

DOCKETED	
Docket Number:	20-LITHIUM-01
Project Title:	Lithium Valley Commission
TN #:	246204
Document Title:	Nikola N. Lakic Comments - Important documents for Commissioners - My Public Comment following three virtual community meetings
Description:	N/A
Filer:	System
Organization:	Nikola N. Lakic
Submitter Role:	Public
Submission Date:	9/26/2022 10:17:31 AM
Docketed Date:	9/26/2022

Comment Received From: Nikola N. Latic
Submitted On: 9/26/2022
Docket Number: 20-LITHIUM-01

Important documents for Commissioners - My Public Comment following three virtual community meetings

Additional submitted attachment is included below.



Geothermal Worldwide, Inc.,
78-365 Hwy 111, #402, La Quinta, CA 92201,

Email: nlakic@GeothermalWorldwide.com
Ph: 760-347-1609

September 23, 2022

California Energy Commission
Docket: Unit, MS-4
Docket No. 20-LITHIUM-01
715 P Street
Sacramento, CA 95814-5512
LithiumValleyCommission@energy.ca.gov
Cc: docket@energy.ca.gov

Subject: Docket Number: 20-LITHIUM-1

Title: “My Public Comment following three virtual community meetings facilitated by the U.S. Army Corps of Engineers, the Salton Sea Management Program (SSMP), and the NAPE on July 7, 2022 (2 meetings) and July 12, 2022.- Nikola Lakic”.

Greetings, Chair, Paz, and Commissioners:

Soon you will be filing reports to the State about your finding as commissioners of the Lithium Valley Commission.

During the last 18 months, I sent several public comments to the Commission asking to be invited to make the presentation so that you (commissioners) can be informed about the problems related to the Salton Sea and solutions to how to solve the problems. Unfortunately, I have not been invited, by whoever makes the schedule for the meetings and for whatever reason.

The Commission was established and convened by the California Energy Commission (CEC) to review, investigate, and analyze eight specific topics relating to lithium extraction (also referred to as lithium recovery) in California and submit a report to the Legislature, documenting its findings and any recommendations developed after conducting the required review and analyses.

It is obvious that the essence of the establishment of the Commission is the evaluation of the feasibility of the production of lithium. My system for the extraction of lithium from salty water from the Salton Sea and from imported water from the Ocean is part of my Architectural Plan (the solution) for the restoration of the Salton Sea. Although the production of lithium of only about 1,000 tons per year is not an impressive number it is a byproduct of the desalination process of the Salton Sea. Limitations to the extraction of lithium from geothermal brine do not make sense. We need lithium. Also, sharing facility is complimentary.



Geothermal Worldwide, Inc.,
78-365 Hwy 111, #402, La Quinta, CA 92201,

Email: nlakic@GeothermalWorldwide.com
Ph: 760-347-1609

Unfortunately, you chose not to learn about it.

By now, you might know that I am the author of a very good proposal for the restoration of the Salton Sea. Also, you might know that I am a graduate engineer architect, and inventor of several breakthrough technologies in the energy industry (hydro, solar and geothermal) which I have modified and incorporated into my Architectural Plan for the restoration of the Salton Sea.

By now, you might also know that I am in dispute with some members of the Salton Sea Authority, (SSA), Pacific Institute, and Tetra-Tech, which are all strongly influenced by the Imperial Irrigation District (IID).

I send an extensive public comment (34-pages) on August 20, 2022, for the record, to the Corps titled **“My Public Comment following three virtual community meetings facilitated by the U.S. Army Corps of Engineers, the Salton Sea Management Program (SSMP), and the NAPE on July 7, 2022 (2 meetings) and July 12, 2022.- Nikola Lakic”**.

Although it might appear as “out of subject” or not related to the Blue Ribbon Commission on Lithium Extraction in California or Lithium Valley Commission – it is very related to the extraction of lithium, the environment, the health of the nearby population, and clean energy. I respectfully urge you to read it. Here is the link to that letter. You need to understand the whole situation to make a sound decision in your report. [Public Comment following the Corps and SSMP meetings -July, 2022 - Copy.pdf](#)

In short – there are two current projects **a)** Extraction of the Lithium from geothermal brine, which is based on a smaller Lake so-called “Perimeter/Brine Lake” and exposed lakebed (playa), and **b)** Restoration of the Salton Sea that is based on the importation of the seawater from Sea of Cortez or Long Beach or both. Those two projects (a) and (b) are in serious conflict. There is no logical explanation for proceeding with the “Perimeter/Brine Lake” and expensive dust suppression projects and talking about the importation of seawater that would flood those projects. Also, there is no logical explanation to import seawater and continue with the “Perimeter/Brine Lake” and related dust suppression projects.

My proposal does not interfere with the extraction of lithium from geothermal brine as long there is a dike built around the desired area for the extraction of lithium. In fact, my proposal unites those two projects (a) and (b) successfully and provides the needed water for the extraction of lithium which obviously with the current plan (or lack of plan) is lacking.

I am including two documents from Jenny Ross, the Senior Researcher at the Ross Institute. She has written in August two very good and in-depth comment letters on the Salton Sea. One is to the Army Corps of Engineers and the Salton Sea Management



Geothermal Worldwide, Inc.,
78-365 Hwy 111, #402, La Quinta, CA 92201,

Email: nlakic@GeothermalWorldwide.com
Ph: 760-347-1609

Plan about the recent environmental impact report on the projects of the Ten Year Plan, and the other is to the U.S. Bureau of Reclamation about how future planning for water management of the Colorado River must include the importation of ocean water to refill the Salton Sea, thus ending its dependence on the Colorado River, and relieving the shortage of water for users of the river in the seven states and Mexico. Here is the link to those two articles: [Jenny Ross 10 Yr Plan Public Comment.pdf](#). and [Jenny Ross on Colorado River Mgt. strategy.pdf](#).

Jenny Ross might not be aware of the existence of my proposal for the restoration of the Salton Sea, but she reinforces my assertion that the “current course of action” is the wrong path to proceed. She supports the importation of seawater from the Ocean as the only solution for saving the Salton Sea.

I am saying that just the importation of seawater, although an important step, would eliminate the need for the nonsensical and expensive dust suppression projects, but would not solve the problem because pollution of the Salton Sea with pesticides and fertilizers from runoff waters from nearby farmlands (New River and Alamo River) would continue. My architectural plan (the proposal) has the solution to that problem.

It is obvious and unfortunate that the current grave situation is caused by the local leadership's (members of the SSA and IID with their collaborators Tetra-Tech and Pacific Institute) desire to control the fate of the Salton Sea and the implementation of the projects for their shortsighted self-interest.

I am hoping that the State will reject Panels results for the obvious reason – a fundamental breach of trust and their task to be “independent” and to review all proposals and select the best proposal that is in the interest of the Salton Sea, the environment, the health of the nearby population and economy in general. I am hoping that the State will see through such manipulative conduct and will extend the deadline for implementation for the obvious reason and initiate a speedy evaluation of my proposal by an independent panel of knowledgeable experts (architects, planners, civil engineers, mechanical engineers) with authority and backbone. No pun intended – but environmental scientists, biologists, and chemists are not appropriated group (team) for this job. I am sure that you would not accept a dentist to perform bypass surgery on your heart in case you need one.

This problematic, unhealthy, and unproductive situation, can be stopped if all stakeholders, including top state officials, act as all of you should, in the interest to clean renewable energy, a clean environment, clean air and water, the health of the nearby population, and the economy in general.

I noticed in many meetings that I attended, via Zoom, that some of you, commissioners, are concerned about the environment, how much profit will be shared with the



Geothermal Worldwide, Inc.,
78-365 Hwy 111, #402, La Quinta, CA 92201,

Email: nlakic@GeothermalWorldwide.com
Ph: 760-347-1609

community, and how many of the local population can be employed at the project site for the extraction of lithium from geothermal brine.

You need to understand that everything that has been promised to you is insignificant compared to the consequence of losing the Salton Sea, the environment, the health of the nearby population, and the economy in general.

You should know that with the implementation of my proposal, thousands of new jobs will be available during construction and after construction is finished. The implementation of my proposal, besides a clean environment, will provide a condition for exclusive real estate, reestablishment of original beaches and marine bays, numerous recreational parks with smaller Lakes (no ponds), and with nearby fisheries, and much more despite restricted use of water from Colorado River.

How it is possible? Well, that is the value of a good architectural Plan. That is what I try to explain if given the opportunity.

For the last 9 years, I was offering my expertise and my proposal and asked local authorities for their attention. Unfortunately, that has been denied, especially recently by Tetra-Tech interfering with the Panel of independent reviewers. The Panel, after having a “training session” with members of Tetra-Tech, refused to evaluate my proposal without a logical explanation. The real reason is that my proposal interferes with their ill-conceived project.

Such practice is highly inappropriate, immoral, and illegal. Such practice and behavior of local leadership must cease if we are to save and restore the Salton Sea.

Again, here is a summary of what I am doing. It is only one hour.

https://energy.zoom.us/rec/share/d4tAFmZFYEoqq4_VQzKqnbEbbjsTG-o8xeJX9KRklp4uLlvOr7dCOz-9zrcMW-tW.JZXVajNyKAb3E9Of.

Also, I am including links, and a summary of my proposal for the restoration of the Salton Sea, divided into five segments for easier understanding. Each of the segments (phases) is essential for the final product – a self-sustained Salton Sea. Please include it on your website including five summaries below.

(About Importing Seawater – Segment - I)

<http://www.geothermalworldwide.com/images/ImportingSeawater-1.pdf>

(About Harnessing Hydropower – Segment - II)

[6+\(II\) Harnessing Hydro Power - May, 2019 - Copy - Copy.pdf](#)

(About Harnessing Solar Energy – Segment - III))

[6+\(III\) Harnessing Solar Energy - Addendum - July 1, 2022 - - Copy - Copy.pdf](#)



Geothermal Worldwide, Inc.,
78-365 Hwy 111, #402, La Quinta, CA 92201,

Email: nlakic@GeothermalWorldwide.com
Ph: 760-347-1609

(About Harnessing Geothermal Energy – Segment - IV) (in the GWC 2020 papers it is defined as Segment - II)

<http://www.geothermalworldwide.com/images/HarnessingGeothermalEnergy-4.pdf>

(About Drilling Deeper and Wider Wellbores – Segment - V) (in the GWC 2020 papers it is defined as Segment - III)

<http://www.geothermalworldwide.com/images/DrillingDeeperWellbores-5.pdf>

The value of my work is its simplicity and its necessity. An average high school student could understand it in a relatively short time if read thoroughly. My work is patented with several “continuation-in-part” applications still pending.

Time is passing fast. Nothing of substance has been achieved. I doubt that I will be invited to make a presentation and answer your question directly. Therefore, if you do not have time to study my work, which might be the case, I respectfully urge you and other key people in government to forward this message to Governor Gavin Newsom to consider issuing a mandatory order requiring that owners of the land (parcels) that are below the original lake’s water level of the 1950s and 1960s (which was about -220) and which are intended for leasing for the extraction of Lithium be surrounded with appropriate dikes. That would provide a condition for refiling the Lake to the original level with seawater to prevent destruction (shrinkage) of the Lake. With appropriate design, it would reestablish original marine bays, and beaches, provide wildlife sanctuaries, and at the same time would provide dry land for harnessing geothermal energy and lithium in the desired area without destroying the Lake. This is not difficult to understand and is not difficult task for you to do.

That is relevant to all eight specific topics. To mention just one: *“Potential economic and environmental impacts to the state resulting from extraction, processing, and production of lithium and lithium-dependent products from geothermal brines.”*

Please read my Public Comment (34-pages) accessible above on the second page.

Also, in the attachment are included again, to be handy, several illustrations that I am referring to in my letter such as “Routes that Meet Fatal Flaw Criteria”, my “Patent cover page regarding the Salton Sea”, “Figure 50 of my proposed corridor from San Felipe to the central section of the Salton Sea”, “Land ownership at the Salton Sea” and a few pages from different articles exposing financial motives for the current grave situation. (NOTE: Unfortunately, some of those people who promote the “current course of action” for their pitiful self-interest do not understand that they would be better off with the implementation of my proposal.)

Although it is in my letter (Public Comment), I would like to emphasize again that the longer nonsensical projects continue (being funded) which unequivocally leads to the



Geothermal Worldwide, Inc.,
78-365 Hwy 111, #402, La Quinta, CA 92201,

Email: nlakic@GeothermalWorldwide.com
Ph: 760-347-1609

destruction of the Salton Sea, will prolong the suffering of the nearby population and economy at large, and that every year of delay in the implementation of my proposal - means - losing at least \$500,000,000 in revenue just from clean energy out of blue – literally. Think for a moment of the current alternative – toxic environment, poor health of the population, fixing never-ending problems, loss of tourism, economic fall, etc.

The absurdity of the situation is that instead to be grateful and supportive that I have solved a huge problem of the Salton Sea and clean energy, not just in the Salton Sea area or California, but my systems can be used worldwide, I have been systematically ignored and denied. That is mind-boggling.

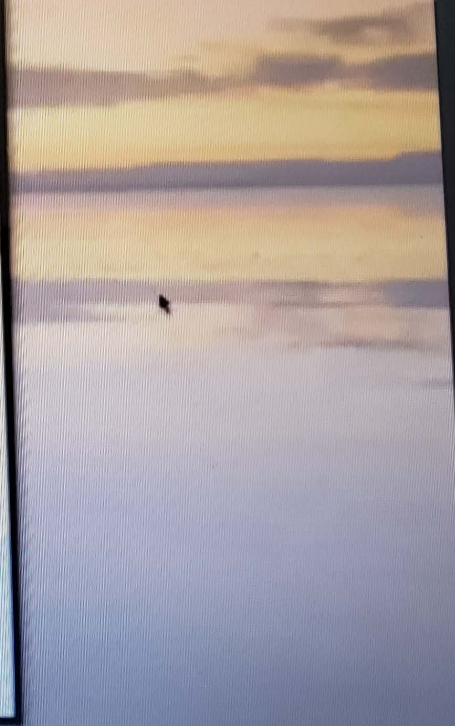
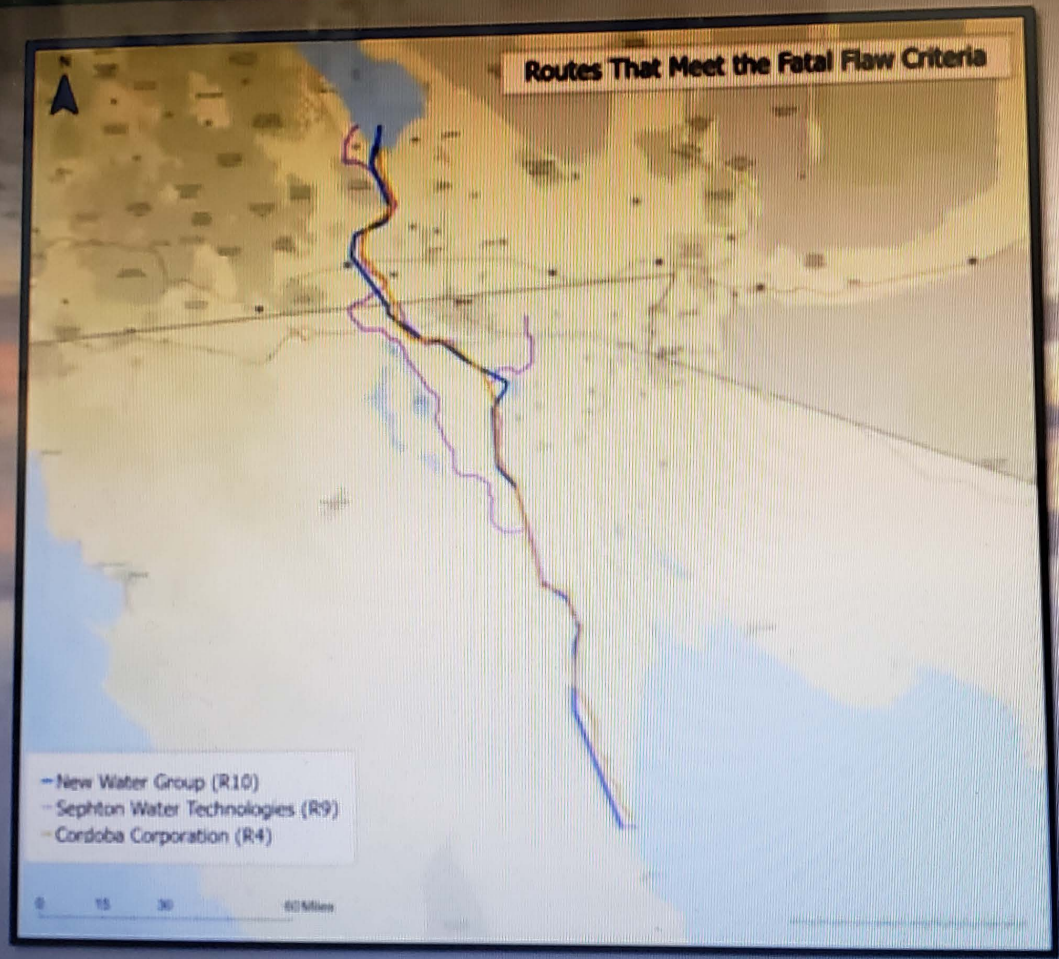
This is a historic moment. Your contribution is essential. Accountability matters.

I would be glad to answer any questions that you might have

Nikola N. Lakic
Graduate Eng. Architect / Inventor
Geothermal Worldwide, Inc.
78-365 Hwy 111, #402
La Quinta, CA 92253
01-760-347-1609
01-760-333-3851 cell
www.GeothermalWorldwide.com
nlakic@Geothermalworldwide.com



UC SANTA CRUZ



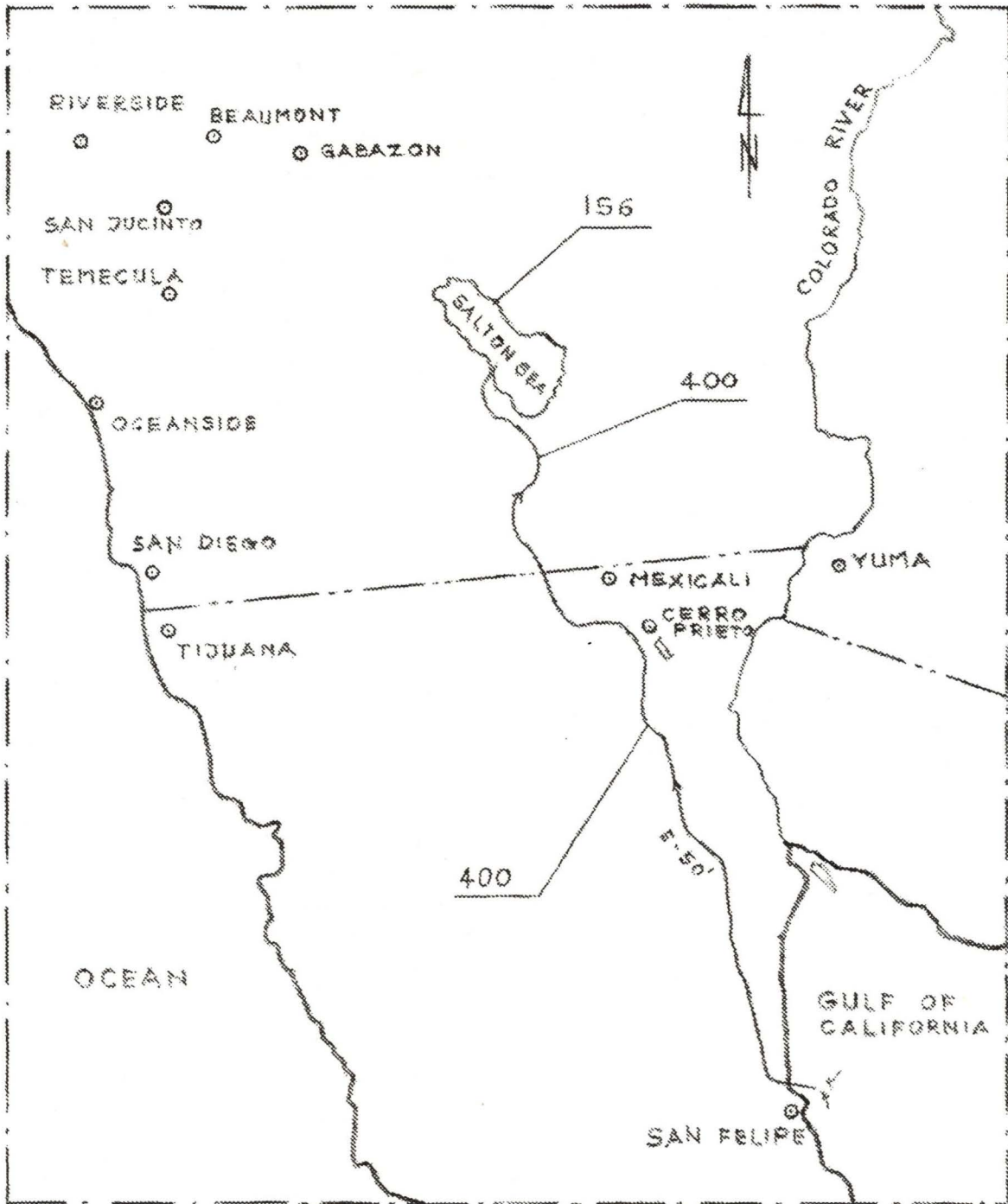


FIG. 50



US011098926B2

(12) **United States Patent**
Lakic

(10) **Patent No.:** **US 11,098,926 B2**
(45) **Date of Patent:** **Aug. 24, 2021**

(54) **SELF-CONTAINED IN-GROUND
GEOTHERMAL GENERATOR AND HEAT
EXCHANGER WITH IN-LINE PUMP USED
IN SEVERAL ALTERNATIVE APPLICATIONS
INCLUDING THE RESTORATION OF THE
SALTON SEA**

(56) **References Cited**

U.S. PATENT DOCUMENTS

1,213,941 A 1/1917 Patrick
1,812,943 A 7/1931 Granger
(Continued)

FOREIGN PATENT DOCUMENTS

DE 2321817 11/1973
DE 3144207 5/1983
(Continued)

OTHER PUBLICATIONS

Lakic, Self Contained In-Ground Geothermal Generator, U.S. Appl. No. 11/770,543, filed Jun. 28, 2007, Office Action Summary, dated Jun. 8, 2010.

(Continued)

Primary Examiner — Hoang M Nguyen

(74) *Attorney, Agent, or Firm* — Schmeiser, Olsen & Watts LLP

(71) Applicant: **Nikola Lakic**, Indo, CA (US)

(72) Inventor: **Nikola Lakic**, Indo, CA (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **15/940,732**

(22) Filed: **Mar. 29, 2018**

(65) **Prior Publication Data**

US 2018/0224164 A1 Aug. 9, 2018

Related U.S. Application Data

(63) Continuation-in-part of application No. 14/961,435, filed on Dec. 7, 2015, now Pat. No. 9,982,513, and a
(Continued)

(51) **Int. Cl.**
F24T 50/00 (2018.01)
F03G 7/04 (2006.01)
(Continued)

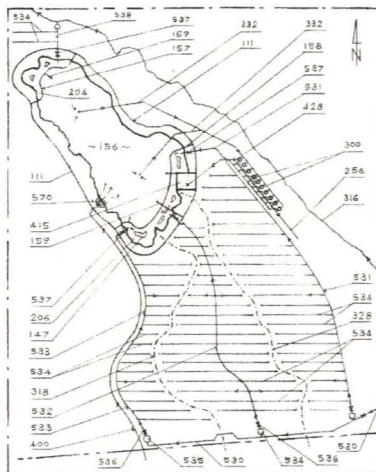
(52) **U.S. Cl.**
CPC **F24T 50/00** (2018.05); **F03G 7/04**
(2013.01); **F04B 47/00** (2013.01); **F24S 90/00**
(2018.05);
(Continued)

(58) **Field of Classification Search**
CPC F24T 50/00; F24T 10/17; F24T 2010/53;
F24T 10/30; F03G 7/04; Y02E 10/18;
(Continued)

(57) **ABSTRACT**

Provided here is a system and method for harnessing geothermal energy for generation of electricity by using complete closed loop heat exchange systems combined with onboard drilling apparatus. The system includes several devices operating separately in many different applications in energy sectors, including Self Contained In-Ground Geothermal Generator; the Self Contained Heat Exchanger; the In-Line-Pump/Generator; and preeminent drilling system for drilling wider and deeper wellbores. The system can be used for harnessing heat from accessible lava flows; harnessing the waste heat from the flame on top of flares stacks and similar cases. Also, included is an architectural solution for the restoration of the terminal lake, the Salton Sea, an area of prevalent geothermal sources, including dividing lake in three sections and importing seawater in central section with pipeline system; providing condition for tourism; treating farmland runoff waters; generating electricity

(Continued)





Salton Sea Perimeter Lake Concept Background

Presentation to:
Salton Sea Authority Board of Directors

June 25, 2020

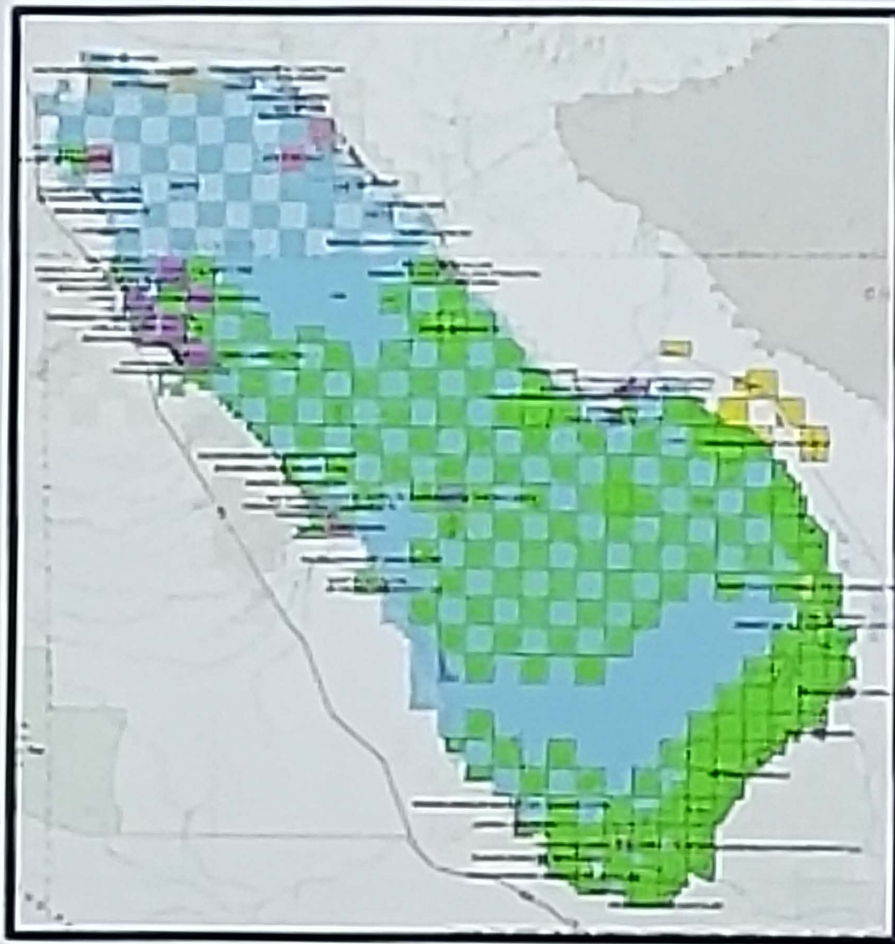
CLEAR SOLUTIONS™

00:32:59 / 02:37:54

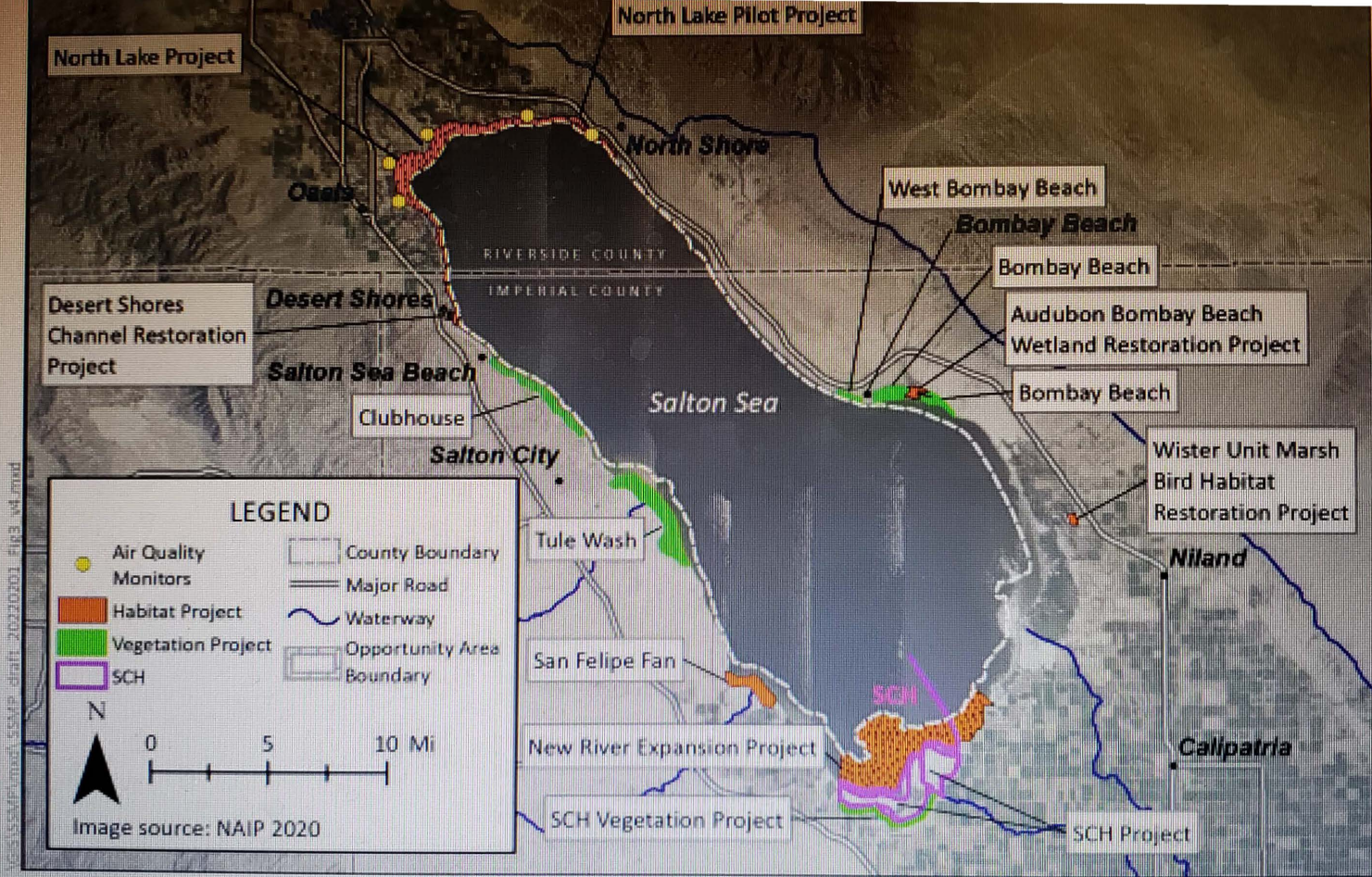
Speed

Colorado River and Salton Sea Nexus: Federal Land Ownership

-  Federal
-  IID
-  Tribal



are secured
 Team worked
 and access
 s not received
 ward, our
 ss agreements
 o dictate the
 h schedule for
 effect the
 the State
 ul targets for
 jects. Without
 ration from
 will continue to
 very.



Sea are shown
 range of
 ken by the SSMP
 oration of the

Beginning in late 2019, projects related to the SSMP are in the consultation process with tribes that may be

A brief discussion of the potential revenues from each technology is summarized below; see Appendix C for full calculations:

- *Geothermal:*
 - Royalty payments from geothermal projects developed on BLM land could generate \$1 million to \$3 million annually for Salton Sea restoration efforts. This is assuming the full .68 GW to 1.24 GW of capacity is developed on BLM land and a range of PPA prices between \$80 MWh and \$100 MWh. The current total capacity developed on BLM land in the region is 80.1 MW at the East Mesa KGRA, so the quantity of BLM land that will be developed in the future is still uncertain.
 - **The low and high land lease revenues for offshore projects on IID-owned playa were estimated at \$6 million to \$12 million annually, assuming that the estimated playa recession and developable offshore potential by 2030 are realized.**
- *Solar:*
 - The low and high land lease revenues for onshore PV projects were estimated at \$1.5 to \$4.4 million, and assume the development of 1.8 GW of capacity within the BLM SEZ's, as well as the passage of HR 596, which would allocate BLM royalties from development back to the county and state.
 - An additional potential revenue stream from development of solar photovoltaics on the playa was considered, based on the following: an assumed 100% share of royalties for offshore IID projects, full development of the non-KGRA land within the playa exposed by 2030, and PPA prices between \$60-\$80/MWh. The total non-KGRA land within the playa, within 5 miles of a 138 kV to 230 kV substation, was 9,938 acres. A 7.9 acre/MW land use factor was applied to this acreage to determine the estimated capacity of 1.25 GW, and the production factor listed below in Table 11 was applied to this capacity. IID leases were assumed to range between 1-2% of gross proceeds. The low and high values for the estimated offshore IID land PV projects were \$1 million to \$3 million annually, assuming that the estimated playa recession and full development of the non-KGRA playa acreage by 2030 is realized. This 1.25 GW potential is not included in the likely developable solar capacity of 1.8 GW, due to the remaining uncertainty surrounding the feasibility of large-scale PV development on the Salton Sea playa.
- *Brine Mineral Recovery.* Potential revenues from lithium production could reach up to \$25.8 million annually. However, the feasible taxable percentage of gross proceeds will be heavily dependent on the operating costs of the mineral recovery project. In general, technology is available for removal of most of the minerals mentioned above; however, the economics of deploying the technologies are marginal at this time, either due to the high cost of the extraction technology or to the market price of the mineral not being adequate.
- *Algae.* Although algal biofuel development appears to be technically viable in the region, this technology is currently pre-commercial and is unlikely to be cost-competitive in the

Long Range Plan Committee: The situation at the Salton Sea has changed and technology has advanced since the time most of the original long-range solutions to water quality and quantity were first considered. Therefore, the state will reevaluate various water import, land use and/or treatment scenarios based on current and projected conditions at the Salton Sea. These types of projects are considered as potential long term solutions for the Salton Sea. The short and mid-term Salton Sea Management Plan will continue to be developed and implemented. To the extent practical, the short and mid-term projects will be developed so as to not preclude the implementation of long term plans.

The state will convene a series of meetings that will include the proponents of various longer range solutions for the Salton Sea. Each meeting will provide an opportunity for proponents to give their presentation (up to 1.5 hours) and the committee to ask questions. The material provided at the meeting will be taken back to the various committee member agencies and reviewed in more detail by their technical teams. A one or two page summary of the results of the evaluation will be given to the project proponent after the review (30-60 day period). There will be an opportunity for the review committee to submit additional questions to the project proponent prior to completing the review summary.

The proposals/presentations and the summary reports will be public documents and will be included on the Salton Sea Management Program web page.

Presentation Process and Requirements

The committee will invite the various project proponent teams to present their proposed projects/plans. Each team will meet individually with the committee. These will not be closed meetings, so members of the general public or other project proponents can attend as audience members.

The following will be required for each presentation:

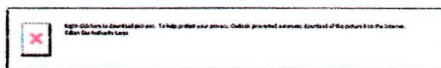
While we recommend a PowerPoint presentation; it is not required. If there is no PowerPoint the presentation should be outlined in a handout, along with pertinent documents relating to the presentation.

Handouts of presentation and other material to be included in the presentation should be made available for the committee at least two business days before the presentation.

Executive Summary: A brief description of the project, its purpose, schedule and funding requirements. The executive summary should also introduce the project proponents and their backgrounds. The executive summary is not meant to provide the detail surrounding the project, that will be captured in the rest of the presentation and therefore the Executive Summary should be short and concise.

Project Description: This section will describe the project, the project's purpose and any related issues relevant to the project construction or implementation. The

From: Salton Sea Authority [info@ssajpa.org]
Sent: Thursday, June 01, 2017 5:10 PM
To: nlakic@geothermalworldwide.com
Subject: California Senate Votes to Support Healthier Salton Sea



FOR IMMEDIATE RELEASE

SB 701: Salton Sea Obligations Act of 2018

California Senate votes to support healthier Salton Sea

Salton Sea, California, June 1, 2017 - Last night the California Senate overwhelmingly voted to support funding the Salton Sea Management Program 10 year plan. Legislators voted 30-10 in favor of SB 701: Salton Sea Obligations Act of 2018 (Sen Hueso/ Co-sponsor Asm Garcia).

If the full legislature passes and the governor signs SB 701, this will set the stage for voters to consider the Salton Sea Obligations Act on the November 2018 ballot. Voter approval would authorize a \$500 Million state general obligation bond to fund the state's 10-Year plan. **While this does not solve every challenge at the Sea**, it would begin to fulfill the state's resources settlement obligations toward the Salton Sea in the Quantitative Settlement Agreement (a major regional water rights settlement brokered by the state of California).

The Salton Sea Authority (SSA) is urging its partner agencies and stakeholders to **support the growing momentum for this historic bill**. The SSA is a joint powers authority empowered by the state legislature to work in **consultation and cooperation** with the California Natural Resources Agency to **revitalize the Salton Sea**.

As the largest inland lake in the state of California, the Salton Sea is home to nearly two thirds of all migratory waterfowl traveling the Pacific Flyway. The Sea's ecosystem and economy are threatened by rising salinity levels and lowering water elevations, a trend expected to accelerate as massive agricultural-to-urban water transfers ramp up after December 2017. Transfer of water in the absence of investments called for in SB 701 could expose up to 100 square miles of potentially dusty lakebed, impacting air quality and human health as far away as Los Angeles.

"The Salton Sea Authority applauds the forward-thinking state leaders who understand that taking action now helps to avert compounding devastation from inaction at the Salton Sea," states Phil Rosentrater, GM/Executive Director of the SSA. "A 'Do Nothing' scenario is the most costly of all options, predicted to cause \$70 Billion in

damages to human health, property values, environmental degradation and the connected economies of agriculture and tourism. Conversely, a YES vote for SB 701 provides a positive alternative and a realistic path forward.”

The SSA and its partner agencies – Imperial Irrigation District, Riverside and Imperial Counties, Coachella Valley Water District, and Torres Martinez Tribe of Desert Cahuilla Indians – are working tirelessly to establish a healthy, prosperous future for a smaller, sustainable Salton Sea.

#

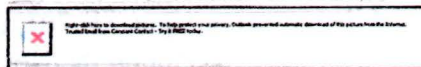
For more information contact: Phil Rosentrater, GM/Executive Director, SSA,
PRosentrater@ssajpa.org

Salton Sea Authority | 82995 Highway 111, Suite 200, Indio, CA 92201

[Unsubscribe nlakic@geothermalworldwide.com](mailto:nlakic@geothermalworldwide.com)

[Update Profile](#) | [About our service provider](#)

Sent by info@ssajpa.org in collaboration with



Try it free today

Salton Sea Management Program Status

You're
Invited

Work continues on the 10-Year Plan of the Salton Sea Management Program led by the California Natural Resources Agency in partnership with the California Department of Water Resources, Salton Sea Authority, California Department of Fish & Wildlife, IID, and many other federal, state, and local stakeholders. Projects included in the 10-Year Plan, like the water management infrastructure, related habitat, and dust suppression components, will help address dust emissions and rising salinity that poses a threat to human health, fish and bird habitat and our local economies.

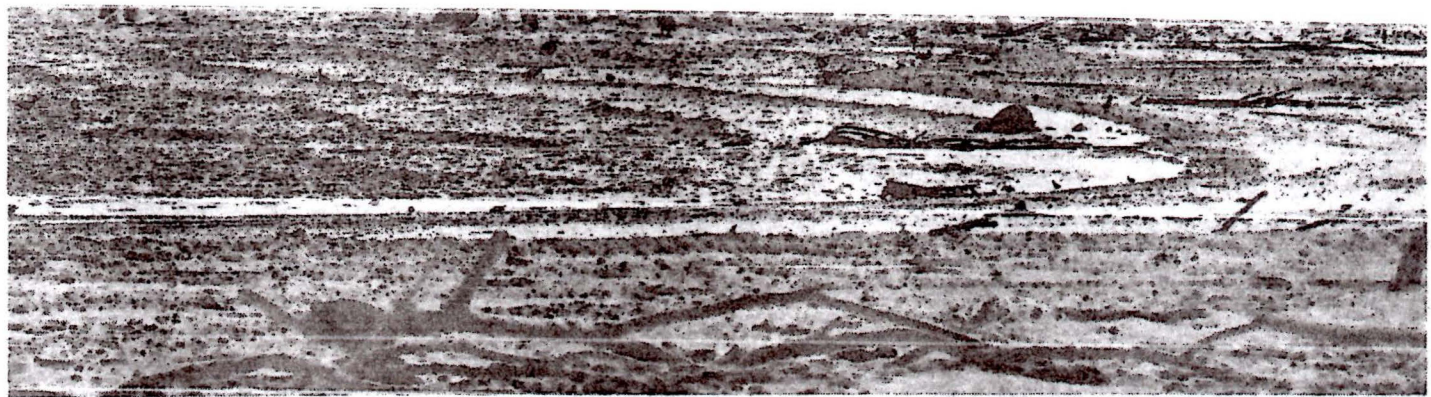
Please join us at one of our upcoming workshops to learn about the 10-Year Plan and what it means for you and your community.

Salton Sea Community Workshops

- 1 Boys & Girls Club
91391 66th Ave, Mecca
June 13, 5:30-7:30PM
- 2 West Shores Senior Citizens
Club in Salton City
1375 S. Marina Drive, Thermal
June 15, 5:30-7:30PM
- 3 Del Rio Community Center
1501 I St., Brawley
June 22, 5:30-7:30PM
- 4 Ski Inn in Bombay Beach
9596 Ave. A, Niland
June 28, 2:00-4:00PM
- 5 IID District Office
1285 Broadway St., El Centro
June 29, 5:30-7:30PM
- 6 Indio Performing Arts Center
4517 Fargo St. Indio
July 6, 5:30-7:30PM
- 7 Rancho Mirage Public Library
71100 CA-111, Rancho Mirage
July 12, 5:30-7:30PM

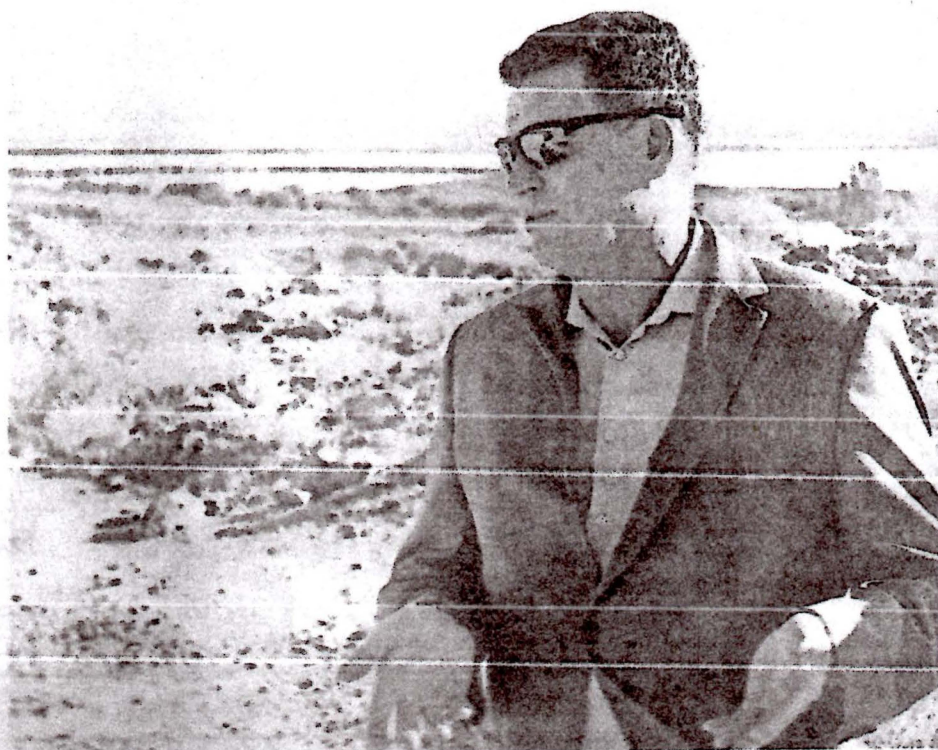
Locations and times are subject to change. Check the Salton Sea Management Program web page for details: resources.ca.gov/salton-sea

For more information and to request special assistance or interpretation services at one of these workshops, please contact Josh Zipperman at Josh@BurkeRix.com or phone at (760) 327-9708 x24.



JAY CALDERON/THE DESERT SUN

Thousands of birds roost at the Sonny Bono National Wildlife Refuge at the Salton Sea on Aug. 5.



ROBERT HOPWOOD/THE DESERT SUN

Controlled Thermal Resources CEO Rod Colwell discusses his company's plans during an interview by the southern shore of the Salton Sea.

temperatures as high as 700 degrees Fahrenheit by the Earth's natural heat. Tapping that sizzling brine for energy production is a renewable process that doesn't create the carbon pollution that causes climate change.

But geothermal development has slowed in recent years due to the high upfront costs of building a plant, with only one new facility opening in the area since 2008. Controlled Thermal Resources thinks it can secure financing for the project by going big, and reaping the benefits of scale. Colwell has said the company's 200-megawatt plant — dubbed "Hell's Kitchen" after a restaurant that operated in the area in the early 1970s — would cost \$850 million to build, compared to the \$400 million another company spent to build the 50-megawatt Featherstone plant, which opened in 2012.

The lithium partnership with Alger should improve the economics of Hell's Kitchen even more, Colwell said, giving the Australian company an additional

er" plants fueled by natural gas.

Geothermal plants are traditionally designed to generate electricity around the clock. But Colwell's team is working on a design that would allow them to limit production during the middle of the day, when the grid has plenty of solar power, then ramp back up in the evening. That would allow utilities to complement solar with climate-friendly geothermal, rather than climate-altering natural gas.

"It's basically just a new twist on the existing technology," said Jim Turner, a longtime Salton Sea geothermal executive who led the development of EnergySource's Featherstone plant, and who now works for Controlled Thermal Resources as its business development manager. "It hasn't been done at the Salton Sea — there hasn't been a need for it. But there is today."

Geothermal is far from the only way for California to meet its clean energy targets without using more natural gas: Smarter energy management, such as using more electricity during the middle

that way. You diversify," James Caldwell, a senior technical consultant at the Center for Energy Efficiency and Renewable Technologies, a Sacramento-based clean energy trade group, told The Desert Sun last year. "And nature rewards people who diversify. This is the same thing."

For Controlled Thermal Resources, nothing is certain until the company drills exploratory wells, confirms that the geothermal resource is adequate, goes through a lengthy permitting process at the California Energy Commission, secures financing, signs a contract with a utility and builds the plant. Czaplak said construction isn't likely to begin until 2019, with Hell's Kitchen coming online in 2021.

If all that happens, Controlled Thermal could launch a new wave of geothermal development in the region, with a focus on lithium production and more flexible power plants. There's plenty of room for new projects: Estimates of untapped geothermal potential at the Salton Sea range from 1,500 to nearly 3,000 megawatts, on top of the 400 megawatts that have already been developed.

New geothermal plants could cover up exposed lakebed, limiting air pollution, and create much-needed jobs. They would also generate revenue. Under the terms of its lease, Controlled Thermal must pay the Imperial Irrigation District \$40,000 per year during exploration, \$230,000 per year once construction begins and royalties between 3 and 4 percent on any electricity or minerals it sells.

Alger and Controlled Thermal aren't the only Salton Sea firms working on lithium. EnergySource, which owns the Featherstone plant, started testing its own lithium extraction process last year, leading to an infusion of cash from a Texas-based investment firm, Mills Capital Group. Mills increased its ownership stake in EnergySource and is funding further testing of the lithium technology.

EnergySource President Eric Spomer told The Desert Sun in October that he expected the tests to take about six months. What differentiates his company's lithium extraction process from Simbol's, he said, is that it isn't totally new technology. EnergySource purchased several existing technologies, all of which have been proven elsewhere,