The buffer should be demarcated using brightly colored flagging and the buffer may only be reduced at the discretion of a Qualified Biologist. The Qualified Biologist shall delineate burrows with different materials than those used to delineate the Project area. Project proponent shall remove and properly dispose of all materials used for delineation immediately upon completion of the Project.

Mitigation Measure BIO 4:

To ensure that the Project avoids impacts to BUOW, a qualified biologist shall complete a take avoidance survey no less than 14 days prior to initiating ground disturbance activities using the recommended methods described in the 2012 Staff Report. BUOWs may re-colonize a site after only a few days. Time lapses or a break in construction activities of 3

days will trigger subsequent take avoidance surveys including but not limited to a final survey conducted within 24 hours prior to ground disturbance**.**

Mitigation Measure BIO 5:

During take avoidance surveys the Project proponent shall have a Designated Biologist(s), pre-approved by CDFW, inspect all burrows that exhibit typical characteristics of owl activity prior to any site-preparation activities. Evidence of owl activity may include presence of owls themselves, burrows, and owl sign at burrow entrances such as pellets, whitewash or other "ornamentation, feathers, prey remains, etc. If it is evident that the burrows are actively being used, the Project proponent shall follow the guidelines in the CDFW approved BUOW Plan. If no Plan has been approved the Project proponent shall not commence activities until owls have been confirmed absent and the burrows are no longer in use by adult or juvenile owls or until a BUOW Plan has been submitted and approved.

Mitigation Measure BIO 6:

Project proponent shall avoid attracting BUOW predators to the Project Area. Project proponent shall modify Project-related tall structures (i.e., buildings and towers), fences, or other materials that could be used as perches for ravens, great horned owls, hawks and eagles to discourage perching. Project proponent shall ensure that trash and food items are contained in animal-proof containers and removed, ideally at daily intervals but at least once a week, to avoid attracting opportunistic predators such as ravens, coyotes, and feral dogs. Plastic water bottles and plastic bags should be removed daily. Project proponent shall ensure all trash be removed from the Project Area or firmly secured daily. Large equipment that is not in use for multiple days should be covered or stored away from BUOW complexes to prevent avian predators from using large equipment as perches.

Mitigation Measure BIO 7:

Project proponent shall prohibit use of rodenticides or other poisons used to control burrowing animals in the Project Area during the life of the Project or within mitigation lands. Project proponent shall prohibit management of ground squirrel populations or any rodents by any means, including, but not limited to, rodenticide, gas, or live-trapping within the Project Area for the duration of construction.

Project proponent may only use pesticides registered with the California Department of Pesticide Regulation (CDPR). Any dyes included in the pesticides must be EPA-registered dyes approved for use in California. All pesticides shall be applied in accordance with labeled instructions and regulations set by CDPR. Labeled instructions for the pesticide(s) used shall be made available to CDFW upon request. No pesticides shall be applied when wind speeds exceed 5 miles per hour.

Mitigation Measure BIO 8:

Project proponent shall prohibit domestic and working animals from the Project Area and site access routes during Covered Activities, except for those that are possessed by

authorized security personnel or federal, state, or local law enforcement officials, dogs used in official and CDFW approved monitoring procedures/protocols, or service dogs under Title II and Title III of the American with Disabilities Act. Project proponent shall prohibit all domestic dogs from entering the no-disturbance buffers. Project proponent shall prohibit any form of domestic birds from entering the Project Area to reduce the risk of transferring avian influenza, sticktight fleas, or other disease or pests to BUOW.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDB). The CNNDB field survey form can be filled out and submitted online at the following link: https://wildlife.ca.gov/Data/CNDDB/Submitting-Data. The types of information reported to CNDDB can be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Plants-and-Animals.

CONCLUSION

CDFW appreciates the opportunity to comment on the EA to assist Lead Agency in identifying and mitigating Project impacts on biological resources. Questions regarding this letter or further coordination should be directed to Dr. Shankar Sharma, Senior Environmental Scientist Specialist at Shankar.Sharma@wildlife.ca.gov.

Sincerely,

DocuSigned by:
Magdalena Rodriguez
938A012E7285407...

FOR Brandy Wood
Environmental Program Manager

cc: Office of Planning and Research, State Clearinghouse, Sacramento
State.Clearinghouse@opr.ca.gov

REFERENCES

California Department of Fish and Game (CDFG). 2012. Staff report on burrowing owl mitigation. State of California, Natural Resources Agency. Available for download at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843&inline