PROTEST

PROTEST FEE PAID

\$15.00 23-04996

Fee Rec'd BY: ONLINE

October 23, 2023

Protestant: National Park Service

c/o Gregory B Hansen, Attorney-Advisor, Office of the Solicitor

125 South State Street, Suite 6201 Salt Lake City, Utah 84138

RE: Protest of Water Right Application 01-1233

A hearing is requested.

Please see the attached document.

Gregory B Hansen, Attorney-Advisor, Office of the Solicitor

Enclosure

RECEIVED

OCT 23 2023 WATER RIGHTS ONLINE

SENT VIA ELECTRONIC MAIL

Ms. Teresa Wilhelmsen, State Engineer Utah Division of Water Rights P.O. Box 146300 1594 West North Temple, Suite 220 Salt Lake City, UT 84114-6300 waterrights@utah.gov

Re: National Park Service Protest to Application to Appropriate Water A83900 (Water Right No. 01-1233)

Dear Ms. Wilhelmsen:

The following protest is submitted on behalf of the National Park Service (NPS) concerning Application to Appropriate Water A83900; water right 01-1233 (Application). The Application was filed on August 14, 2023 by A1 Lithium, Inc., 1635 Village Center Drive, Suite 150, Las Vegas, NV 89134 (Applicant). A credit card payment in the amount of \$15 has been made to cover the protest filing fee.

The applicant seeks to withdraw 19 cubic feet per second (cfs) (equivalent to approximately 13,755 acre-feet annually [afa]), of brine groundwater sourced from deep wells. Additionally, the Application proposes to lease of 2,500 afa of surface water from Wayne County Water Conservancy District using water right 95-434. The purpose of the Application is to support extraction of lithium from the brine. The Application also mentions a processing facility and indicates that brine and surface water will be reinjected to the subsurface using an underground injection control (UIC) well, or wells. The proposed points of diversion (PODs) are located approximately 6 miles northeast from the north boundary of Island in the Sky district of Canyonlands National Park (Canyonlands). The PODs are also approximately 10 miles from several springs located along the Neck Spring Trail south of the park Visitor Center. The named springs along this trail are Neck Spring and Cabin Spring; however, other springs are present.

Canyonlands National Park was designated by Congress on September 12, 1964. The enabling legislations states that "The purpose of Canyonlands National Park is to preserve striking geologic landscapes and associated ecosystems in an area encompassing the confluence of the Green and Colorado rivers possessing superlative scenic, scientific, and cultural features for the inspiration, benefit, and use of the public."

Canyonlands National Park and its expansive natural setting exhibit an array of striking geologic landscapes composed of canyons, mesas, buttes, and spires formed from multiple and varying sedimentary rock formations. These landscapes and features were formed by geologic processes such as sedimentation, erosion, salt dissolution and tectonics, and meteorite impact operating over

hundreds of millions of years. Canyonlands National Park protects the confluence, significant reaches, and associated ecosystems of two major western rivers, the Colorado and Green. These rivers are the lifeblood of the park, and fundamental to their integrity are clean water, native biotic communities, characteristic landforms, and the natural hydrologic, geomorphic, and biotic processes necessary for sustaining them.

NPS holds senior unquantified federal reserved water rights appurtenant to Canyonlands that support surface springs within the park boundary. These springs are critical natural resources that NPS is required to manage and protect pursuant to the NPS Organic Act, found at 54 U.S.C. 100101, et seq. While recognizing the distance between the proposed appropriation and NPS-managed lands, NPS remains concerned that Application A83900 could impair their water rights and negatively impact these resources. The Applicant has failed to satisfy their burden to prove that the application will not impair NPS's rights because the application fails to provide the minimal information necessary for NPS to fully evaluate its potential impacts. For these reasons, the Application does not meet the requirements of Utah Code 73-3-2 and 73-3-8, and the State Engineer should reject the application accordingly.

Specifically, NPS raises the following concerns with the Application:

1. Lack of discussion and scientific evidence of hydrogeology in target aquifer formations.

The Application contains no discussion of potential effects of pumping 19 cfs of groundwater and how that volume of withdrawal may or may not affect the target formation or overlying aquifers that are in hydrologic connection. There is a similar lack of discussion of specifics regarding reinjection of the brine. And lastly, there is no discussion regarding hydrogeologic connectivity, or lack thereof, between the target brine formations and those formations that support surface spring flows on NPS lands. These deficiencies make it impossible to evaluate the potential effects of groundwater withdrawal and reinjection on the overall hydrogeologic system underlying Island in the Sky (including areas north of Canyonlands), and to specific water resources of Canyonlands. Without this information, neither the Utah State Engineer nor the NPS can fully evaluate the Application or understand effects on regional and park water-related resources.

- 2. Lack of explanation of the basic infrastructure characteristics of the proposed operation. In addition, the Application provides no information regarding the following:
 - The anticipated lifespan of the brine extraction and processing operations.
 - The PODs are identified; however, the place(s) of use are not. Email correspondence between the Applicant and Utah Division of Water Rights (UDWR) staff that is available on the UDWR website suggests that an injection well may be located near one of the points of diversion. However, the correspondence also mentions a "Main Brine Pipeline" approximately 2.6 miles in length to a processing facility. The location of this pipeline is not clearly delineated in the Application.
 - The Application describes a processing facility, but does not provide information on its location and how it is presumably connected to extraction well(s), the Main Brine Pipeline,

and one or more injection wells mentioned in the Application.

- The planned depth of the pumping wells and target aquifers or geologic formations, and the distance and direction of any directional drilling that may be conducted.
- The planned depth of the injection wells and target aquifers or geologic formations.
- The Applicant fails to provide "the place where the water is to be returned to the natural stream or source" for the mineral extraction activity, as required by Utah Code Ann. 73-3-2(2)(c).
- 4. Lack of explanation of consumptive use attributable to the Application.

Applicant proposes appropriating an exceptionally large quantity of water, supplemented with additional leased water, but fails to identify the percentage of the 19 cfs that will be consumptive use and the total quantity of water that will be reinjected.

The UDWR policy for Area 01 – Western Moab Vicinity updated on July 9, 2019 states that "New appropriations are limited to small amounts of beneficial use sufficient to serve the domestic requirements of one family, the irrigation of one acre, and ten head of livestock (or equivalent livestock units). New diversions and consumptive uses that require more water than this must be accomplished by filing a change application on valid existing water rights owned or acquired by the applicant. However, some water is available for larger appropriations on a Temporary (one-year) or Fixed Time period basis. Non-consumptive uses such as hydroelectric power generation would be considered on the individual merits of each application."

NPS suggests the proposed use cannot be non-consumptive because the Applicant has not demonstrated that the use will be non-consumptive. As this Application is not a Temporary or Fixed Time application, and is presumably consumptive, it appears to violate the area policy for new applications to appropriate.

3. The Application is speculative.

Lastly, Applicant has failed to satisfy their burden under Utah Code 73-3-8 because they have not shown that their proposal is physically and economically feasible, or that they have the financial capability to complete the proposed works. The State Engineer should reject their application accordingly.

Request for Hearing

NPS requests that the State Engineer hold a hearing on this Application and provide NPS the opportunity to participate. In addition, NPS requests that the State Engineer require Applicant to supplement their application in the following manner prior to holding a hearing and rendering a decision:

1. Applicant should be required to fully describe the infrastructure of their proposed lithium

mining operation;

- 2. Applicant should clearly identify the depths, target aquifer(s) for brine extraction, estimated consumptive uses of water, and locations for brine reinjection;
- 3. Applicant should clearly describe what confining geologic formations separate the proposed target aquifer(s) for brine extraction from those aquifers that support NPS-managed resources critical to Canyonlands and the associated public benefits the park provides. To this end, NPS recommends that State Engineer require the Applicant to fund an independent third party, such as the Utah Geological Survey or U.S. Geological Survey, to conduct studies designed to determine what if any connection exists between the aquifer(s) to be pumped and the aquifers supplying water to springs within Canyonlands.

If Applicant is able and willing to supplement their application with engineering and hydrogeologic information confirming NPS-managed resources will not be impaired by the proposed operation, NPS may be willing to withdraw its protest.

Please have a copy of any notice, correspondence, or decision concerning the Application or future hearing mailed to me c/o Department of the Interior, Office of the Regional Solicitor, 125 South State Street, Suite 6201, Salt Lake City, UT 84138. I would appreciate it if a courtesy copy of the same would also be mailed to Terry Fisk, National Park Service, Water Resources Division, 1201 Oakridge Drive, Suite 250, Fort Collins, CO 80525.

Thank you for your consideration of this protest. Please contact me at your convenience (202-993-0428) if you have any questions.

Sincerely,

Gregory B. Hansen Attorney-Advisor

Cc: Via email

Brendan Bray, Acting Superintendent, Southeast Utah Group of Parks Kim Hartwig, Chief of Resource Stewardship & Science, Southeast Utah Group of Parks Terry Fisk, National Park Service, Water Rights Branch Chief