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 DEPARTMENT OF FISH AND WILDLIFE
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GAVIN NEWSOM, Governor
 CHARLTON H. BONHAM, Director



October 23, 2023
 Sent via email

Governor's Office of Planning & Research

October 24 2023

David Black, Planner
 Imperial County
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STATE CLEARINGHOUSE

Subject: Draft Environmental Impact Report
 Hell's Kitchen PowerCo1 and LithiumCo1 (Project)
 State Clearinghouse No. 2022030704

Dear Mr. Black:

The California Department of Fish and Wildlife (CDFW) received a Draft Environmental Impact Report (DEIR) from Imperial County (Lead Agency) for the Project pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.¹

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 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: Controlled Thermal Resources Inc. (CTR), via its subsidiary Hell's Kitchen Geothermal, LLC (Applicant)

Objective: The objective of the Project is to produce 49.9 megawatts (MW) of geothermal power and to extract and produce lithium hydroxide, silica, bulk sulfide, and poly metallic products for commercial sale from the geothermal brine from within CTR's geothermal lease area. The development area for the Project would be approximately 64 acres and would consist of the following activities:

¹ CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

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- Construction and operation of a 49.9 MW geothermal power plant;
- Construction of well pads with geothermal production and injection wells;
- Construction of pipelines between HKP1 and HKL1 to facilitate the movement of brine between the facilities;
- Construction and operation of a mineral-extraction facility to extract lithium hydroxide, silica, bulk sulfide, and polymetallic products from the geothermal brine;
- Construction and operation of mineral handling and packaging facilities;
- Construction of ingress and egress to the Project site from Davis Road;
- Paving of Davis Road from McDonald Road to Noffsinger Road (approximately 2 miles);
- Construction and operation of a 230 kV gen-tie line and collocated power line; and
- Construction of shared administrative facilities, offices, repair facilities, shipping and receiving facilities, and other infrastructure components.

Location: The proposed Project would be located within Imperial County, California, approximately 3.6 miles west of the town of Niland near the eastern shore of the Salton Sea. The Project would be adjacent to Davis Road and south of Noffsinger Road, within the CTR geothermal lease area and on lands owned by Imperial Irrigation District (IID). The gen-tie line will run from Noffsinger Road approximately 2 miles south to McDonald Road and then run approximately 0.3 miles east to Hudson Ranch. The gen-tie line will be located east of Davis Road and north of McDonald Road within IID's transmission right-of-way and within new right-of-way. The geothermal development area and lithium facilities would be within Sections 11 and 12 of Township 11 South, Range 13 East, San Bernardino Base Meridian, and the gen-tie/power line ROW corridor is located within Sections 12, 13, and 14 of Township 11 South, Range 13 East.

Timeframe: The construction phase of the Project is anticipated to last 24 months in total.

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist the 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. Editorial comments or other suggestions may also be included to improve the document.

Assessment of Impacts to Biological Resources

Executive Summary Biological Resources Threshold (a) (p. ES-10) states that the Project construction activities may impact the Yuma hispid cotton rat (*Sigmodon hispidus eremicus*), but omits other species identified in the DEIR that may be impacted. While the Yuma hispid cotton rat is a Species of Special Concern and impacts to it should be considered, this section of the Executive Summary should also acknowledge the other species listed under the California Endangered Species Act (CESA) that may be impacted by the Project, specifically Yuma Ridgway's rail (*Rallus obsoletus yumanensis*; CESA Threatened and Fully Protected), California black rail (*Laterallus jamaicensis coturniculus*; CESA Threatened and Fully Protected), and desert pupfish (*Cyprinodon macularius*; CESA Endangered).

Existing Environmental Setting

Compliance with CEQA is predicated on a complete and accurate description of the environmental setting that may be affected by the proposed Project. CDFW is concerned that the assessment of the existing environmental setting has not been adequately analyzed in the DEIR. CDFW is concerned that without a complete and accurate description of the existing environmental setting, the DEIR may provide an incomplete analysis of Project-related environmental impacts.

As described in Section 4.3, page 9, multiple studies and delineations have been conducted for the Project over the last several years. However, the shapes and acreages of the study areas differ between reference reports. The DEIR notes that vegetation mapping was updated during Great Ecology's 2022 delineation efforts and uses the results of that study to produce the current vegetation mapping. This differs from the mapping that was conducted by Panorama Environmental and depicted in the 2021 Biological Resources Technical Report. CDFW would like to note that the difference between the

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conditions in 2021 vs 2022 could be best attributed to changes in hydrology that were made in which areas were dewatered by the applicant without permits and have since been required to be corrected. Once the correction is completed it could be expected that the conditions would return to a similar state as 2021 where the entirety of the area is wetted and suitable marsh (i.e, the 2022 surveys were conducted during a window of time which may not accurately reflect the conditions).

Fully Protected Species

The DEIR identifies Yuma Ridgway's rail (*Rallus obsoletus yumanensis*) and California black rail (*Laterallus jamaicensis coturniculus*) as being present within the study area during field surveys. Both species are Fully Protected under Fish and Game Code section 3511 and may not be taken or possessed at any time, and no permit may be issued to authorize their take.

CDFW is concerned that Section 4.3.5 Project Impact Analysis (p.4.3-36) does not accurately characterize the potential impacts to marsh birds, including Yuma Ridgway's rail and California black rail. CDFW recommends the following impacts be further considered in the Final EIR:

- It should be noted that tamarisk stands in water or adjacent to cattail marshes may also provide suitable habitat, in addition to the existing native marsh vegetation communities.
- Ongoing continuous noise would have an impact on breeding birds calling for and locating mates and may impact the movement of birds throughout the marsh that surrounds the Project site.
- Construction activities involving any vegetation removal within cattail marsh or riparian scrub during the breeding season (February 1-September 30) may have the potential to adversely affect nesting marsh birds; as such vegetation removal activities within 500 feet of suitable habitat should be timed to occur outside that time period.
- Due to the secretive nature of these species, protocol presence absence surveys should be conducted to confirm that they are not there, otherwise all suitable habitat areas should be presumed to be occupied due to positive past detections. A full breeding season of call back surveys without detecting a single individual would be required to determine a suitable area unoccupied.

CDFW is also concerned that the DEIR does not provide an adequate explanation as to how Project elements or identified mitigation measures for these species will avoid or reduce Project-related impacts to a less than significant level. Mitigation Measure BIO-10 requires pre-construction surveys and construction monitoring within all Project development areas within suitable habitat and a 500-foot buffer. Note that CDFW does not support Project activities continuing within the buffer of known occupancy, and would instead recommend that all work stay outside of the 500-foot buffer of all suitable habitat that is adjacent to the survey point that was found to be occupied, as the birds are known to move throughout dense marsh patches and could be impacted directly by Project activities in the area and by the ongoing noise of construction.

Nesting Birds

It is the Project proponent's responsibility to comply with all applicable laws related to nesting birds and birds of prey. Migratory non-game bird species are protected by international treaty under the federal Migratory Bird Treaty Act (MBTA) of 1918, as amended (16 U.S.C. 703 et. seq.). In addition, sections 3503, 3503.5, and 3513 of the Fish and Game Code also afford protective measures as follows: Section 3503 states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by Fish and Game Code or any regulation made pursuant thereto; Section 3503.5 states that it is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by Fish and Game Code or any regulation adopted pursuant thereto; and Section 3513 states that it is unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

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The final EIR should include specific avoidance and minimization measures to ensure that impacts to nesting birds do not occur. Project-specific avoidance and minimization measures may include, but not be limited to: Project phasing and timing, monitoring of Project-related noise, sound walls, and buffers. The final EIR should also include specific avoidance and minimization measures that will be implemented should a nest be located within the Project site.

CDFW supports the inclusion of Mitigation Measure BIO-16 of preparing a nesting bird plan, but recommends incorporating the following language in the measure in the final EIR to reduce potential impacts to nesting birds:

“Construction activities shall take place outside the general bird breeding season (February 15 to September 30), to the maximum extent practicable. Regardless of the time of year, prior to ground-disturbing activities, a qualified biologist shall conduct a nesting bird survey to comply with CDFW Code 3503 and 3503.5 and the Migratory Bird Treaty Act. The survey shall occur no more than three (3) days prior to initiation of proposed Project activities and shall include any potential habitat (including trees, shrubs, the ground, or nearby structures). Any occupied passerine and/or raptor nests occurring within the proposed Project area or the Project’s zone of influence (generally 100-300 feet) shall be delineated and a no-disturbance buffer zone (as determined by the avian biologist) shall be established and maintained during Project activities. Additional follow-up surveys may be required by the resource agencies and Imperial County. The buffer zone shall be sufficient in size to prevent impacts to the nest. A qualified biologist shall monitor active nests to determine whether construction activities are disturbing nesting birds or nestlings. If the qualified biologist determines that construction activities pose a disturbance to nesting, construction work shall be stopped in the area of the nest and the no disturbance buffer shall be expanded. Once nesting has ceased and the fledglings are no longer using the nest area as confirmed by a qualified biologist, the buffer may be removed. A nesting bird survey report shall be provided to Imperial County and CDFW. If an active nest is encountered during construction, construction shall stop immediately until a qualified biologist can determine the status of the nest and when work can proceed without risking violation to state or federal laws.”

Desert Pupfish

CDFW is concerned that the DEIR does not adequately analyze potential Project impacts on desert pupfish (*Cyprinodon macularis*). Section 4.3, Page 27-28 states that survey findings confirmed presence of desert pupfish in the S Drain, with one juvenile desert pupfish individual trapped in 2019, and that the most recent confirmed observation of desert pupfish in the Q Drain was in 1994, and in the R Drain in 2002. During a 2023 survey and salvaging effort conducted by CDFW presence of pupfish has been confirmed in all three drains. Over 400 pupfish were captured and relocated from the extended area of the S Drain. The Final EIR should incorporate the most recent survey data as part of their analysis of potential impacts to desert pupfish.

The desert pupfish is listed as endangered under the California Endangered Species Act (CESA). CDFW is responsible for ensuring appropriate conservation of fish and wildlife resources including threatened, endangered, and/or candidate plant and animal species, pursuant to CESA. A CESA Incidental Take Permit (ITP) is issued to conserve, protect, enhance, and restore State-listed CESA species and their habitats. CDFW recommends that a CESA ITP be obtained if the Project has the potential to result in “take” (California Fish and Game Code Section 86 defines “take” as “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill”) of CESA-listed species. Take of any CESA-listed species is prohibited except as authorized by state law (Fish and G. Code, §§ 2080 and 2085). If the Project, including Project construction or any Project-related activity during the life of the Project, could result in take of CESA-listed species, CDFW recommends that the Project proponent seek appropriate authorization prior to Project implementation through an ITP.

The DEIR includes Mitigation Measure BIO-8: Desert Pupfish Protection and Relocation Plan, which would provide, among other things, protocols for capture and transport methods that will minimize handling and stress. Note that handling and translocation of desert pupfish would constitute a form of take and would be prohibited without authorization of an ITP. The DEIR (p. 4.3-37) acknowledges that a CDFW ITP would be required prior to construction in

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any areas containing suitable habitat for desert pupfish, and states that the impact on desert pupfish would be less than significant due to compliance with the ITP; however, the Applicant has not indicated that they intend to apply for a CESA ITP for pupfish. Furthermore, the formulation of mitigation measures may not be deferred to other agencies, even where a subsequent permit may be necessary.

Lake and Streambed Alteration Program

Fish and Game Code section 1602 requires an entity to notify CDFW prior to commencing any activity that may do one or more of the following: Substantially divert or obstruct the natural flow of any river, stream or lake; Substantially change or use any material from the bed, channel or bank of any river, stream, or lake; or Deposit debris, waste or other materials that could pass into any river, stream or lake. Please note that "any river, stream or lake" includes those that are episodic (i.e., those that are dry for periods of time) as well as those that are perennial (i.e., those that flow year-round). This includes ephemeral streams, desert washes, and watercourses with a subsurface flow. It may also apply to work undertaken within the flood plain of a body of water.

Upon receipt of a complete notification, CDFW determines if the proposed Project activities may substantially adversely affect existing fish and wildlife resources and whether a Lake and Streambed Alteration (LSA) Agreement is required. An LSA Agreement includes measures necessary to protect existing fish and wildlife resources. CDFW may suggest ways to modify your Project that would eliminate or reduce harmful impacts to fish and wildlife resources.

CDFW's issuance of an LSA Agreement is a "project" subject to CEQA (see Pub. Resources Code § 21065). To facilitate issuance of an LSA Agreement, if necessary, the DEIR should fully identify the potential impacts to the lake, stream, or riparian resources, and provide adequate avoidance, mitigation, and monitoring and reporting commitments. Early consultation with CDFW is recommended, since modification of the proposed Project may be required to avoid or reduce impacts to fish and wildlife resources. To obtain a Lake or Streambed Alteration notification package, please go to <https://www.wildlife.ca.gov/Conservation/LSA/Forms>.

The Applicant has been coordinating with CDFW to obtain an LSA Agreement for impacts to 1602 resources. The Applicant submitted a notification to CDFW on March 2, 2023, which CDFW subsequently deemed incomplete on March 30, 2023 due to deficiencies in the Project description as it relates to 1602 resources. The Applicant has since been working on revising the notification, but as of this time has not yet resubmitted it.

CDFW appreciates the inclusion of Mitigation Measure BIO-19 Wetland and Riparian Area Restoration/Compensation. Note that the final mitigation ratio for impacts will be determined through the LSA Agreement process and may be greater than 1:1 as proposed. Additionally, the final mitigation plan should provide some form of guarantee that a sufficient and reliable supply of water will be available for the purposes of supporting the proposed mitigation site in perpetuity.

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 (CNDDDB). The CNDDDB field survey form can be found at the following link: http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/CNDDDB_FieldSurveyForm.pdf. The completed form can be mailed electronically to CNDDDB at the following email address: CNDDDB@wildlife.ca.gov. The types of information reported to CNDDDB can be found at the following link: http://www.dfg.ca.gov/biogeodata/cnddb/plants_and_animals.asp.

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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 & G. Code, § 711.4; Pub. Resources Code, § 21089.)

CONCLUSION

CDFW appreciates the opportunity to comment on the DEIR to assist Imperial County in identifying and mitigating Project impacts on biological resources. CDFW recommends that the Applicant coordinate further on the issues identified in the letter, particularly those that pertain to avoiding and minimizing impacts to desert pupfish, Yuma Ridgway's rail, and California black rail.

Questions regarding this letter or further coordination should be directed to Rose Banks, Senior Environmental Scientist (Specialist) at (760) 218-0022 or Rose.Banks@wildlife.ca.gov.

Sincerely,

DocuSigned by:

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Alisa Ellsworth
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