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CALIFORNIA ENERGY COMMISSION

In the matter of:

Forum Presentation)
_____)

LITHIUM VALLEY COMMISSION

REMOTE VIA ZOOM

WEDNESDAY, NOVEMBER 17, 2021
6:00 P.M.

Reported by:

Martha Nelson

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P R O C E E D I N G S

6:00 P.M.

WEDNESDAY, NOVEMBER 17, 2021

CHAIR PAZ: Welcome everyone. We're going to give it a few minutes, as people log into the webinar. Okay.

Hi everyone. Welcome to the Lithium Valley Commission community forum. The intent of the forum really grew out of conversations with community leaders wanting to learn more about the Lithium Valley Commission, what our purpose was, and address general questions around lithium and the lithium opportunity at the Salton Sea.

So the intention of this meeting is to provide the opportunity to learn about opportunities and challenges to lithium development from geothermal brine in the Salton Sea region, for the community to share their thoughts and ask questions about what matters most to them and their communities, and to connect with the State's Lithium Valley Commission and Assembly Member Eduardo Garcia, and the California Energy Commission staff.

Next slide, please.

As you'll notice, we are offering

1 interpretation services in Spanish and Purepecha
2 for today's forum. The CEC's Public Advisor will
3 now speak in Spanish to inform our Spanish-
4 speaking audience about the need to select the
5 Spanish channel if they prefer to listen to this
6 meeting in Spanish. There is an interpreter in
7 the Spanish channel interpreting everything said
8 in English into Spanish. There is also an
9 interpreter in the Purepecha channel interpreting
10 everything said in English into Purepecha.

11 And at this point I will invite our CEC
12 Public Advisor.

13 PUBLIC ADVISOR GALLARDO: Hello. This is
14 Noemi Gallardo. Can you hear me clearly?

15 CHAIR PAZ: Yes, Noemi. Thank you.

16 PUBLIC ADVISOR GALLARDO: All right. I
17 will begin.

18 [Translating instructions from English into
19 Spanish]

20 PUBLIC ADVISOR GALLARDO: All right. I
21 have concluded the instructions.

22 MS. DE JONG: Pardon me, Chair Paz.
23 You're on mute.

24 CHAIR PAZ: Thank you.

25 If you're joining us today via smartphone

1 or tablet, you may need to find the three dots or
2 more button to navigate to the interpretation
3 options. Again, all attendees should select a
4 channel, either English, Spanish, or Purepecha.
5 All members of the public in the English,
6 Spanish, and Purepecha channels will be given the
7 same opportunity to engage in the question and
8 answer session, and in public comment at the end
9 of the agenda.

10 The interpreter will provide instructions
11 to those in the Spanish and Purepecha channels to
12 be sure that all attendees can use the raise-hand
13 feature and be called on to speak. The
14 interpreter will assist and translate the
15 questions or public comment into English for the
16 benefit of the Commissioners and attendees in the
17 English channel.

18 Unfortunately, the Zoom interpretation
19 function does not work for attendees who are only
20 joining by phone, so our attendees on the phone
21 will hear the English channel of this meeting.

22 The Spanish and Purepecha channels are
23 intended to provide members of the public the
24 ability to hear the entire dialogue of the
25 Lithium Commission meeting in Spanish or

1 Purepecha in real time. To ensure that all
2 members of the public have access to the meeting
3 under Bagley-Keene, we ask that all of the
4 Lithium Valley Commissioners select and remain on
5 the English channel for the entirety of the
6 meeting, preferably with cameras on.

7 All attendees who wish to join the
8 English channel, please look for the small glove
9 icon on the bottom of your Zoom application and
10 select the English channel. Do not select mute
11 original audio.

12 Also, please note that the slides include
13 some text in Spanish which is highlighted in
14 light gray. However, we do not have the
15 PowerPoint slides translated into Purepecha, so
16 we do apologize for that.

17 I will now hand it over to Elisabeth from
18 the CEC who will go over some administrative
19 items.

20 MS. DE JONG: Thank you so much, Chair
21 Paz. Would you like to go through the physical
22 locations --

23 CHAIR PAZ: Oh.

24 MS. DE JONG: -- for the sites?

25 CHAIR PAZ: Yes. Perfect. Yeah. Thank

1 you.

2 So we do have four physical locations
3 that are joining the Zoom meeting. The physical
4 sites were offered by Assemblymember Garcia,
5 Imperial County, Comite Civico Del Valle, and
6 Alianza Coachella Valley. The locations are
7 available for in-person attendance. And, again,
8 they are the Imperial County Administration
9 Center, the Calipatria Community Center, the
10 North Shore Beach and Yacht Club, the City of
11 Coachella Corporate Yard. Thank you for everyone
12 who's helping host these in-person meetings.

13 There will be Spanish interpretation
14 services at each of the locations. Attendees at
15 the locations will be able to participate during
16 the Q&A and public comment by following
17 instructions from the in-room host. For those
18 attendees who want Purepecha interpreting, please
19 join the Zoom on an electronic device, either
20 like a computer or a tablet, so that you can hear
21 the interpreter.

22 Please be patient with us today. This is
23 the first hybrid meeting that the Lithium
24 Commission has.

25 And now, I will transfer it over to

1 Elisabeth for some administrative guidance.

2 MS. DE JONG: They, Chair Paz.

3 This meeting is being conducted remotely
4 via Zoom and, as mentioned by Chair Paz, there
5 are also the physical location sites. This means
6 that we're in separate locations and
7 communicating via Zoom. Attendees of the
8 physical locations will be able to participate
9 over Zoom with guidance from the in-room hosts.
10 We are meeting in this fashion, consistent with
11 Assembly Bill 36 -- sorry, 361 to improve and
12 enhance public access to state agency meetings
13 during the COVID-19 pandemic, and to allow
14 broader access through teleconferencing options.

15 This meeting is being recorded, as well
16 as transcribed by a court reporter. The
17 transcript will be posted to the electronic
18 docket. The recording of the meeting will be
19 available on the Lithium Valley Commission
20 webpage. Neither the Spanish or Purepecha
21 interpretations will be recorded or transcribed.

22 Members of the public will be muted
23 during the presentation. But there will be an
24 opportunity for a question and answer discussion
25 with the Lithium Valley Commissioners and a

1 public comment period. To participate in the
2 question and answer discussion or provide public
3 comment, please use the raise-hand feature in
4 your Zoom application to be called on to speak.
5 When you speak, please provide your name and
6 affiliation.

7 If you've called in by phone, you will
8 need to dial star nine to raise your hand and
9 then star six to un-mute yourself. Before
10 speaking, please say and spell your name for the
11 court reporter.

12 There is also a Q&A window in the Zoom
13 application which you may use to type your
14 questions. If you want to provide public comment
15 but are unable to raise your hand in the Zoom
16 application or by phone, then during the public
17 comment portion of the meeting, you may type your
18 comment into the Q&A window so we can relay your
19 comments.

20 We'll go over these instructions again
21 during the time for question and answer and
22 public comment. Please remember to stay muted
23 until you've been called on to speak.

24 We also have a chat function available
25 for any IT support. We ask that the Lithium

1 Valley Commissioners use the chat only for IT
2 support. As well, any other comments are
3 considered substantive to the conversation and
4 should be made publicly and orally for Bagley-
5 Keene compliance.

6 Meeting materials, including the notice,
7 presentation slide, and any other meetings
8 documents are posted online and in the Lithium
9 Valley Commission docket.

10 I'll turn it back to you, Chair Paz.

11 CHAIR PAZ: Thank you, Elisabeth.

12 Next slide, please.

13 The agenda today will be as follows. We
14 will start with a welcome and opening remarks by
15 Assemblymember Garcia. We will do an
16 introduction of the Lithium Valley Commissioners.
17 Then there will be presentations and a
18 conversation. We have two presentations, one
19 giving an overview on the Lithium Valley
20 Commission, another one giving an overview of
21 lithium recovery from geothermal brine, and then
22 a conversation around the potential regional and
23 community benefits and impacts from the
24 development of lithium.

25 That will be followed by a Q&A session

1 with the Lithium Valley Commissioners. The Q&A
2 session is slightly different from the public
3 comment period. During the Q&A session we are
4 going to be inviting people to ask a question,
5 and there will be time, unlike during public
6 comment period, there will be time for the
7 Commissioners to be able to answer and address
8 some of those questions.

9 Then there will be a general public
10 comment period before we close the forum today.

11 Thank you. Next slide, please.

12 So now it is my pleasure to introduce our
13 Assemblymember, who not only has been a champion
14 for, you know, the Salton Sea region and its
15 needs, also on the climate front, and is the
16 author of the bill that established the Lithium
17 Valley Commission.

18 So Assemblymember Eduardo Garcia,
19 welcome, and I'll hand it over to you.

20 ASSEMBLYMEMBER GARCIA: Hello. Buenos
21 noches. Good evening, everyone. It's great to
22 be with you this evening to engage, not just the
23 folks that that we typically get to talk to. At
24 the Lithium Valley Commission hearings, as you
25 all know, our team has been intimately involved

1 at every one of those meetings, starting this
2 past February. It's hard to imagine that we're
3 almost at the one-year mark that this Commission
4 has gotten together and the work that, I hope
5 everyone feels, is coming together.

6 I'll just say that it's so important that
7 we're having this conversation given that, at
8 every single meeting since February to present
9 time, we've seen greater and greater interest and
10 participation from members of our community who
11 want to be directly engaged on this issue of
12 lithium and the possibility of development. And
13 clearly understanding, how does it benefit them?
14 How does it benefit the direct residents and
15 communities surrounding the Salton Sea? And how
16 does it improve opportunities for Salton Sea
17 mitigation and restoration? All great questions
18 that I would imagine are going to come up today.

19 And with those who are here with us
20 today, whether they be from specific agencies of
21 the state, private-sector investors who are
22 developing the geothermal energy and then
23 shifting into the lithium recovery component,
24 along with our community-based organizations,
25 both outside of the Lithium Valley Commission and

1 those inside of the Lithium Valley Commission,
2 which is the uniqueness of this body.

3 Given that this bill and the purpose of
4 it was to empower our community to have a seat at
5 the table and not just be at the table but
6 clearly have decision-making authority to give
7 recommendations to the state legislature on what
8 direction to take if, in fact, we come to the
9 conclusion that this opportunity could benefit
10 the community.

11 I see this as a once-in-a-lifetime
12 opportunity for the community to drive what could
13 be one of the most important decisions to be made
14 as it relates to the Salton Sea, as it relates to
15 the economy and the circumstances of Easter
16 Riverside County, and the entire are of Imperial
17 County.

18 And I don't think it was by accident that
19 the makeup of the Commission has a diverse group
20 of folks, again, from private sector to those who
21 are involved in the economics of it, our state
22 agency representatives, and for me, more
23 important, tribal members, community membership
24 from our NGOs who are experts, in my opinion, in
25 community advocacy and outreach. And at the same

1 time, we have organizations that represent local
2 environmental and environmental justice interests
3 in our communities.

4 I'm excited for today's conversation.
5 I've also been following the discussions going
6 back to February when the Commission first
7 convened and had a number of conversations about
8 the role of the Commission, the CEC staff that
9 will provide the technical assistance. In March,
10 we talked about the structure of the Commission
11 and the topics that could potentially come up.
12 In April, you all broke into some subcommittees
13 to look at various areas of these questions. And
14 in there, I know, there was conversations about
15 the environmental impacts

16 And in all of those discussions we've
17 seen more and more interest from our community
18 residents saying, hey, we want to be involved.
19 Although we may not be on the Commission, we want
20 to be engaged to better understand what is going
21 to happen.

22 In May, we had a presentation from the
23 Commissioner of this Commission, as well as the
24 CEC, to talk about the roles of the subcommittees
25 and the work moving forward.

1 In June, we talked to industry and heard
2 from them in terms of the opportunities to not
3 only recover lithium but develop and entire A
4 through Z supply chain that could really
5 transform the economic and job opportunities for
6 our region, including our educational
7 institutions.

8 In July, you went over the methods of
9 what this recovery of lithium looks like that is
10 very different than what we know happens in
11 Chile, that happens in Australia, that happens in
12 China.

13 I know that in August, you focused on the
14 issue of geothermal and the permitting process,
15 the land use aspects of it, energy resource
16 infrastructure planning.

17 In September you focused on other
18 opportunities for the Commission.

19 And this past October the Commissioner
20 invited some outside environmental stakeholders
21 to talk about how this could or could not be of
22 benefit to the region. And although I have some
23 opinions on how that conversation went I'll, for
24 now, just say that I believe that if the
25 presentation of this being not a good thing for

1 the community, that the Lithium Valley Commission
2 explore those comments and statements and either
3 address them with data-driven facts or, for that
4 matter, agree with them and say, hey, then we are
5 spinning our wheels and this isn't something that
6 we want to see happen in our community.

7 I have my opinion. I will reserve that
8 for later in the conversation if it happens to
9 present itself. But I can tell you this, is that
10 I believe that we are at a critical point.

11 And this conversation was brought up in
12 Glasgow, Scotland at the Climate Change
13 Conference as the entire world is looking to
14 transition into a clearer and greener economy,
15 and at the forefront it happens to be our
16 transportation system. And all eyes are on
17 California, and not just looking at our climate
18 change policies but our electric vehicles
19 policies that will help transform that will help
20 transform how we do things in California and
21 improve the environment

22 But, furthermore, all eyes are on what's
23 being referred to as Lithium Valley, our
24 community, our homes where we grew up, where
25 we've seen a tremendous amount of challenges

1 historically, and that many of us have decided to
2 take on this task to try to change for the
3 better, for our kids, our great grandkids, and
4 for many, many generations to come.

5 Those of you who are on the Lithium
6 Valley Commission have been appointed and
7 empowered to help us make this decision, to make
8 some recommendations on how this may or may not
9 work in the interests of those who live in and
10 around the Salton Sea, the Imperial County,
11 Eastern Riverside County, the state of California
12 and, quite candidly, for our country and the
13 entire world.

14 All eyes are on us in terms of what we
15 decide to do here. And what's important to me is
16 that the Commission use its power to engage the
17 community every step of the way. We are in the
18 early stages of determining how this all plays
19 out. And so the community, who has been involved
20 since February to present time, should know that
21 they are part of this decision-making endeavor
22 that we are all participating in.

23 And with that, I'll just say thank you to
24 everyone responsible for bringing us together
25 logistically. I know that it wasn't easy, the

1 selected sites, the technical expertise to be
2 able to make sure that things run smooth, that we
3 can see you, you can hear us. And that we're
4 also, at the same time, adhering to the safety,
5 you know, measures that remain in place to keep
6 everyone safe from COVID-19.

7 And so I'm going to be here until the
8 last minute of this meeting. I'm looking forward
9 to this conversation.

10 And just want to remind, you know,
11 everyone that's here with us today that the
12 Lithium Valley Commission was set up as an avenue
13 for our community and community members to be
14 able to help make some determinations and make
15 some clear decisions on where we want to go. We
16 don't want Sacramento, San Francisco, and other
17 parts of the state telling us how we should
18 develop opportunities in our own back yard.
19 Quite on the contrary.

20 I think we're in a unique opportunity to
21 tell the state and the country, this is how we
22 can do this, do it right, and make sure that the
23 people who live and around the Salton Sea, the
24 shareholders that I call, the shareholders
25 benefit directly from this opportunity

1 With that, I'll yield my time. And it's
2 good to see some of you that I can see in the
3 images but I look forward to this conversation
4 and, certainly, many, many more.

5 CHAIR PAZ: Thank you, Assemblymember
6 Garcia.

7 And I also want to recognize and
8 acknowledge the support that the Lithium Valley
9 Commission receives from the CEC staff. And they
10 are present both in the background and with
11 Elisabeth helping at the forefront. And we will
12 also have some Commissioners from the CEC joining
13 us later. So, again, I want to acknowledge and
14 thank them for their support.

15 Next slide, please. Oh, I think that's
16 where we are.

17 At this point, we're moving to the
18 introductions of the Lithium Valley
19 Commissioners. And as Assemblymember Garcia
20 mentioned about the Commissioners, the criteria
21 for the selections of the Commissioners was set
22 forth in the bill that Assemblymember authored.
23 The Lithium Valley Commission is comprised of 14
24 members, representing a wide range of expertise
25 and interests. The Energy Commission appointed

1 nine members with the remaining appointments made
2 the California Public Utilities Commission, the
3 Secretary of the California Natural Resources
4 Agency, the Senate Committee on Rules, the
5 Speaker of the Assembly, and the Governor.

6 We will now be moving to Lithium Valley
7 Commissioner introductions, along with the Chair
8 and Vice Chair introductions. And on the screen,
9 you're able to see the list of the members who
10 will be introducing themselves.

11 I do, also, want to make mention that
12 some Commissioners may not be able to join us
13 today, and others might just be getting here a
14 little bit late.

15 But for the purposes of the introduction,
16 I would like to invite the Commissioners, as they
17 are introducing themselves and, you know, the
18 agencies or organizations that they represent, if
19 they can also briefly speak to either the
20 interest or the expertise that they're bringing
21 into the Lithium Valley Commission, just for the
22 purpose of the community members to get to know
23 us a little bit more.

24 So I'll start. My name is Silvia Paz. I
25 am -- I was elected the Chair of the Lithium

1 Valley Commission, but I work full-time. I'm the
2 Founder and Executive Director of Alianza
3 Coachella Valley. We are a nonprofit advocacy
4 coalition working with various community members
5 on issues of environments justice and the Salton
6 Sea, as well as education and youth leadership.

7 I was appointed by the Governor. And my
8 interest in Lithium Valley really comes at the
9 juncture of, you know, the ability to develop
10 lithium, this resource, in an environmentally
11 friendly way, as well as the opportunity to be
12 able to leverage the benefits of this resource to
13 stay within the community, so in the form of
14 better jobs, and being able to see more economic
15 opportunities for the community surrounding the
16 Salton Sea.

17 Thank you. If Vice Chair Ryan Kelley has
18 joined us, I would like to invite him to
19 introduce himself.

20 Okay, I do not see him, so I will move to
21 Commissioner Castaneda.

22 COMMISSIONER CASTANEDA: Well, thank you
23 very much, Chair Paz and Assemblymember. Thank
24 you very much for your foresight and your
25 leadership in terms of establishing a community-

1 based group that will look at this important
2 issue. And you know, as you said, I think, and
3 very, very eloquently, all eyes are on us.

4 Since I've been involved in the
5 Commission for the last several months, there
6 have been news articles and various press
7 segments from all over this country and I'm sure
8 the rest of the world is watching our work. And
9 it is an awesome and a humbling opportunity to
10 serve.

11 I want to talk a little bit about myself.
12 I don't live in the Imperial or Coachella
13 Valleys. I live in Chula Vista, California. But
14 my family owned a business, a family business, in
15 Brawley for many years. And we have a lot of
16 friends, a lot of associates that still live
17 there. But even before that, as a young child,
18 my grandfather used to take me to the Salton Sea
19 fishing. And it was quite a vibrant area. We
20 always got a lot of good fish and always had a
21 great time. But over the years we saw the
22 systematic degradation of that beautiful
23 resource.

24 And so when the opportunity came before
25 me to apply for this Commission, it really struck

1 a heart chord for me to have an opportunity to be
2 on a panel that could have a significant and
3 influential opportunity and a place to rejuvenate
4 and to renovate and so just sort of bring this
5 sea back to its original luster, and I take that
6 very, very seriously.

7 I have served in many political
8 capacities in the County of San Diego. At the
9 City of San Diego, I was a Transportation and
10 Land Use Committee consultant for a number of
11 years to the city council and to the mayor. I
12 was a two-term city councilmember in my own city
13 of Chula Vista. And now I serve as a director on
14 our water district, the Sweetwater Authority.

15 And in each and every one of those
16 responsibilities, I've had to look at issues like
17 this. And as you said, Assemblymember, weigh the
18 positives versus those impacts that may not bear
19 fruit for the community. And I clearly have a
20 very keen eye on that.

21 And so I appreciate you establishing this
22 Commission. I appreciate the opportunity. And I
23 appreciate the opportunity to listen to our
24 community and to understand, what are the goals,
25 and what are the priorities, and what is

1 important, and look forward to completing our
2 work.

3 Thank you, Chair Paz.

4 CHAIR PAZ: Thank you, Steve.

5 Rod? Commissioner Colwell?

6 COMMISSIONER COLWELL: Yeah. Thank you,
7 Chair Paz, for the opportunity. And it certainly
8 is a privilege to speak on behalf of Controlled
9 Thermal Resources. And a special thank you to
10 Assemblymember Garcia, you know, for his efforts
11 and hard work to pull this together, but really,
12 you know, Steve just touched on this wonderfully.

13 So speaking on behalf of a developer,
14 we're developing the Hell's Kitchen Lithium Power
15 Project at the moment in Imperial Valley. And
16 you know, I think just walking through the sort
17 of steps of where we're heading, I mean, 2011 is
18 when I first arrived at the Salton Sea and,
19 clearly, from Australia as you've probably
20 figured out. I've spent of my time in Imperial
21 Valley which is great. And like my wife says, I
22 travel halfway around the world to go to a place
23 where I grew up. You know, it's much the same,
24 agriculture and the whole bit.

25 So 2011 is, you know, those of you have

1 been down to Red Hill Bay, you could launch a
2 boat at that point down there. And you know,
3 since then the sea has receded probably another
4 mile or so. We've seen that side of things.

5 We've also seen the development of this
6 lithium brine opportunity as really an extension
7 of existing geothermal, which existing
8 geothermal, I believe, has been in operation now
9 successfully for 39 years, you know, very, very
10 clean electricity. It's the same process. You
11 know, the lithium process is in a closed-loop
12 system. There's no evaporation ponds. There's
13 no emissions to the air. There's no toxic nature
14 with this. It is, truly, the cleanest lithium, I
15 believe, on the planet, really.

16 And I think the opportunities the
17 Assemblymember was alluding to is connecting the
18 supply chain, you know, to Imperial Valley. It's
19 not just the opportunity -- the opportunity is
20 not just about trying to produce a clean green
21 lithium product and then move it to Asia for
22 processing or moving it somewhere else. The
23 opportunity is actually about how many links can
24 we remove from the supply chain.

25 For those of you who don't know, there

1 was a recent public announcement by General
2 Motors with their arrangement and deal and
3 investment in our business. And the reason Mary
4 Barra made that decision on behalf of General
5 Motors and their exceptional team is because of
6 their acclaimed energy credentials and how they
7 are looking for clean sustainable sourcing
8 instead of hard rock mining or evaporation ponds
9 out of Chile that you may all read about. This
10 is the cleanest way to do it.

11 Now the opportunity really is, beyond my
12 job on the Commission, is trying to relay the
13 opportunity to it, not only as a developer but,
14 also, how can we attract a cathode or battery
15 cell manufacture to collocate in the state of
16 California instead of going to Georgia or, rose,
17 heading over to, you know, Southern Asia or
18 China.

19 So I think GM has really been a testament
20 to that. You know, they thoroughly looked at the
21 technology and understood how clean and green it
22 is. And really sort of thinking about this as an
23 extension of existing geothermal, again, it's
24 visually no difference. There's definitely no --
25 it's benign when it comes to any environments

1 impacts whatsoever. And you know, I'm truly
2 excited to be and privileged to part of this
3 Commission to do the best I can to in an open
4 manner to deal with everything from community,
5 local government, state, federal, and global
6 interests. As Assemblymember touched on from COP
7 26, this is real.

8 And I'll just close in saying the
9 opportunity window closes in 2024. That's what
10 we have, we have this opportunity to deliver now
11 because Detroit and big auto are basically at a
12 point where they need to make decisions now and
13 they need to get on with it. Otherwise, they'll
14 basically go to other locations.

15 Thank you so much.

16 CHAIR PAZ: Thank you, Commissioner
17 Colwell.

18 Commission Dolega?

19 COMMISSIONER DOLEGA: Yeah. Hi
20 everybody. And I sit in one of the OEMs that Rod
21 was talking about, so I've been at Ford for ten
22 years in our Purchasing Group, and I work with
23 our cell -- Global Cell Purchasing Team, and I
24 look at the raw materials, including lithium. So
25 this is, obviously, an interesting topic.

1 As we talk about localization or bringing
2 different parts of the value chain to the U.S.
3 away from Asian to collocate here with all the
4 cell factories that are going up, the raw
5 material portion is important. So very
6 interested in the Salton Sea area and the
7 developments for U.S.-based lithium.

8 Thank you.

9 CHAIR PAZ: Thank you.

10 Commissioner Flores?

11 COMMISSIONER FLORES: Yes. Good evening,
12 everyone. I'm Miranda Flores here. And I was
13 appointed by the Secretary of Natural Resources
14 Agency where I am currently, also, the
15 Legislative Deputy Secretary. And really, you
16 know, the Natural Resources Agency has been
17 mitigating -- having efforts to mitigate areas of
18 the Salton Sea for, gosh, a very long time. And
19 really, we're here to make sure and protect the
20 interest of, you know, the ecology and all of
21 that, and the communities that are a part of the
22 Lithium Valley.

23 So thanks so much.

24 CHAIR PAZ: Thank you.

25 Commissioner Guzman-Acevas?

1 COMMISSIONER GUZMAN-ACEVAS: Thank you,
2 Chair Paz. And good evening to everybody. My
3 name is Martha Guzman-Acevas. I'm one of the
4 Commissioners, also another Commissioner at the
5 California Public Utilities Commission. And our
6 role here is, really, twofold.

7 The most important role is that we direct
8 what types of energy generation utilities,
9 private utilities, should procure, should buy.
10 And we recently did order the utilities to buy,
11 essentially, 1,000 megawatts of geothermal
12 statewide. And so some of our mandates for
13 procuring energy to get us to 100 percent clean
14 energy will require greater geothermal
15 production. And this region of the state is one
16 of those opportunity areas, not the only one but
17 a very important one. So that's one of my most
18 critical roles here.

19 And, of course, the other piece of what
20 the Commission, the PUC Commission does, is we
21 also direct the procurement of a lot of electric
22 vehicle charging infrastructure, and a lot of
23 electric storage. And both of those require a
24 lot of lithium.

25 So we're very excited about the prospect

1 of our orders requiring greater electricity
2 storage and electric vehicle charging
3 infrastructure which, ultimately, requires more
4 electric vehicles, but particularly the electric
5 storage dependency on lithium coming from the
6 valley.

7 So I look forward to all the dialogue and
8 the questions and I'm glad to be here today.

9 CHAIR PAZ: Thank you.

10 Commissioner Hanks?

11 COMMISSIONER HANKS: Yes. This is Jim
12 Hanks. I represent the IID, currently the Board
13 President, and selected by CEC to serve as a
14 representative for a utility district.

15 My interests in the known geothermal area
16 began years ago. I am a valley native, lived in
17 Imperial Valley 76 years, served as the
18 Superintendent of Schools in the Calipatria
19 Unified District, which includes Niland and
20 Bombay Beach, for 20 years. During that time I
21 was -- had the opportunity to negotiate a tax
22 break for the local geothermal.

23 When the first mineral extraction came
24 in, which was a zinc project, it was very
25 valuable to the school district. We had always

1 been a state agency. At the time, our assessed
2 valuation of our homes average was \$21,000, this
3 was in the mid-1980s, which made it very
4 difficult to pass a bond with sufficient funds to
5 take care of the school facilities that were in
6 dire shape.

7 And with the addition of the zinc coming
8 in, it moved us to a Basic A district. And to
9 try to promote as much growth as possible, we
10 negotiated a tax break with the geothermal
11 industry in the hopes that mineral extraction
12 would continue. But the markets went south and
13 that was put on hold.

14 Upon retiring from the Calipatria School
15 District, I carried with me to the IID a
16 knowledge and an understanding of the potential
17 of the known geothermal resource, particularly
18 the minerals that were available. And it's been
19 a struggle for 15 years to push that to the
20 forefront but never gave up hope, made numerous
21 trips to Washington D.C., to Sacramento, in
22 trying to bring attention to the value of the
23 area.

24 So I'm excited and honored to be a part
25 of this Commission. I know that we have a task

1 placed on our shoulders to carry back what the
2 possibility is for California, also let our --
3 any negative impacts that may have to be
4 mitigated, and also the benefits shared of a
5 knowledge of the benefits that come to the area.

6 We passed a bond without any resistance
7 from the geothermal industry. At that time, they
8 represented 70 percent of our tax base and we
9 were able to rebuild the Calipatria Unified
10 School District and maintain excellent facilities
11 for our children there.

12 So I'm looking forward to not only the
13 electrical generation potential out there, and
14 the minerals, but also the ancillary services
15 that will be developed, come about, that will
16 give good paying jobs to our people, restore our
17 middle class, and also provide a future for our
18 many students who have, over the years, have had
19 to leave our community to pursue their interests
20 or their education and their training in other
21 communities.

22 So I'll leave it at that and thank you
23 for the opportunity.

24 CHAIR PAZ: Thank you, Commissioner
25 Hanks.

1 Commissioner Arthur Lopez is not able to
2 join us today, so I will call on Commissioner
3 Luis Olmedo.

4 COMMISSIONER OLMEDO: Well, thank you,
5 Madam Chair. This is Luis Olmedo. I am both a
6 Commissioner under the assignment of representing
7 disadvantaged communities, but I'm also -- and my
8 day job is the Executive Director of Comite
9 Civico del Valle, a native-based organization.

10 I, first of all, want to issue some
11 thanks to the Assemblymember Garcia for his
12 vision in bringing together other stakeholders,
13 as he well and very eloquently presented it, and
14 for once in our lifetime being able to put
15 together a Commission where there is
16 participation and representation of multiple
17 stakeholders, in particular, to the community and
18 the disadvantaged representation, and the
19 environmental justice.

20 I also want to thank Cesar Chavez for her
21 Sylvia Chavez for her role helping set up the
22 logistics here at the Calipatria location where -
23 - it's where I'm at now. So I want to thank my
24 Noemi Gallardo again for her technical
25 assistance, for her continued support in helping

1 assure that the community is participating and
2 engaged in this phenomenal opportunity that is
3 before us, so thank you, Noemi. And you see her
4 name on it. I'm actually borrowing her computer,
5 so thank you for that, as well.

6 I also want to recognize Huston Hisel,
7 the Mayor. Thank you for being here and, as
8 well, Maria Froelich for being here, both
9 Councilmembers and Mayor. And, as well, Sylvia
10 Chavez, who is also a Councilmember here in
11 Calipatria.

12 And I want to thank all the community
13 here in the North End of Imperial Valley, but
14 also all those who came from throughout the
15 Imperial County. One of my goals and my purpose
16 here is to make sure that I bring a meaningful
17 voice and, at every opportunity, assure that the
18 community participates in a meaningful way, and
19 that they are helping guide and elevate the
20 issues of priorities to the community.

21 We have seen many large-scale projects,
22 especially around the renewables, that have sort
23 of been fly-by-night, create a lot of enthusiasm
24 but very shortly the enthusiasm where jobs are
25 created in a very short term.

1 I'd also like to see that -- make sure
2 that the community has a voice when it comes to
3 the economic benefits that could come from this
4 new industry, but also the industry that has been
5 here for many decades which is the geothermal. I
6 think that industry gets a second opportunity to
7 restructure, perhaps even rebuild, in how they
8 invest in the communities.

9 Also recognizing the fenceline
10 communities that are closest to the known
11 resource area, but also to elevate the reality
12 that a lot of these resources currently sought
13 out are in the hands of the public's interests.

14 So I am very grateful to the fact that
15 this table was created. And I, again, I'm here
16 in my role as a Commissioner, not to necessarily
17 just speak my mind but to be a messenger and to
18 be able to create more participation from our
19 community.

20 I want to thank all those who
21 participated, including Madam Chair Paz, for --
22 and the Assemblymember's Office, as well, for
23 putting together the venues in both Imperial and
24 the Coachella area and creating these spaces for
25 the community.

1 But with that said, I want to, again,
2 thanks to the entire California Energy Commission
3 Staff for helping us, again, put these community
4 meetings, and I hope it's the first of many to
5 come.

6 One last thank you, and I know I'm
7 utilizing more of my time to issue thank yous,
8 well deserved thank yous, because I think that we
9 need to bring in a positive, enthusiastic
10 environment, but I want to thank all of those who
11 are participating because you are an important
12 voice in this process.

13 And we hope that as we get into the meat
14 of the conversation that we're able to hear you,
15 but also at the same time is to be able to break
16 down those conversations that perhaps may not
17 necessarily be the day-to-talk, right, but we can
18 do everything that we can to make sure that we
19 are helping bridge that communication between the
20 technical, the scientific, but also the
21 opportunities both on assuring there is a safe
22 process of moving forward in these industries,
23 and as well as the economic opportunities are
24 there.

25 But, finally, thank you to my team. I'm

1 only one person. I want to thank all, each and
2 every one of my colleagues, my partners. I don't
3 often use staff, but just for a reference point,
4 for all the work that they put in to making sure
5 that we had a good facility and logistics. And
6 thank you to the City of Calipatria and their
7 staff.

8 Thank you.

9 CHAIR PAZ: Thank you.

10 Commissioner Ruiz?

11 COMMISSIONER RUIZ: Hi everyone. My name
12 is Frank Ruiz. I am the Salton Sea Program
13 Director for the Audubon Society. Some of you
14 may not know or may not be familiar with the
15 Audubon Society. We are the bird people.

16 First of all, I want to thank the
17 California Energy Commission and everyone that
18 decided to take the time to be informed, to
19 participate in this important discussion.

20 I was appointed to represent the
21 environmental groups. And my role is to provide
22 the questions and elevated concerns of possible
23 environmental impacts as a result of the lithium
24 recovery. We already live in an area that is
25 highly stressed with high levels of pollutants.

1 And ecosystems, like the Salton Sea that is on
2 the brink of major ecological collapse.

3 In California, we've lost over 97 percent
4 of the wetlands. And the Salton Sea is one of
5 the last standing habitat that's along the
6 Pacific Flyway, used by millions of birds in
7 their migratory journey from Alaska all the way
8 to Argentina.

9 If all is done well, this is a unique
10 opportunity to bring benefits to the local
11 communities, provide much needed clean energy in
12 geothermal, lithium, and bring direct and
13 indirect benefits to the Salton Sea, so I want to
14 thank everyone for taking the time.

15 And thank you, Chairman Pass.

16 CHAIR PAZ: Thank you.

17 Commissioner Scott? I do not see him.

18 Commissioner Soto?

19 MS. DE JONG: Not in attendance.

20 CHAIR PAZ: Okay. thank you.

21 So Commissioner Weisgall?

22 COMMISSIONER WEISGALL: Good evening.

23 thank you, Chair.

24 My name is Jonathan Weisgall. I'm Vice
25 President for Government Relations at Berkshire

1 Hathaway Energy. I was appointed by the Energy
2 Commission to serve on the Commission.

3 I want to join the others in thanking
4 Assemblymember Eduardo Garcia for his leadership
5 in seeing the need for this Commission and his
6 leadership on these issues affecting the
7 community.

8 My company, Berkshire Hathaway, started
9 about 35-plus years ago called Cal Energy. We
10 still identify as Cal Energy. We've got ten
11 geothermal plants we've been running in Imperial
12 County, Calipatria for the last 35 years. We
13 started as a small company. I've been part of
14 the company for 29 years, I guess. My training
15 background is as a lawyer.

16 Jim Hanks talked about the school
17 district. Our company, we're very proud members
18 of the Imperial Valley community. We've got a
19 workforce of more than 200 employees, all with
20 very good paying jobs. And we've paid \$45
21 million in property taxes over the last eight
22 years which have gone exclusively for local
23 development.

24 Can we produce battery-grade lithium from
25 the geothermal at the Salton Sea known geothermal

1 resource? Yes, we can. But there are two big
2 challenges. Can we do it in an environmentally
3 responsible and commercially viable way? Those
4 are the challenges.

5 The benefits, we all know the
6 demographics of Imperial County, the second
7 highest unemployment rate historically of any
8 county in the entire United States, low
9 educational achievement, many of the jobs in the
10 agricultural sector. The benefit, the
11 opportunity here, is really for, I guess I would
12 just say, for upward mobility. It starts with a
13 good education, and then a good job, a job that
14 you want to go to every morning. And we hope
15 that we can offer more of those with lithium
16 development.

17 We are already funding schools, not just
18 through taxes but through donations, schools in
19 Imperial County for young kids and students at
20 Imperial Valley College. We want to encourage
21 them to take STEM courses and prepare for good
22 paying jobs in clean energy in Imperial County.
23 So that's the benefit.

24 And I guess, Sylvia, you wanted -- Chair
25 Paz, you wanted to know our areas of expertise.

1 We're developers. But my passion is workforce
2 development and economic opportunities in the
3 clean energy sector.

4 Thanks very much.

5 CHAIR PAZ: Thank you for that. Thank
6 you to all the Commissioners for introducing
7 yourselves. I think it's important. You know,
8 the public has been asking about hearing from the
9 Commission. And I think it's important for them
10 to know who we are, what we represent, and the
11 uniqueness of this Commission as we all bring
12 different perspectives to this conversation.

13 I do want to acknowledge that there are
14 several comments regarding making sure that we
15 get to public comment. We will get to public
16 comment as delineated in the agenda.

17 So now we will move on to some of the
18 presentations briefly. I have one of them, the
19 first one. I'll move through it as quickly as
20 possible so we can get to the Q&A and the public
21 comment.

22 So here is a little bit about how the
23 Lithium Valley Commission has structured
24 ourselves so that we can address the various
25 topics that were delineated in AB 1657. So we

1 have topics, I will not read them all, they're on
2 the screen, but each of those topics is being led
3 by two Commissioners. And the Commissioners
4 prepare workshops that are then discussed in the
5 public meetings.

6 Let's see. Assemblymember. A little bit
7 about Assemblymember -- Assembly Bill 1657, as I
8 mentioned, was authored by Assemblymember Eduardo
9 Garcia. And it was approved by the Governor, by
10 Governor Newsom, in 2020. It charges the Lithium
11 Valley Commission with reviewing, investigating,
12 and analyzing certain issues and potential
13 incentives regarding lithium extraction and use
14 in California.

15 The Lithium Valley Commission, as was
16 mentioned earlier, convened in February of 2021.
17 It holds monthly public meetings. And Ab 1657
18 requires the Lithium Valley Commission to submit
19 on or before October 1st, 2022 a report to the
20 legislature documenting its findings and
21 recommendations.

22 Again, there were some comments on the
23 chat about, you know, we cannot move forward
24 without knowing the implications of lithium and
25 lithium extraction. That is precisely what this

1 Commission has been tasked to do, to look at
2 various -- it's really an exploration in looking
3 at the possibilities and the impacts of lithium
4 extraction from the Salton Sea region.

5 The Lithium Valley Commission, in March
6 of 2021, had a discussion around our vision. And
7 during that discussion we, you know, recognized
8 that there is potential from geothermal brine
9 from the Salton Sea region and it could address a
10 critical need for growth in the supply of lithium
11 and renewable energy.

12 It's also important for this Commission
13 that we can leverage, if this resource is going
14 to be available and, you know, we can get it to
15 market, that we leverage the opportunities in the
16 communities where the resource is coming from;
17 right? So the potential of establishing a
18 geothermal and lithium battery manufacturing hub
19 in Imperial County could be a possibility, the
20 focus of creating high-quality long-term
21 employment and career opportunities for the local
22 community, to ensuring that we have the right
23 trainings, that the workforce is ready, that
24 we're, you know, breaking any barriers that have
25 traditionally kept our communities out of good

1 paying jobs.

2 And most importantly, that we are
3 ensuring that strategies and recommendations from
4 the Lithium Valley Commission are informed by and
5 responsive to the local context and the
6 conditions of the Salton Sea region.

7 Thank you.

8 The Lithium Valley Commission public
9 meetings typically occur on the last Thursday of
10 each month. The meetings are public and have
11 been conducted entirely via Zoom. During each
12 meeting there are opportunities for public
13 comment. We encourage all of you to follow those
14 conversations. As I said, many of us are
15 exploring one or all of the topics for the first
16 time in the Commission. And it's a great
17 opportunity to do so with the public. During
18 each meeting there are opportunities for public
19 comment.

20 There is a link to the past meetings and
21 recordings and materials on the presentation
22 that's posted in our website. And there's also a
23 link to future meetings over Zoom. The slides
24 will be posted to the Lithium Valley Commission
25 docket in the Lithium Valley Commission meeting's

1 website.

2 During the public meetings, we have been
3 reviewing specific topic areas through guest
4 participant participations, moderated
5 discussions, and Q&A periods. These are followed
6 by public comment so the community can give input
7 on each topic that is being discussed.

8 Upcoming meetings will review topics,
9 including economic impacts, incentives, workforce
10 development, benefits to and of geothermal,
11 overcoming challenges to lithium extraction, and
12 legislative and regulatory recommendations.

13 In July of this year, we began including
14 a Spanish interpreter in these public meetings,
15 as well as a Spanish translated meeting notice
16 that is released and docketed ten days before the
17 public meeting commences.

18 The December agenda is currently being
19 developed. And it is anticipated that items
20 previously proposed for the December meeting
21 might be deferred to subsequent meetings. The
22 December meeting notice and agenda will be posted
23 as least ten days before the meeting in
24 compliance with the Bagley-Keene Open Meeting
25 Act.

1 We were polling, because we had a
2 conflict for the original December 9th meeting,
3 we were polling Commissioners again to ensure
4 that we could have quorum for our next meeting.
5 So far eight Commissioners have responded to the
6 email request to identify a new December date.

7 So this is to my colleagues on the
8 Lithium Valley Commission, please be sure to
9 respond to that email by the end of this week so
10 that we can proceed with scheduling the December
11 meeting.

12 And now on the screen you have the
13 reports schedule. The Lithium Valley Commission
14 has conducted, already, several public workshops
15 to this point that are organized by the sub
16 bodies on the topics that are outlined in AB
17 1657. A working draft outline of the report is
18 docketed and available for public review and
19 comment.

20 CEC Staff are working with the Lithium
21 Valley Commission sub bodies to synthesize
22 information provided during public meetings to
23 build a draft of the report. The draft report
24 will be published and made available for public
25 review and comment and will be discussed at a

1 public Lithium Valley Commission in December of
2 2022. Public input on the outline and draft
3 report can be provided through the docket for the
4 Lithium Valley Commission and during public
5 meetings.

6 The final AB 1657 report will be
7 submitted to the legislature and published
8 publicly by October 1st of 2022.

9 So now, for this next part of the
10 presentation focusing on lithium recovery from
11 geothermal brine, I'm going to invite Elisabeth
12 de Jong to provide the presentation.

13 MS. DE JONG: Thank you, Chair Paz.

14 Hello everyone. My name is Elisabeth de
15 Jong. I work for the California Energy
16 Commission's Geothermal Grant and Loan Program.
17 And I'm currently serving as the Project Manager
18 supporting the Lithium Valley Commission. I will
19 be sharing this presentation on lithium recovery
20 from geothermal brine.

21 Next slide, please.

22 Senate Bill 100 established a landmark
23 policy requiring that renewable energy and zero-
24 carbon resources supply 100 percent of electric
25 retail sales to end-use customers by 2045.

1 Today, approximately two-thirds of California's
2 electricity comes from carbon-free sources, being
3 solar, wind, and geothermal, the three main
4 eligible renewable resources.

5 Geothermal power provides constant
6 renewable power, this means 24 hours a day, 7
7 days a week, known as baseload energy, which is
8 not subject to intermittency or variability
9 related to weather or climate conditions, such as
10 solar and wind energy.

11 As identified in SB 100 report released
12 earlier this year, geothermal energy plays a role
13 in meeting the state's energy goals. Energy
14 sector planning models project the need for
15 additional geothermal development in the state's
16 known geothermal resource areas, including the
17 Salton Sea region. The CPUC authorized
18 procurement of at least 1,000 megawatts of
19 baseload energy resources, such as geothermal, to
20 meet midterm reliability needs.

21 According to the NREL report called
22 Technoeconomic Analysis of Lithium Extraction
23 from Geothermal Brines, lithium extraction from
24 geothermal brines offers the potential to provide
25 the United States with a secure domestic supply

1 of lithium to meet the increasing demands of
2 electric vehicles, grid energy storage, portable
3 electronics, and other end-use applications.

4 Today, California is approaching 1
5 million electric vehicles on the road. And
6 developers expect to process the lithium
7 extracted from geothermal brine for use in
8 lithium-ion batteries, the type of battery that
9 is used in electric vehicles.

10 Additionally, according to some
11 estimates, as detailed in the New Energy Nexus
12 report called Building Lithium Valley, which is
13 available on the Lithium Valley Commission
14 docket, development of the lithium extraction
15 industry could support over 4,000 construction
16 and long-term jobs.

17 Next slide, please.

18 The demand for lithium has surged in
19 recent years, mainly due to transportation
20 electrification. Electric vehicles had a global
21 market growth of 1.7 million in 2020. That
22 number is expected to swell to 60 million
23 vehicles by 2040, according to an analysis by
24 Bloomberg NEF. The graph on the screen, also
25 from Bloomberg NEF, shows estimated battery

1 demand growth increasing exponentially by 2030
2 for all vehicles, from passenger to commercial
3 vehicles.

4 As previously mentioned, SB 100 aims to
5 achieve 100 percent clean energy. And the SB 100
6 report found that California will require
7 significant increases in battery storage to
8 achieve this goal.

9 Next slide, please.

10 So first, let's briefly review the
11 geothermal generation processes currently used in
12 the Salton Sea region.

13 Power plants near the Salton Sea use
14 geothermal flash technology. Hot water flows up
15 from the well from the geothermal reservoir
16 thousands of feet below the surface. A
17 percentage of the geothermal fluid, called brine,
18 is flashed into steam and is piped to a power
19 plant where it turns the steam -- a steam turbine
20 that is connected to a generator to generate
21 electricity that is then connected to the
22 electrical transmission system.

23 The unused brine and steam condensate
24 from the power plant process is then reinjected.
25 Water is sometimes needed to dilute the brine for

1 reinjection. However, the water source is not
2 the Salton Sea but is actually provided by
3 Imperial Irrigation District that has been set
4 aside for industrial usage.

5 Next slide, please.

6 The Salton Sea known geothermal resource
7 area is a reservoir approximately 1.2 miles below
8 the Salton Sea. It is worth emphasizing that the
9 geothermal reservoir is distinct and separate
10 from the Salton Sea itself. In other words, the
11 projects are located along the Salton Sea
12 shoreline but are not using the water from the
13 Salton Sea. There are already about a dozen
14 geothermal power plants operating in the area
15 that circulate this brine to produce electricity.

16 The idea is that developers would be able
17 to recover or extract lithium from the geothermal
18 brine when it is pumped up and then reinject the
19 remaining brine back into the reservoir through
20 the already existing pumping process.

21 Research conducted by members of the
22 Salton Sea Task Force at the University of
23 California, Riverside indicate that geothermal
24 brine from the area has a high concentration of
25 about 200 milligrams per kilogram of lithium.

1 However, the process is still in that testing and
2 verification phase, so lithium production at the
3 Salton Sea region will not occur until 2024.

4 The CEC is also supporting research in
5 this area and, to date, has funded more than \$16
6 million in research projects exploring lithium
7 recovery from in the Salton Sea region. As
8 mentioned in AB 1657, the Salton Sea resource
9 could produce as much as one-third of today's
10 global lithium demand, a demand that is expected
11 to drastically increase in the coming years.

12 Next slide, please.

13 Currently, two forms of lithium
14 extraction dominate the global market. These
15 methods are not being proposed for use at the
16 Salton Sea but it is helpful to understand what
17 these methods are and how they significantly
18 differ environmental and otherwise from the
19 geothermal brine direct lithium extraction
20 technology I just described.

21 Over half of all lithium produced comes
22 from hard rock mining, the largest operation in
23 the world at Green Bushes Mine in Western
24 Australia. Almost all of the lithium produced
25 comes from large evaporation ponds in arid desert

1 climates, particularly in the lithium triangle.
2 Those are the countries of Argentina, Bolivia,
3 and Chile. These methods have significant
4 environmental impacts, particularly land use and
5 water use.

6 Using geothermal brine to produce lithium
7 has a much lower environmental footprint than
8 mining or evaporation ponds. It reduces the time
9 to produce lithium and appears to be cost
10 competitive with current practices.

11 As shown in the images created by the CEC
12 staff and using Miniviro data on screen, this
13 graphic provides an example of greenhouse gas
14 emissions, water use, and land use from three
15 different lithium extraction methods.

16 This example uses information on the
17 technology for direct lithium extraction from
18 geothermal brines used by Vulcan Energy Resources
19 in Germany. Although details vary across
20 technology for extracting lithium from geothermal
21 brine, in general, the greenhouse gas emission
22 impact, water use, and land use of extraction
23 lithium from geothermal brine is expected to be
24 much less than other forms of lithium extraction
25 because it is an additive process to the

1 geothermal energy generation.

2 Next slide, please.

3 Lithium recovery from geothermal brine is
4 currently being pursued in Imperial County by
5 three developers, including EnergySource, BHE
6 Renewables, and Controlled Thermal Resources.

7 In addition, the CEC has provided funding
8 and support from two different funding programs,
9 the Geothermal Grant and Loan Program and the
10 Electric Program Investment Charge, known as
11 EPIC, which is a research program focused on
12 innovation to help meet energy and climate goals.

13 The Geothermal Grant and Loan Program
14 Project was with EnergySource Minerals at the
15 John L. Featherstone Geothermal Power Plant in
16 the Salton Sea region. The project was
17 successfully completed in September 2020. The
18 purpose was to develop an integrated engineering
19 design, reducing the risks and costs associated
20 with a commercial lithium plant using geothermal
21 brines.

22 The EPIC Grant projects include BHE
23 Renewables, which aims to design, build, and
24 demonstrate an integrated one-tenth commercial
25 scale geothermal brine pretreatment and lithium

1 recovery system at an existing geothermal power
2 plant. Controlled Thermal Resources' Hell's
3 Kitchen Geothermal Project aims to integrate
4 multiple brine pretreatment processes to
5 demonstrate a system for completely preparing
6 geothermal brine for lithium extraction.

7 And additionally, the Materials Research
8 is -- Project is demonstrating a pilot-scale
9 integrated process for the recovery of lithium
10 from geothermal brines using a high-capacity,
11 selective solid sorbent for the extraction of
12 lithium, and a carbon-negative sorbent
13 regeneration process for the direct formation of
14 high-purity lithium carbonate.

15 Next slide, please.

16 Assembly Bill 1657 outlines the rationale
17 for creating the Lithium Valley Commission as
18 having the potential to create a domestic supply
19 of lithium to support the exponential growth of
20 demand for lithium to become a competitive source
21 of supply that could satisfy more than one-third
22 of today's worldwide lithium demand. But no
23 mining companies will invest in this resource
24 until the technology to recovery lithium from
25 geothermal brine on a commercial scale is proven

1 and can occur without certain risks and
2 uncertainties.

3 Additionally, a 2021 presidential
4 executive order includes securing and urgently
5 developing a domestic lithium-battery supply
6 chain. The U.S. Department of Interior considers
7 lithium one of 35 critical minerals that are
8 vital to the nation's security and economic
9 prosperity. According to the U.S. Department of
10 Commerce, the United States of America are safer
11 when important technology and essentially
12 products are produced domestically. And finally,
13 the opportunity for lithium production in
14 California has the potential to unleash billions
15 of dollars of new economic infrastructure
16 development.

17 With that, I will turn back to you, Chair
18 Paz, for the next agenda item. Chair Paz, you're
19 on mute.

20 CHAIR PAZ: Thank you.

21 Now to the discussion with Commissioners.
22 We have heard several questions, and you're
23 probably seeing them on the chat, right, around
24 both the impacts of the benefit of lithium
25 extraction from a geothermal known resource area

1 in the Salton Sea.

2 So the first question is: What are the
3 potential regional and community benefits? And
4 what needs to be done to leverage those benefits
5 in the local areas?

6 COMMISSIONER COLWELL: Chair Paz, I guess
7 I can weigh in on this one initially.

8 Look, I think the benefits have been
9 mapped out over the months. It's really jobs,
10 education, and a tax base or an expanded tax base
11 off the existing geothermal plants. You know,
12 our numbers alone were around about 480
13 construction jobs and 220 direct jobs with Stage
14 1. Additional stages will take it up to 1,400.
15 IVEDC have suggested a further two-and-a-half
16 thousand auxiliary jobs. I mean, the cathode
17 battery opportunity but, you know, direct jobs
18 alone is quite significant.

19 So -- and Jonathan, I think, will
20 summarize the benefits to the tax base and, also,
21 Commissioner Hanks where the direct -- yeah,
22 Calipatria School District went, and this is
23 basically an extension of that.

24 But you know, what's needed, just on
25 that, would be, you know, we need a clear and

1 efficient path to permitting at the state and
2 county level straight through. And I think it's
3 worth to note that the recent CUP that went
4 through with EnergySource was, you know, a very
5 detailed 1,500-page EIR with no impacts. It sort
6 of, actually, summarizes the no impact to
7 development at all, and no relationship to Salton
8 Sea.

9 Yeah, that's probably my couple comments.
10 Thank you.

11 CHAIR PAZ: Thank you.

12 And this -- both of these questions allow
13 us to hear from different perspectives. We heard
14 from the industry sector. I would also like to
15 invite some of the government sector to answer
16 and participate in this conversation, as well as
17 some of the NGOs that we have.

18 So I will call on Commissioner Weisgall.
19 This is, again, another industry perspective on
20 the matter of benefits.

21 COMMISSIONER WEISGALL: Just very
22 quickly. I made my comments earlier. But you
23 asked, what's needed to leverage?

24 What's needed is to get the young
25 generation educated about these opportunities and

1 to get the young generation, the new generation,
2 educated on the skills need for this opportunity,
3 which really means emphasizing the STEM
4 curriculum. And we're not just talking in
5 colleges, we're talking at Imperial Valley
6 College, and we're talking at high schools and
7 the like.

8 But, no, I've summarized, you've heard me
9 before, to me the single greatest benefit is that
10 economic opportunity.

11 Thanks very much.

12 CHAIR PAZ: Thank you.

13 Okay, can I call on some of the NGOs,
14 maybe Commissioner Ruiz?

15 COMMISSIONER RUIZ: Hi. I think, you
16 know, there are so many different potentials that
17 this industry can bring along if it is unwell
18 (phonetic). I call it the three big Ws, the
19 three big ones.

20 One is that it can definitely improve the
21 much needed jobs, you know, in the communities.
22 And it is important to, for this industry, to
23 bring not just well-paid jobs but, also, create
24 the ability for young people to participate in
25 these opportunities.

1 Second, I think lithium can very much
2 benefit geothermal energy by making it a
3 byproduct, increasing the -- not just the amount,
4 but I think it will also increase the value of
5 geothermal energy.

6 And the last one, I think, is so
7 important because the Salton Sea is -- can
8 benefit -- can be benefitted directly or
9 indirectly through, perhaps, you know, mitigation
10 programs, perhaps, you know, many other different
11 resources that can -- that this industry can
12 provide.

13 So I think, you know, there is a lot to
14 gain, you know, from this endeavor if it is done
15 well. And so I think, you know, this is
16 important for us as Commissioners to pay
17 attention to these factors from the beginning and
18 making sure that the industry provides and
19 becomes the hope that everyone is waiting for,
20 especially in communities and especially in an
21 area that is dealing with, already, a lot of
22 economic, environmental, and many other issues.

23 CHAIR PAZ: Thank you, Commissioner Ruiz.

24 I will now -- let's see if we can get
25 some government perspective here.

1 Commissioner Guzman-Acevas, do you want
2 to weigh in on this question?

3 COMMISSIONER GUZMAN-ACEVAS: I'm not --
4 I'm really sorry, but could you repeat the
5 question?

6 CHAIR PAZ: Yes, of course. Yes.

7 So what are the potential regional and
8 community benefits? And what needs to be done so
9 we can leverage these benefits?

10 COMMISSIONER GUZMAN-ACEVAS: Oh, that's a
11 great question. You know, I think that I would
12 say, honestly, one of the things that I have seen
13 more recently in some of the -- not even some of
14 the just generation projects but the transmission
15 projects in the energy space, is some of the
16 shared ownership models. And what I mean by that
17 is that there could be public-private
18 partnerships in everything from, you know, the
19 raw material generation to the processing, and
20 everything in the value chain.

21 And of course, I think, was already
22 somewhat mentioned, but the other creative
23 opportunity is to ensure, you know, the wealth
24 sharing of the different enterprises is also
25 shared with the community. And everything in the

1 dialogue that we have heard thus far is really
2 open to that opportunity, so I think that's been
3 really positive.

4 But I think those are really the
5 opportunities, is to really see some of the
6 economic wealth being shared with the community
7 and putting those pieces in place.

8 And of course, coming from kind of, also,
9 the environmental side of things, making sure
10 that all of the production practices are as
11 environmentally sound as possible.

12 CHAIR PAZ: Thank you, Commissioner
13 Guzman-Acevas.

14 I believe Commissioner Olmedo had his
15 hand up.

16 COMMISSIONER OLMEDO: Thank you, Madam
17 Chair. Am I on?

18 CHAIR PAZ: Yes, we can hear you.

19 COMMISSIONER OLMEDO: So, again, I
20 appreciate all the perspectives. And that's,
21 again, that's the beauty about this Commission,
22 being of multiple stakeholders and learning from
23 each other.

24 You know, as in regards to the work that
25 I've done, both in my day job and working on

1 socioeconomic and environmental justice and
2 disadvantaged issues, one of the things that I
3 would hope that occur is that, first, make sure
4 that we have good environmental compliance.

5 Anytime that we circumvent the law, or
6 that we have sort of a short-term vision, a
7 desperate approach to creating jobs, we tend to
8 miss a lot, and all those are actually jobs, job
9 opportunities. There are many job opportunities
10 that go in to assuring that our water, that our
11 air, that our land, and that the public health is
12 protected. Because when we don't protect all
13 those areas, and many more that I'm certainly not
14 mentioning, that's where, you know, we create a
15 lack of balance.

16 Some of the things that, as I talk to
17 more people who certainly experience and
18 understand and, you know, have been a part of
19 similar types of opportunities, you know, they
20 talk about the models that are there, such as
21 creating community benefits agreements; right?
22 And the importance of engaging the community in a
23 transparent negotiation as to what is the vision,
24 both regionally but, very important, you know,
25 fenceline communities, you know, I think there's

1 enough that has been done across California,
2 across this nation, that we realize that
3 fenceline communities are going to face the
4 greatest impact.

5 But also, you know, in the spirit of the
6 regionalization, you know, what are those
7 important opportunities there to make sure that
8 we are building in a way that makes logistical
9 sense and in a way that we can maximize the
10 efficiency and the many business, direct or
11 indirect, business opportunities that are there?

12 We have seen that, historically, the
13 decisions have been made by very few; right?
14 That's why the movements begin, you know, even
15 before we saw a lot of the other movements build
16 on, you know, the one percent, the one percent;
17 right? And it's true. I mean it's usually a
18 very small percentage of people who position
19 themselves, either because of their status or
20 because of their role, and often they'll bring
21 the community along.

22 So I really am very appreciative of the
23 fact that we have spaces, like those today, to
24 make sure that the community are actually pretty
25 eager for the community to participate, because

1 that's the voice we need to hear? What does the
2 community want? What is their vision, you know?

3 You know, I've -- no secret, you know,
4 more and more, I'm acknowledging and learning.
5 And one of the things I learn is, wow, you know,
6 the realization that a lot of the known resource
7 area is in public domain; right? So what does
8 that mean, you know? That's going to be really
9 important for the community to tell us, what does
10 that mean to you? I mean, you know, the land out
11 there, whether it's IID, whether it's state and
12 federal, these are the public -- these are public
13 lands.

14 So, to me, that immediately translates
15 into, well, the public has to have something to
16 say about that. If there's opportunities for a
17 win-win, that's what we're trying to aim for, and
18 making sure that we create a sustainable business
19 infrastructure. And if that's going to come from
20 subsidies, that's great, you know, support that.

21 But at the same time, we want to make
22 sure that these business opportunities, again,
23 are investing back in our communities, again,
24 with community benefits agreements, through
25 wherever there are royalty revenue opportunities,

1 and be clear and transparent. Where are all
2 those royalties going? Are they returning back
3 into our communities and making sure that we are
4 investing in those areas and in those
5 opportunities that have received the least amount
6 of investment?

7 And I can't help but just, you know, come
8 to the realization, particularly, you know,
9 because I'm actually out here in the Calipatria
10 community, but the entire North End was very well
11 known as being an area that has received very
12 little, you know, very similar, like the East
13 Coachella Valley, you know, areas that have
14 received the least amount of resources. And we
15 want to make sure that these areas, you know, get
16 their fair share because, ultimately, they are in
17 close proximity.

18 But I think there are a couple of values,
19 you know, the different business models, the
20 energy, and then the secondary business which is,
21 you know, the extraction business, and then
22 others that are first about extraction but then
23 have the energy. So that really creates a much
24 broader, a much larger dialogue that I think
25 could be very beneficial in terms of seeing a

1 more larger, a more complete picture in terms of
2 what are the economic opportunities for our
3 community?

4 You know, certainly, there's a lot of
5 talk around investing in the Salton Sea, you
6 know? And again, you know, we have to be very
7 diligent. Where does the community want to put
8 these dollars? You know, where does the
9 responsibility lie?

10 You know, we don't want to necessarily
11 kind of go by the old playbook, right, just
12 putting in the same sort of old things. And the
13 same old things means that we still will continue
14 to have blighted areas, disadvantaged
15 communities. No. We want to actually, you know,
16 tackle it from the bottom up to make sure we're
17 thinking about those things that have received
18 the least amount of resources.

19 But again, creating a balance, making
20 sure that environmental compliance, regulations,
21 all of those things, they need to be taken care
22 of. Those are not community benefits, you know?
23 We need to make sure that gets done. And that's
24 going to be important for the sustainability of
25 these industries. And I'm not speaking

1 specifically, necessarily, the geothermal or
2 lithium extraction. I'm speaking just in the
3 historical perspective that we we've seen this
4 time and time and time again; right?

5 The other is making sure that, again,
6 that there are opportunities for dialogue. Maybe
7 someone has even a better model, right, but at
8 minimum is looking at that. Are there royalty
9 opportunities? Are there, you know, investments
10 in terms of profit sharing? You know, is that a
11 conversation here? Is there a conversation in
12 terms of -- again, and I mentioned earlier is,
13 you know, on these royalties, you know?

14 So, yeah, certainly, that's sort of the
15 perspective that I bring. But more importantly,
16 I'm eager to hear the community and see what they
17 bring, because I think we're going to learn a lot
18 from them, things that we're not even thinking
19 about; right?

20 Thank you.

21 CHAIR PAZ: Thank you for --

22 COMMISSIONER OLMEDO: Thank you, Madam
23 Chair.

24 CHAIR PAZ: Thank you, Commissioner
25 Olmedo. And, yes, the community members are

1 chatting and they want to get to us their
2 questions.

3 So just very briefly, because I know this
4 is another question that has been submitted to us
5 and asked multiple times regarding the impacts of
6 lithium extraction.

7 As Elisabeth shared in the presentation,
8 the method that is being used for removing
9 lithium from the Salton Sea is very different
10 from the most popular known methods that have
11 been taking place in other regions. And I think
12 that's what's been creating both, maybe, some of
13 the question marks, but also some enthusiasm, the
14 possibility that this could be done in a way that
15 is reducing emissions and that can provide a
16 cleaner source of energy from geothermal which is
17 already in existence.

18 So I want to ask, what are the potential
19 regional and community impacts; right? And what
20 needs to be done to mitigate those impacts?

21 So there will still be some impacts. Do
22 we know what those are? I know there's been
23 reference to the EIR. So again, addressing
24 Commissioner Olmedo, I don't think any of the
25 developers, or that in California, it would fly

1 by to let developers surpass [sic] any of the
2 environmental reviews that need to happen. There
3 is an EIR that was submitted by one of the
4 developers and that can start giving us answers.
5 Now that is a very long and technical document.

6 So I would like to see if anyone from the
7 Commissioners who has taken a look or understands
8 more about the potential impacts, if you can name
9 them and how we can -- how can we mitigate those?
10 And I would like to -- again, just very briefly,
11 so that we can get to public comment and have --
12 they might, probably, have more questions.

13 Commissioner Ruiz, is that your hand for
14 this question around the impacts?

15 COMMISSIONER RUIZ: Sure. I mean, I can
16 probably elaborate a little more.

17 I'm not an expert in what are the
18 environmental impacts because I think a lot of
19 this technology is rather new. And I think, you
20 know, this is probably going to be a better
21 question for some of the geothermal companies,
22 the lithium industries.

23 But I think, you know, in the community,
24 when I go around the community, people usually
25 ask and they are concerned about, you know, the

1 water, the water tables, they're concerned about
2 the impact of how much water. Will water be
3 contaminated? They have seen what this industry
4 has done in many other places around the world.
5 And I think, you know, that is a valid concern.

6 One thing, you know, that I'd like to
7 address is that we don't need to rush into
8 finding, you know, the, probably, the right plan
9 right now. I think, you know, one of the
10 responsibilities of the Commission is to make
11 sure that we look at everything, we become
12 dialectic, and make sure that the benefits
13 outweigh the negatives, and the environmental
14 impacts, the public health impacts, are the bare
15 minimum.

16 Every industry has -- you know, presents
17 risks. But I think, you know, that it is
18 important to make sure, you know, that we do a
19 very thoughtful process in order to not only
20 allowing the community to participate but being
21 really thoughtful of minimizing any impacts and
22 assuring the communities that the impacts are not
23 going to be negative, that the impacts are going
24 to be minimal, and that the benefits will
25 outweigh the negative impacts.

1 CHAIR PAZ: Thank you.

2 So I will -- this will be the last person
3 that I call on before we go to the community.

4 So Commissioner Weisgall, I'm sure that
5 you or your team have reviewed that EIR and maybe
6 there are some very specific things that you can
7 point out to us, anything that mitigated?

8 COMMISSIONER WEISGALL: Well, in the
9 interest of time, I think they're really for --
10 especially for the public listening, what exactly
11 does one of the analyses cover? You know,
12 they're pretty thorough. You want to look.

13 There's obviously going to be an impact
14 in so many areas. It could be very minimal but
15 they all have to be studied. You've got to study
16 air quality, biological resources, the cultural
17 resources, the soils -- will there be greenhouse
18 gas emissions? -- hydrology, noise,
19 transportation, tribal cultural resources, things
20 like that.

21 So an environmental impact report like
22 this is designed to examine all of those areas
23 and then determine which ones have significant
24 effects, some maybe even irreversible, which do
25 not, and that's really what you'll see in a

1 report like this.

2 Madam Chair, let me not take any more
3 time. We could go into great detail but
4 that's --

5 CHAIR PAZ: Thank you.

6 COMMISSIONER WEISGALL: -- that's the
7 overview.

8 CHAIR PAZ: Thank you, Commissioner
9 Weisgall.

10 So now we are going -- next slide.

11 This is the opportunity for members of
12 the public to ask a question and, again,
13 different from public comment. If you only have
14 a comment, we can wait until the end. This is
15 for people who have a question that they have
16 been pondering, maybe hasn't been answered up
17 until right now, and we are going to invite you
18 to ask that question.

19 In order -- you know, we want to try to
20 be as flexible as we can and get to as many of
21 you. And in order to try to be fair, we're going
22 to start by limiting them to one person per
23 organization. So in the case that an
24 organization is being represented, that we start
25 with one person per organization. And then, if

1 there is more opportunity to get a second round,
2 we'll call on them again if they have additional
3 questions.

4 And we will be starting with the
5 locations that are watching us streamed, so the
6 physical locations. I believe Patrick O'Dowd had
7 submitted and requested to ask a question. So
8 maybe -- I don't know if he's at one of the
9 locations yet, but if he's on?

10 And just, I'm also getting questions
11 about the duration of the meeting. I can stay as
12 long as we can if we need to extend it a little
13 bit more so that we can get to many people. I
14 know the challenge will be that some of the
15 physical locations might have to close down. But
16 if we can be a little bit flexible, I think we
17 can stay a little bit past the 8:00 timeline if
18 it's okay with everyone.

19 MS. DE JONG: Chair Paz?

20 CHAIR PAZ: Yes?

21 MS. DE JONG: Oh, sorry. So Patrick
22 O'Dowd is online, but he did just comment that he
23 has no questions.

24 Thank you.

25 CHAIR PAZ: Okay. Thank you.

1 MS. DE JONG: (Indiscernible.)

2 CHAIR PAZ: Okay, so then we will go to
3 the El Centro location and see if there are any
4 questions coming from the participants at that
5 location?

6 EL CENTRO MODERATOR: There are no
7 questions on our end.

8 CHAIR PAZ: Thank you.
9 Calipatria?

10 CALIPATRIA MODERATOR: Yes, we have a
11 participant.

12 CHAIR PAZ: Thank you.

13 MR. REYES: Eric Reyes, Los Amigos de la
14 Comitida (phonetic). I've been following all of
15 these Lithium Valley Commission meetings, and
16 also on the local Imperial County Lithium
17 Ordinance Committee put together by Ryan Kelley,
18 who invited CBOs and environmental groups to be
19 participating, and we thank him for that.

20 One thing that I have seen, so I have
21 this question, the question is, you talk about
22 the potential for the economic: Has there been a
23 comprehensive economic study that will give us
24 the definitives based on solid economic
25 methodologies of how much income will be produced

1 by lithium extraction with geothermal and
2 derivatives or supply-side chain reactions and
3 other investments that could be made? And what
4 is the window in that time of that development?
5 I know the industry, in our meetings, have stated
6 maybe 10, 15 years.

7 So, I think, is there such a
8 comprehensive economic study? Because the
9 community can ask, but if we don't have a basis
10 of how to ask, it's just a blind ask. We want to
11 make informed, educated, studied requests to
12 improve our community from the ground up. So
13 that's my first question.

14 CHAIR PAZ: Thank you.

15 Is there any one of the Commissioners,
16 and I'm looking for hands up, who can address
17 that question? And I believe it's Eric.

18 Oh, okay, so I have Jonathan, and then
19 Rod.

20 COMMISSIONER WEISGALL: Rod, go first.
21 Go ahead. Be my guest. I've been speaking too
22 much.

23 CHAIR PAZ: Okay. Rod?

24 COMMISSIONER COLWELL: Hi Eric. No, we
25 haven't finished detailed studies yet. All I can

1 say is the numbers, which are union construction
2 numbers that we have, 408 on a rolling
3 construction program. The direct employment, you
4 know, as in operational jobs, for Stage 1 are
5 220.

6 But, Eric, I haven't got the actual
7 breakdown study. That's a good point. We
8 haven't sort of got to that point but we do know
9 the numbers. And of the 220, there's a further
10 breakdown, you know what I mean, electricians,
11 operators, you know, those sort of sway. So we
12 can share that information, probably, in the
13 coming months.

14 Thank you.

15 CHAIR PAZ: Thank you.

16 Jonathan?

17 COMMISSIONER WEISGALL: Yeah, I'll just
18 add very briefly.

19 Eric, we're building at a one-tenth
20 commercial scale right now. We're building a
21 demonstration plant to show ourselves, can we do
22 this? And, as I said earlier, can we do it in a
23 commercially viable way, and in an environmental
24 responsible way?

25 So we don't have the numbers yet for

1 full-scale production. The best estimate I can
2 give you is we've got a current workforce of, you
3 know, 200 to 220 already the geothermal plants.
4 We're guessing we would need about that number
5 for lithium at our existing plants. If we build
6 more plants, obviously, more numbers. That
7 doesn't look at the ancillary jobs or the like.

8 I do know that our average job pays
9 about, I think it's 197 percent of the median
10 income in Imperial County, but what does that
11 mean? It means our average way is about twice
12 the average wage in Imperial.

13 I think your question is a good one. And
14 there's no doubt that a detailed study needs to
15 be done. We certainly will engage in that when
16 we're ready to go fully commercial, and we're --
17 which we hope will occur when our demonstration
18 plants prove successful.

19 Thanks.

20 CHAIR PAZ: Thank you.

21 You are on mute, Eric. But just for a
22 point of clarity here, if there are -- we're
23 going to start with one question per
24 organization, Eric, so --

25 MR. REYES: If I could --

1 CHAIR PAZ: -- if there's somebody else?

2 MR. REYES: -- follow up on that?

3 CHAIR PAZ: And then we can come back
4 if -- we'll make several rounds.

5 MR. REYES: All right.

6 CHAIR PAZ: But is there anybody else at
7 the Calipatria site who has a question?

8 MR. FLORES: Hello. Good afternoon.

9 This is Jose Flores. I'm a retired civics and
10 econ teacher, currently with Comite Civico. My
11 question is in regards to the talk about supply
12 chain, the possibility of supply chain being part
13 of the economic system here with the possible
14 lithium production.

15 And my concern is with the companies, we
16 currently have three companies here but others
17 might arise if it's feasible, and my concern
18 comes from is there any conversation tied into
19 possible incentives, subsidies, or tax breaks,
20 that these companies kind of hold the line or tow
21 the line of not starting here and then exporting
22 jobs to (indiscernible) and Mexicali and pay
23 somebody, you know, \$10.00 a day, and then we end
24 up losing here and still have to deal with our
25 environmental burdens.

1 CHAIR PAZ: Rod?

2 COMMISSIONER COLWELL: Great question and
3 a legitimate concern. Not that we've seen. I
4 know that the (indiscernible), you know, we're
5 public with General Motors, and the discussions
6 we're having with cathode and battery are all,
7 you know, based here onsite because it doesn't
8 make sense to sort of pick up raw material and
9 move it, whether it's 30 miles or 300 miles.

10 Really, the process itself has to be done
11 onsite to sort of try to value add the supply
12 chain. If anything, if the battery cell
13 companies come here, that's great. At this
14 stage, I think if we can get the cathode or
15 battery cell, then those materials would be sent
16 to where the battery plants are, more than likely
17 Georgia or places like that.

18 Thank you.

19 CHAIR PAZ: Thank you.

20 Are there other questions from
21 Calipatria?

22 MS. MARQUEZ: I think with Calipatria, we
23 should be given more opportunity because some
24 people that are speaking that are not from
25 Calipatria.

1 So my question to you is -- in
2 researching some of the Lithium Valley, and in
3 the South America lithium valley there, which is
4 called the Triangle, in Chile and Bolivia, and
5 also in other parts where they are doing the
6 lithium, there are like -- some of the negative
7 impacts have included contamination of soil,
8 contamination of water affecting some of the
9 cattle. I'm just wondering if/how we are going
10 to be able to address that?

11 I know that there's going to be an
12 environmental impact study and we will have the
13 opportunity for the scoping. But since this is
14 completely new to us, we won't really know like -
15 - or do you have an idea when we will start
16 seeing some of those negative impacts in our
17 community?

18 And my second question to you, to the
19 Lithium Valley Commission, is maybe it's a favor,
20 but I feel like we should have a leverage
21 percentage for the North End because we've seen
22 some of these projects where many, many people in
23 the grants, when they're writing, they use a lot
24 of our numbers for the North End, especially
25 Niland. And we are a very disadvantaged

1 environmentally and economically disadvantaged
2 community. And it's kind of disheartening when
3 big industries like this come. We welcome you.
4 It's a good thing. You know, we're starving for
5 economic development.

6 But my concern would be, like if a lot of
7 it stays in the south end, it's not really fair.
8 And some people say, well, life is not fair. But
9 at the same time it's like we need to some
10 benefits, economic development. We're excited
11 about all the industry and all the collaboration
12 that's going to happen, that's already happening,
13 because I have been participating in some of the
14 workshops with lithium -- the lithium project.

15 I see a lot of good things happening
16 behind the scenes, San Diego State University and
17 Imperial Valley College, a lot of things going
18 on. So I just want to make sure that the North
19 End gets our fair share.

20 And if you could address the item in
21 regards to the contamination of soil and water?
22 Thank you.

23 CHAIR PAZ: Thank you.

24 Who can take that question?

25 COMMISSIONER WEISGALL: I'll go very

1 quickly, just on the water issue. Maybe Rod
2 wants to talk soil.

3 Again, this is preliminary, but we know
4 that in South America the evaporation ponds there
5 use upwards of 500,000 gallons of water to
6 produce one ton of lithium. At our company the
7 goal is to reduce that by 90 percent. The you
8 have to do the math and translate that into acre
9 feet per year. It's a modest amount. But the
10 goal is to reduce by at least 90 percent the use
11 of water that is used in the South American
12 process.

13 As far as soil, I'll leave it to Rod. We
14 don't really see major soil issues because we're
15 not -- we're going to be extracting that lithium
16 within existing valves and pipes in the
17 geothermal plants themselves, but perhaps Rod can
18 talk more on that point if he wants to.

19 CHAIR PAZ: And Rod, before you answer
20 the soil question, if that's what you were going
21 to answer, but if you can more specifically --
22 Jonathan talked about water use, but the question
23 is around water contamination. And I know some
24 of the presentations that we've received in this
25 Commission have always focused and emphasized the

1 difference between this direct lithium extraction
2 process.

3 So can you tell us, what are the risks of
4 water contamination, if any, so that you can more
5 directly address that question? Thank you.

6 COMMISSIONER COLWELL: Thank you, Chair
7 Paz. And thanks for the previous, another great
8 question.

9 Firstly, just weighing in on Jonathan's
10 comments, I mean, maybe a simple way to explain
11 this is the Atacama that was referred to where
12 you, basically, bring up a brine, it's a very
13 cold brine that comes up, and they put it into
14 evaporation ponds and they evaporate the water.
15 And that leaves contaminants in the soil and
16 wastes and uses a lot of water that, you know, as
17 Jonathan mentioned, half a million gallons per
18 metric ton of lithium produced.

19 Brine in the Salton Sea comes up but it's
20 superheated, it's 600 degrees. So, basically, we
21 run that through a -- the steam through a
22 turbine. It's in a completely closed loop. And
23 then we selectively extract lithium from the
24 brine. That brine does not engage at all in the
25 atmosphere or on the ground, or it doesn't need

1 to go to an evaporation pond.

2 So, basically, we're using the heat, if
3 you like, very similar to the Atacama in South
4 America except the heat itself concentrates the
5 lithium in real time. And, basically, then it's
6 injected back into the formation, so there's no
7 contact with the soil whatsoever, no reagent
8 contact with the soil, and there's no, you know,
9 water contamination. We're using the brine.
10 There's no connectivity or contact at all with
11 the Salton Sea.

12 The second part of the question is just
13 or even more important. You know, on one side,
14 the social side, like Calipatria, you know, we --
15 one of the issues we're all going to have is,
16 okay, where do we house and how do we
17 accommodate, you know, all of these workers we're
18 talking about? And I can say that Controlled
19 Thermal Resources have purchased, it's not
20 announced yet, but land in Calipatria and
21 developing residential accommodations to try to
22 deal with that. So we're trying to, you know,
23 balance this out where we wind up with somewhere
24 there's nowhere to live but, also, how that, you
25 know, weighs in.

1 So thank you for the great question.

2 CHAIR PAZ: Thank you.

3 And I think I saw Assemblymember Eduardo
4 Garcia. Do you want to weigh in on this
5 question?

6 ASSEMBLYMEMBER GARCIA: I think you
7 rephrasing the question, I think, answers or
8 addresses what I wanted to say.

9 I think if there's anything that there's
10 a takeaway with, and I know that in Sacramento
11 we, any and every time we are having this
12 conversation, we start at the top with the
13 differentiation of lithium recovery here and
14 lithium extraction in other parts of the world.

15 And I guess if tonight there's any
16 takeaway -- and I hope that we're able to go past
17 8:00, maybe 8:30 or so, so folks can ask all the
18 questions that they'd like, I'm happy to stay
19 here until 9:00 -- I'm hoping that the takeaway
20 is that there's a huge difference in the process
21 and the technology that's being utilized,
22 minimizing all of the concerns that we all read
23 about when we Google about lithium recover or
24 lithium extraction that comes up when we read
25 about Chile or other South American countries, or

1 for that matter Australia, or certainly our
2 biggest source that comes from China. So if
3 there's one takeaway is that there is a huge
4 difference between the process and the
5 environmental impacts that occurs.

6 And in Sacramento, it's something that we
7 start with, our conversations, consistently so
8 that my colleagues understand that there is a
9 huge, huge difference in terms of what is being
10 proposed to be done here.

11 Thank you.

12 CHAIR PAZ: Thank you.

13 We have somebody else from the Calipatria
14 site.

15 MS. GARCIA: Yes. My name is Anna
16 Garcia. I'm part of the North End Alliance 111,
17 representing Calipatria, Niland, and Bombay
18 Beach. We are the North End. I like to be a
19 voice for those underserved communities. And my
20 question is very simple. This is all new to me,
21 the terminology is over my head, but I have some
22 simple questions.

23 When you're talking about bringing jobs
24 into our area, is that STEM education being
25 offered now? Will we be able to catch up to the

1 point when you're ready to hire that people will
2 be ready to compete for those jobs? What can we
3 do in our area? What can you do to help us to
4 prepare our locals to take those jobs?

5 CHAIR PAZ: Thank you.

6 I will call on Commissioner Ryan Kelley.

7 VICE CHAIR KELLEY: Thank you,
8 Chairperson Paz.

9 To Ms. Garcia's question, we have started
10 those conversations with industry, our workforce
11 development, and local education to identify the
12 gaps. Industry has provided training levels, job
13 descriptions for the geothermal and lithium
14 extraction. And our workforce development has
15 already put together a group with the Office of
16 Education and local school districts about
17 developing STEM education, all the way and
18 including middle school.

19 So we are trying to address it as fast as
20 we can. We know that IVC has already adopted
21 some changes into their curriculum to address
22 some of those needs. SDSU is pivoting to offer
23 additional engineering students courses in
24 Imperial Valley. And I think we're learning more
25 and more that we have made the move in the right

1 direction to address your concerns and ours.

2 CHAIR PAZ: Thank you.

3 Commissioner Weisgall?

4 COMMISSIONER WEISGALL: And just, really,
5 one point to add on this which is we also need to
6 go down a level below that. We need to be in the
7 high schools. We need to encourage sophomores
8 and juniors to take STEM courses. By the time
9 you're a senior, if you want to go into the
10 workforce, that can be a little late. We need
11 and we intend to be in the high schools. We want
12 to sponsor career days. We want to do job fairs.
13 We want to educate the community that there are
14 these local jobs.

15 We don't want to bring in a workforce
16 from outside of Imperial County if we don't have
17 to. That's just not going to be. That just
18 doesn't work. You bring in workers from San
19 Diego, they're not -- it's a different culture,
20 it's a different climate, it's a different
21 community.

22 So I know from our company's perspective,
23 it is very much in our interest to hire locally
24 as much as we can. And to do that, we have to
25 work on the education, not just at the four-year

1 college SDSU level, not just at IVC with
2 community college, but even in high school, and
3 we have every intention of doing that, and
4 welcome input from the community at any time as
5 to how make that happen.

6 Thank you.

7 CHAIR PAZ: Yeah. I want to add to that
8 question, as well, because I am planning the --
9 an upcoming workshop that we will be discussing
10 workforce development at one of our early
11 meetings next year. And the question that you
12 are asking, it's at the forefront of that
13 workshop, is that, first, we need to understand
14 what are the types of jobs, right, that come at
15 the diff phases of the development of lithium and
16 making sure that we know that as soon as
17 possible.

18 Because, as you're saying, we want to
19 make sure that we are getting at the forefront
20 and we're not chasing the jobs, right, that our
21 communities are ready to participate in the job
22 market. And that we're thinking ahead of time of
23 what are the barriers? Because it's great to
24 engage the youth, and it's great to, you know,
25 start them early.

1 But we have high unemployment rates in
2 Imperial, and in the Coachella Valley, Eastern
3 Coachella Valley. And we have a population of
4 adults already who could be retrained. And the
5 ability for them to get a better paying job is
6 going to impact their kids; right? So not just
7 focusing on the youth, focusing on the people
8 that are employable now and that have faced
9 barriers, whether it's language, whether it's
10 transportation, infrastructure, different
11 barriers to accessing these jobs, that we're
12 addressing them as early as we can.

13 And also, to that point, I wanted to
14 mention, Assemblymember Garcia did introduce a
15 bill around workforce for getting agreement that
16 is also leading with that sentiment and value at
17 the forefront, right, that our community is
18 benefitting from these jobs.

19 So Assemblymember Garcia, you know more
20 about your bill because I'm blanking out right
21 now.

22 ASSEMBLYMEMBER GARCIA: I'll just, I'll
23 be short. It's a bill that will get up and going
24 for conversation again in January that really
25 prioritizes community workforce agreements to

1 ensure that the locals have first prioritization
2 in taking on these jobs. And that will require
3 partnerships with workforce development centers,
4 educational institutions, our labor friends who
5 traditionally build these facilities and train
6 folks to take on these jobs. So that
7 conversation will get off the ground in January
8 again.

9 And that idea came directly from locals
10 as it relates to hearing this same sediment.

11 So I'll stop there.

12 CHAIR PAZ: Thank you.

13 And we will go, maybe, to another
14 question, if there are any in Calipatria, or I
15 want to see if I can move on to North Shore Yacht
16 Club.

17 MS. GARCIA: That's fine. I do want to
18 thank you but I do want to ask one question, just
19 to piggyback on that.

20 Is there any internship or apprenticeship
21 programs going on now for what's coming to our
22 valley?

23 CHAIR PAZ: Jonathan?

24 COMMISSIONER WEISGALL: I had my hand up
25 to make that very point. You are reading my

1 mind.

2 We do. We have internships now for our
3 geothermal program. We need to strengthen them.
4 And we do need to develop an internship program
5 for lithium. I've actually had three meetings
6 now already with Imperial Valley College to talk
7 about that.

8 The idea would be to work collaboratively
9 with IVC where students would spend a certain
10 amount of time in the classroom but the rest of
11 the semester, if you will, at a site like ours or
12 the other two developers where, number one, they
13 could get paid for internship, number two, get
14 credit, and number three, really get that kind of
15 really on-the-job training. And I guess the
16 fourth benefit is they would have the advantage
17 of really seeing what a job at a facility like
18 ours would be like, and vice versa. We would be
19 able to see what they're like.

20 So internships are absolutely critical
21 and it is something that we will be focusing on.
22 Again, we're still in the early stages. But, as
23 Commissioner Kelley said, we've got to get these
24 programs going and we've got to get the
25 curriculum developed. But internships are a very

1 important part of that. I really appreciate the
2 question.

3 CHAIR PAZ: Thank you.

4 So I will move on to the North Shore
5 Yacht Club and see if there are any questions
6 coming from that site.

7 CONCHITA: (Speaking Spanish.)

8 CHAIR PAZ: We will wait for one of the
9 interpreters to repeat the question in English.
10 Yes.

11 (Spanish interpretation given off mike.)

12 CHAIR PAZ: Thank you, Conchita, for your
13 questions. Gracias. This is Silvia Paz. And
14 I'll start, maybe by addressing some of your
15 points.

16 So in terms of somebody who lives in the
17 area, I live about nine miles away. I live in
18 Thermal. I live very close. I live in the
19 communities and I completely understand the
20 concerns, the concerns that you have for your
21 children, that I have for my children, right, who
22 sometimes get bloody noses, too, because it's
23 windy and dusty.

24 What I can tell you is that everything
25 that I have seen about the process for -- by

1 which lithium is going to be developed in the
2 Salton Sea, and I'm just talking at this point of
3 the development of lithium, everything that I
4 have seen is completely different and not
5 relevant to the examples that we have from other
6 places in the world.

7 So when I -- when you ask about this
8 question about the risk and the impacts from the
9 development itself, what I keep hearing, and I'm
10 just going to repeat because I'm not an expert,
11 but what I keep hearing, not just from the
12 developers but from researchers, is that when
13 you're extracting lithium directly in this
14 closed-loop process that you are not adding
15 contaminants to anything else. Now if I hear
16 something else, I'll be the first one, as many
17 other questions, probably, right, to say -- to
18 raise a red flag; right?

19 The other point that I want to address is
20 that you're right. If once lithium is developed
21 and if there is a buildup of other businesses,
22 right, they do come with an impact. They come
23 with the impact that any other building, if we're
24 building houses, if we're building a park, if
25 we're building anything, there is an impact

1 because you're moving dust. And all those things
2 are going to be reviewed in the environmental
3 processes that the state has, and they're going
4 to be mitigated, just like any other project.

5 And again, right now, I do not know what
6 those businesses or what that impact is, and I
7 don't know if there's anybody who knows that, but
8 that is my -- when I'm attending these meetings,
9 I'm not only facilitating the meeting, I'm also
10 looking out for these concerns that are your
11 concerns and that are my concerns, the other --
12 the Salton Sea and the community in which we
13 live.

14 And I'm saying this more for the context,
15 maybe, of the rest of the Commissioners and the
16 CEC staff is that our community has been dealing
17 with the impacts of a deteriorating Salton Sea
18 for far too long. Our communities have seen the
19 state not live up to its promise to addressing
20 these environmental concerns around the Salton
21 Sea. And these things are naturally a backdrop
22 to this conversation that we're having in
23 lithium, and it's going to keep coming up because
24 we need to see solutions at the Salton Sea, and
25 we need to see our communities improve.

1 And maybe on a more optimistic role for
2 me is what I'm seeing. Some of the
3 infrastructure that our communities need are
4 infrastructure that the development of lithium is
5 going to rely on, broadband, roads. You know, so
6 those could be some added benefits, too, that we
7 can improve our streets, that we can have access
8 to the internet in some of our more rural
9 communities.

10 So I know I answered in many, many ways,
11 but I'm trying to hold all different angles of
12 this topic and, also, ask that -- and I don't
13 even know what I'm -- if it's reassurance that
14 you need, but know that when I join these
15 meetings, I'm trying to hold all of those
16 perspectives.

17 And at the end it's not going to be this
18 Commissioners role to approve or not approve.
19 That's not what we're here for. We're here to do
20 an investigation, try to answer those same
21 questions that you're asking, and submit that
22 report to the legislature. So this Commission
23 does not have the authority to approve lithium or
24 to stop lithium.

25 So I will end with that. And I see

1 Assemblymember Eduardo Garcia.

2 ASSEMBLYMEMBER GARCIA: Thank you for the
3 opportunity to say a few words. And you've
4 addressed some of the things that I will align my
5 comments with.

6 But I'll say this, I think the starting
7 point to looking at the public health
8 implications of this would be to take a look at
9 the current geothermal development that's
10 generating clean baseload energy as we speak and
11 has the Public Health Departments of Imperial
12 County, has the Water Boards, Regional Water
13 Boards of Imperial County have any other relevant
14 regulatory agencies received and have been able
15 to confirm that there are public health
16 regulatory issues not in compliance with the
17 expectations, whether it be of the local or the
18 state ordinance that are in place?

19 That, I think, would lead us to a
20 conversation about, so what are the additional
21 things to take a look at as it relates to public
22 health?

23 Let's be very clear. The geothermal, as
24 far as we know, isn't what's contributing to air
25 quality issues around the Salton Sea. Geothermal

1 development has been occurring there for several
2 decades now. What's happening here with the
3 lithium conversation is taking that process one
4 step forward and capturing a mineral that is a
5 byproduct of the development of geothermal.

6 So I think if we're going to pinpoint
7 what the environmental problems at the Salton Sea
8 area, it should be pointed to a dying sea, a lack
9 of expedited urgency to develop projects in and
10 around the sea.

11 And that really is something that, for
12 me, if this opportunity moves forward, clearly,
13 there has to be a direct benefit to addressing
14 Salton Sea mitigation restoration issues,
15 operation and maintenance issues, ten-year
16 management plan development. Someone will need
17 to help with the operation and maintenance of a
18 project in North Shore as the North Shore Pilot
19 Project gets off the ground, or the projects in
20 Desert Shores, or for that matter the current
21 4,000-acre habitat restoration project on the
22 southeast end of the Salton Sea which is the
23 first of its kind as it relates to the state
24 living up to its responsibility.

25 So I appreciate the conversation about

1 public health. I don't think we need to go very
2 far to determine if the current geothermal
3 operations in the south end of the sea have
4 contributed to any public health issues, given
5 that they've been out there in operation for 30
6 years. The public health agencies, the local
7 water regulatory agencies could potentially help
8 us understand that a bit better. And as I
9 understand today, those have not been issues that
10 could be pinpointed as responsible for the
11 environmental problems that we have out at the
12 sea. If I'm wrong I will stand corrected.

13 But we certainly need to start there.
14 It's not as simple as saying that right there is
15 the problem, therefore we do not want our
16 community to see any progress, any benefit that
17 could address environmental problems that are
18 before us, and I think we all believe and agree
19 with, need to be addressed.

20 CHAIR PAZ: Are there other questions
21 from the North Shore Yacht Club?

22 UNIDENTIFIED FEMALE: (Speaking Spanish.)

23 CHAIR PAZ: Gracias. We will invite the
24 interpreter to translate that question.

25 (Spanish interpretation given off mike.)

1 CHAIR PAZ: Okay. I don't know if there
2 was a question imbedded in that but is there,
3 maybe, a response from any of the Commissioners?
4 We can move on to the next question then.

5 Is there another question from the North
6 Shore Yacht Club?

7 MS. LOERA: Yes. This is Mariela Loera
8 from Leadership Counsel. And I (indiscernible) a
9 question, I think, for all of us.

10 The majority of this meeting should not
11 have been you all talking to us about you
12 listening but, instead, you were listening from
13 (indiscernible). Having a public meeting on a
14 more consistent, on a monthly basis, as you all
15 have had up until now, the Lithium Valley
16 Commission is what I'm talking about, even if it
17 is translated, that is not sufficient to the
18 Public Information Act. This needs to be a
19 public engagement when -- even if they're held at
20 a monthly meeting, or however the community
21 chooses to have them. They need to be more
22 accessible to community. And when they are
23 provided, like in this space, they should be led
24 primarily by community.

25 I understand that at this point there is

1 a need to answer a lot of questions, like the
2 ones that we, the Leadership Counsel, submitted
3 to the Lithium Valley Commission. But in order
4 to answer those questions and have that
5 conversation with the community, we need to have
6 more community meetings and public meetings like
7 this. And this should not have been done right
8 now. They should have been done eight months
9 ago, nine months ago. This is not acceptable at
10 all.

11 And even in your responses to our
12 questions are these are minimal public health
13 impacts, these are minimal environmental
14 public -- environmental impacts, you haven't even
15 given us information as to what exactly that
16 means. And that's why we still have the similar
17 and same questions.

18 Another problem that I have is that all
19 of the conversations that are happening,
20 including comments from community representatives
21 of the Lithium Valley Commission, are suggestive
22 of lithium extraction happening and being, much
23 like the previous commenter said, being such a
24 great thing without, until this point, any sort
25 of communication happening, and that's really

1 problematic, including things like using the term
2 lithium recovery before even having any
3 conversations until now. And this meeting is the
4 first meeting where I hear that term be used. I
5 don't know if it was purposefully used in this
6 meeting for the community to give us some sort of
7 positive perspective about. That's not okay
8 either.

9 So with that and all of this, my question
10 is: How will community be made a central part of
11 the conversation in the decision-making process
12 moving forward?

13 Thank you.

14 CHAIR PAZ: Can you repeat your question
15 a little slower? Because I don't think I got
16 everything you asked.

17 MS. LOERA: The question is: How will
18 community be made a central part of the
19 conversation in the decision-making process
20 moving forward?

21 CHAIR PAZ: Yeah. I think I will start,
22 again, by repeating myself maybe a little bit,
23 that this Commission is not going to be making
24 any decision on whether lithium moves forward or
25 it stops. That is not the role of this

1 Commission.

2 What this Commission is going to be doing
3 is researching, analyzing these topics. And the
4 topics that you're mentioning about impacts, we
5 are going to be, in the report that we submit to
6 the legislature, we are going to be talking about
7 those. And believe me, I'm not going to be
8 complacent with a report that states it's
9 minimal. We are probably not there yet. We are
10 still doing this research. And you will see
11 those answers as we are finding them ourselves.
12 So that is my commitment as a Commissioner.

13 Are there any other of my colleagues who
14 have a response? Okay.

15 So seeing none, are there other questions
16 from the North Shore Yacht Club?

17 And just I want to point out that the
18 Coachella site did not have any questions and
19 they are already closing.

20 But if there are still questions from the
21 North Shore Yacht Club, we would like to hear
22 them now. Okay.

23 COMMISSIONER OLMEDO: Yeah. I just
24 wanted to say, I lost my mike and computer
25 access, so I wanted to raise my hand. So you

1 call on me whenever. You know, I'll stay in the
2 queue.

3 CHAIR PAZ: Okay. Thank you. Do you --
4 well, I don't see any questions, Commissioner
5 Olmedo, right now. So if you have an answer to
6 one of the questions that has been asked, go
7 ahead.

8 COMMISSIONER OLMEDO: Yes. I just wanted
9 to just make a general comment. And it's going
10 to be really important to -- you know, I think we
11 owe it to the community. You know, a lot of good
12 questions were raised. And every one of these
13 questions, we need to be able to back it up by
14 science, research, unbiased, right, independent
15 science and research.

16 I feel uncomfortable, you know, answering
17 a lot of these questions, again, because, I mean,
18 are we the right respondents to them? Or is it
19 that, you know, we're just so enthusiastic about
20 this opportunity we don't want to destabilize or
21 discourage? But, ultimately, I mean, public
22 health isn't a negotiable chip. You know, that's
23 not something as to whether, you know, where's
24 the cost benefit? You know, where's the benefit
25 in terms of the health and, you know,

1 (indiscernible) not know? Of course, it never
2 does, you know?

3 And that is something that, as a
4 Commissioner, I'm going to be continually
5 persistent. You never negotiate a public's
6 health because what is the cost of human life if
7 they are persistently exposed to something that
8 is creating -- either lowering the quality of
9 life or causing some type of, you know, health
10 impact or so on, or something that is
11 irreversible.

12 Also, you know, there is the -- and I'm
13 glad the way that Assemblymember Garcia, you
14 know, called it out, there are these regulations
15 that need to be followed. Those aren't
16 negotiable. That needs to happen.

17 So again, there's a lot of opportunity
18 here to be able to build an industry that is
19 sustainable, responds to the community's
20 concerns. But again, it's going to be very
21 important that we are responding to the community
22 with facts and not necessarily just with
23 enthusiasm or with concerns that, you know -- and
24 we have seen this historically. But we don't
25 want to push too hard or, you know, we're afraid

1 that this opportunity is going to be missed.

2 And so, yeah, that's the way industry
3 always shows up; right? Our duty is to be able
4 to do the best we can, put it on paper. Why?
5 Because even just right here, the New River, I
6 still remember 20 years ago, oh, so and so came
7 out here, shook my hand and promised me, you
8 know? So and so from Washington, we took a trip
9 all the way to Washington, and they promised us.

10 You know, it's going to be very important
11 that we -- that the community gets the facts,
12 gets the information, gets the signature on the
13 paper, and that we do our due diligence as
14 Commissioners and not necessarily react to threat
15 or fear that this opportunity is going to, you
16 know, get past us. There is policies. There is
17 a movement to distance ourself from more
18 destructive fuel sources.

19 So, yes, the opportunity is here. The
20 resource is in the public domain for the majority
21 of its part. Let's, you know, make sure the
22 community is engaged in getting a fair
23 opportunity in this, but let's not instill fear,
24 concern. I think that's our responsibility as
25 Commissioners that we don't get ahead of

1 ourselves and try to respond because some of the
2 responses and questions, I think they deserve a
3 much more profound, deeper, accurate responses.

4 Conchita was one of those that really --
5 you know, her questions, I feel, do deserve some
6 real facts behind them.

7 So thank you.

8 CHAIR PAZ: Commissioner Ruiz?

9 COMMISSIONER RUIZ: Yeah. I just want to
10 respond to one of the questions that -- I think
11 it was Mariela from Leadership Counsel, how can
12 the community participate? I think, you know,
13 this is probably one of the venues, and I
14 appreciate the CEC for putting this platform. It
15 is important for the community to come and voice
16 all their concerns that is fear, and
17 understandably so. I think these communities
18 have been dealing with a lot, a lot of issue
19 environmentally, public health-wise for many --
20 for many years.

21 But I think, you know, this is a unique
22 opportunity. And we need to be dialect to here.
23 We need -- it is important to see both sides.
24 And I think the opportunity here is that lithium
25 can definitely present new opportunities,

1 especially in a climate change crisis, to provide
2 better and cleaner sources of energy. I think,
3 you know, the opportunity is here. It is
4 important to see that the impacts are minimum and
5 that the benefits totally outweigh the negatives.

6 So I think, you know, that everyone --
7 and I think it is a long answer to the question,
8 but I think it's important for community members
9 to participate, to understand the process or the
10 processes, and be part of, you know, these
11 conversations that will allow everyone to have a
12 better understanding of this industry and how can
13 this industry bring the resources to the
14 communities, jobs, you know, and -- but overall,
15 I think, contribute to the really daunting tasks.

16 You know, in California, if California is
17 going to electrify every single vehicle by 2035,
18 we're going to need a lot of clean energy
19 sources. And lithium can, I think, you know,
20 potentially, can bring, you know, those answers.

21 CHAIR PAZ: Thank you, Commissioner Ruiz.

22 Elisabeth, I think at this point, I don't
23 see any other questions from North Shore. There
24 were none in Coachella. I think it's to go to
25 the phone and see if there are any questions from

1 those participating via phone.

2 MS. DE JONG: Thank you, Chair Paz.

3 So as we turn to the Zoom application --
4 (clears throat) I'm so sorry -- if you could
5 please use the raise-hand feature if you'd like
6 to be called on to speak. And if you've called
7 in, please dial star nine to raise your hand, and
8 then star six to un-mute your phone line. So
9 first, we'll go to those hands raised in the Zoom
10 application, then the phones, and then to reading
11 comments.

12 So Art Gertz, you should be able to speak
13 or un-mute yourself. Okay. I will come back to
14 Art to see if he's still there.

15 But Consuelo, you should be able to un-
16 mute yourself.

17 MR. GERTZ: Can you hear me now?

18 CONSUELA: Yeah. Hi.

19 CHAIR PAZ: Oh.

20 MR. GERTZ: Can you hear me now?

21 CHAIR PAZ: So sorry about that,
22 Consuela. We will come to right away.

23 But, Art, if you wouldn't mind, just go
24 ahead and give your comment?

25 MR. GERTZ: Yes. For the record, Art

1 Gertz, A-R-T G-E-R-T-Z, resident of West Shores.

2 I have a question for the Commission.

3 We've been assured that the water within
4 Salton Sea is no way connected to lithium
5 extraction. My question is: Will the Commission
6 oppose privately or publicly the possibility of
7 ocean water import? That is my question.

8 CHAIR PAZ: Thank you.

9 Is there an answer from any of the
10 Commissioners?

11 Jonathan?

12 COMMISSIONER WEISGALL: I think it's a
13 legitimate question. It needs to be studied.
14 There will be need for water resources if the
15 drought in the west continues the way it is.
16 Importing water from elsewhere and desalinating
17 it may be necessary. I think it's premature but
18 I think it's the kind of a question that should
19 be on the table.

20 CHAIR PAZ: Thank you.

21 Next question.

22 MS. DE JONG: Thank you.

23 Consuela, you should be able to un-mute.

24 CONSEULA: Oh, yeah. Hi everyone. So my
25 comment is this, I don't want to the extraction

1 to happen, period. Say whatever you want,
2 extraction is extraction, especially in a land
3 that has already been severely damaged by state
4 and federal neglect (indiscernible) and
5 pesticides. And you've made it very clear that
6 kind of the only, quote unquote, "benefit" or
7 motivation that's behind this project is
8 financial gain.

9 So my question is: when we say that we do
10 not want the extraction to occur, is this
11 something that you guys will actually support
12 when we say this, whether if it's when you report
13 this to the higher ups to the state or is this
14 just lip service? Because lithium is not a
15 renewable energy source. And I actually want to
16 ask that, if this is like -- if you guys will
17 actually listen to us?

18 Thank you.

19 CHAIR PAZ: Thank you, Consuela, for your
20 question.

21 These meetings are recorded. The report
22 will reflect the comments that we received from
23 all of our public engagement meetings. So to the
24 extent, if you're asking what you are saying and
25 the comments that we have heard today, will be

1 reflected on the report.

2 Next question.

3 MS. DE JONG: Thank you.

4 So we have a hand raised from Tom
5 Sephton.

6 MR. SEPHTON: Thank you for the
7 opportunity. I'd like to direct my question to
8 the industry representatives, Rod Colwell and
9 Jonathan Weisgall.

10 And the question of water supply has been
11 raised and that's a relevant one. And I think
12 you responded to something tangentially related
13 to that. But I understand from earlier that
14 you're going to be using the IID interim water
15 supply. And while you have a 90 percent
16 reduction in water use, you still need some.
17 That water supply was set aside to be 25,000 acre
18 feet per year. I think about 5,000 has already
19 been purchased by EnergySource. Is that going
20 to -- is the remainder of that going to be enough
21 for full lithium development?

22 A related question. We've heard from
23 many local residents the concern about dust. And
24 that dust is relevant, both to what's coming off
25 the desert but, very significantly, fine

1 particles and toxic materials coming off the
2 drying Salton Sea. The geothermal companies are
3 not responsible for that. That's because we're
4 selling off water supply to other regions, but
5 it's a legitimate question.

6 And we're -- and I'm a board member of
7 the EcoMedia Compass, a nonprofit located in the
8 West Shores. And we're hearing from the people
9 we talk to in the community that they're worried
10 about the thought that because of the plan for
11 developing lithium resources, that officials and
12 industry want to shrink the Salton Sea down even
13 more than it already is. We know that there's
14 about half of the available Salton Sea KGRA
15 (phonetic) is still underwater.

16 I personally don't believe it's necessary
17 to shrink the sea to get at the resource, but
18 could you comment on whether, as industry
19 representatives, you think it's necessary to
20 shrink the sea in order to drill for the
21 resource?

22 And then a final question related to that
23 is what can industry and development do to help
24 the restoration of the Salton Sea? How can you
25 be part of the solution?

1 Thanks.

2 CHAIR PAZ: All right. Thank you.

3 And, Sergio Rodriguez?

4 COMMISSIONER WEISGALL: Oh, do you want
5 to respond? Oh, I'm sorry. I thought you wanted
6 a response.

7 MS. DE JONG: Oh, I'm so sorry.

8 COMMISSIONER WEISGALL: Real quick,
9 again, very limited time. All very good
10 questions.

11 Number one, question one, I don't know
12 the exact amount of acre feet per year, Tom.
13 But, again, when we get closer to commercial we
14 should know.

15 Number two, my company has absolutely no
16 interest in the continued shrinking of the Salton
17 Sea. We have no lease rights in any lands on the
18 Salton Sea. And I thin your point is well taken
19 about, you know, the ongoing deterioration.

20 And I'm already forgetting the third
21 point, but it's 11:30 p.m. back here in D.C. I
22 apologize.

23 MS. DE JONG: All right. Thank you.
24 So I think we do have a hand raised from Rod
25 Colwell.

1 COMMISSIONER COLWELL: Yeah, just real
2 quick. Great questions, Tom. Thank you.

3 So water supply, I'd probably refer to
4 the whole -- everyone on this call to the recent
5 EnergySource EIR, a 1,500-page document that
6 covers most of these concerns, specifically water
7 at 4,000 -- 3,456 acre feet is probably a good
8 gage. And improving that is, you know, is
9 certainly beneficial.

10 The dust and playa, I mean, there's no
11 connection whatsoever between the proposed
12 developments, current and future, to the Salton
13 Sea at all. The Salton Sea is, unfortunately,
14 shrinking. Definitely haven't heard the
15 connection between wanting to accelerate the
16 recession of the sea. That's sort of news to me.
17 I could be missing something there.

18 And, yes, localization of dust, like any
19 industrial development, if there's trucks, you
20 know, on the road the roads need to be
21 blacktopped, or we've got to be careful on that.
22 I think the approval process is very, very
23 arduous. And I would refer you, Tom, to the
24 EnergySource EIR that covers most of those issues
25 scientifically.

1 Thank you.

2 MS. DE JONG: All right. Thank you.

3 The next public commenter is Sergio
4 Rodriguez.

5 I'm not hearing anything, so I will go to
6 the next commenter, Pati Leal-Gutierrez.

7 MS. LEAL-GUTIERREZ: Yes. Hi everyone.
8 Good evening. My name is Patricia Leal-
9 Gutierrez.

10 And my question is the one on the chat,
11 so I'll just go ahead and elaborate a little bit
12 more. But it's in regards to the public health
13 and local air and water agencies, more of a
14 question, if the Commission can share any reports
15 or studies or if you've seen any reports or
16 studies that look into the public health impacts
17 associated with geothermal, specifically the ones
18 located out here in Imperial County, specifically
19 in the southern end of the Salton Sea? I'm
20 unsure if this information is actually available.

21 I think that without really studying and
22 really understanding the health impacts of what
23 the current geothermals may be adding to the
24 public health conversation, it's not as easy to
25 say that geothermal or geothermal practices, you

1 know, can be easily dismissed, that they're not
2 causing any health issues in this area.

3 So as stated before, I think that the
4 California Department of Public Health should be
5 in these conversations, again, to provide input,
6 data, and guidance as this Commission is really
7 looking at providing a report. This component of
8 public health has often been a lens that hasn't
9 been included, even as we think about Salton Sea
10 and the Salton Sea impacts, but more so in this
11 case.

12 I think we're trying to jump the line
13 here where, yes, geothermals have been out here
14 for more than 20 years but I'm not sure if it has
15 been studied through a public health lens in
16 regards to what impacts we've seen or not. We
17 know that asthma rates are higher, much, much
18 higher in the southern end than in the northern
19 end. We do have the Salton Sea in common but I
20 think there is underlying layers, intersectional
21 layers that may contribute to that.

22 So I think, for me, it's just a question
23 of really looking into reports or studies that
24 further look into the public health component as
25 it relates to the current geothermals as, you

1 know, this Commission is looking at the further
2 impacts or added impacts when it comes to
3 lithium.

4 So again, the request is really to bring
5 into the conversations and be a part to bring
6 California Department of Public Health.

7 Thank you.

8 CHAIR PAZ: Rod, you have your hand up
9 for this question?

10 COMMISSIONER COLWELL: Yeah. Again, I
11 would refer this question, as previously
12 mentioned, to the EnergySource EIR. There is a
13 current study, it's less than 30 days old, that
14 covers air quality, energy, greenhouse gases,
15 hazardous materials, hydrology and water quality,
16 noise, transportation, and all of those. So that
17 document that you're asking for, you know, very
18 good question, is available to you. And I
19 believe in the chat there is a link to access
20 that document for anyone who wants to look at
21 that.

22 CHAIR PAZ: Thank you. And is there
23 anyone -- I know during the presentation earlier
24 there was mention about the various research,
25 maybe, projects that the CEC or Department of

1 Energy have funded. Are any of those available,
2 completed? I don't know if anybody from the CEC
3 can answer that question.

4 MS. DE JONG: If I could defer, possibly,
5 to someone from the CEC to answer that question,
6 if we're able to?

7 CHAIR PAZ: Yeah. Please.

8 MS. LEE: Hello. This is Natalie Lee
9 from the CEC.

10 I would point to some of the summaries
11 that have been provided on our public website.
12 I'm not able to provide a thorough and current
13 summary of all of our -- the status of all of our
14 current research projects, however, we do make
15 the reports of those projects available through
16 our website. And this is an area that we can
17 follow up with the Lithium Valley Commission to
18 be sure that you have links to all of those
19 resources available through the Lithium Valley
20 Commission docket, as well.

21 CHAIR PAZ: Thank you, Natalie. And I
22 think what I'm hearing, too, there's been a lot
23 of reference to the EIR report that is long and
24 technical. And I think some support around
25 summarizing or having someone presented to us and

1 the community, so that we can all have access to
2 that information, would be very helpful,
3 especially because the community groups not have
4 attorneys or resources who may have the time to
5 look through such a lengthy report.

6 Next question, please.

7 MS. DE JONG: All right. Michael Dea,
8 you should be able to un-mute yourself.

9 MR. DEA: Yeah. This is -- good evening.
10 I don't know if it's more of a comment than a
11 question, if that's appropriate now? I know
12 we're getting late on time.

13 So you know, my name is Mike Dea. I'm
14 with the Laborers' International Union Local 1184
15 here in Imperial County out of El Centro. And
16 we've got probably, approximately, 1,000 to 1,200
17 members that live and work in the Imperial
18 County. And we are well behind these projects.
19 I mean, these jobs create -- these jobs that
20 these developers are going to create not only
21 benefit the community but the surrounding
22 communities with longevity jobs.

23 And you know, I'm hearing a lot of
24 comments about the environmental impacts. And as
25 someone who reviews those impacts, the EIRs, and

1 makes sure that developers and contractors build
2 correctly and securely and safely, not only for
3 the workers but for the surrounding communities,
4 these developers that are looking into the
5 lithium industry -- and I've been a 26-year
6 resident of eastern Riverside County and driving
7 down the Highway 6 corridor and heading down, and
8 they're building solar fields with our members --
9 look out for them and their safety.

10 I think that these community workforce
11 agreements that congressman -- or Assemblymember
12 Eduardo Garcia is looking to do are great for the
13 community and ensures local hire, local
14 apprenticeship progs are contributed to, you
15 know, for our members and their grandchildren and
16 their nephews and aunts and uncles, the people
17 that live in these communities that need these
18 jobs to buy homes and to buy food. And not only
19 those -- for those reasons, the benefits that
20 these jobs provide to the membership. I mean,
21 they get full health and welfare, and dental and
22 vision, prescription.

23 And I can go on and on about how
24 crucially important jobs are. There's nothing
25 more important to residents in the Imperial

1 Valley than a job and to be able to provide for
2 their families. And these developers come into
3 this area to put all the risk, all the money,
4 all, everything that's required to build these
5 projects, so we need to support them.

6 I agree, we need to make sure that
7 they're built safe and sound as possible as far
8 as the environmental impacts. I look at EIRs
9 constantly to make sure that they're doing these
10 things.

11 So again, I apologize if I'm at the wrong
12 particular moment in time. I've been listening
13 to this for, now, two-and-a-half to three, almost
14 three hours, and these are all great questions.
15 And we are stakeholders and we should have these
16 forums. And I appreciate the Committee and what
17 you guys are doing to make sure these things
18 happen.

19 So again, if there's anything LIONA
20 (phonetic) could do to help or be assistive of
21 anything, we're here to help and to make sure
22 these things are built correctly.

23 Thank you.

24 CHAIR PAZ: Thank you.

25 Next question.

1 MS. DE JONG: Yes. Thank you.

2 Stephanie White, you should be able to
3 un-mute.

4 MS. WHITE: Hi. Good evening, everybody.
5 Thank you for hosting this and inviting the
6 community, such as myself.

7 I was just wondering if the geothermal
8 people here today could speak on exactly where
9 the brine of the so-called injected, as it's
10 usually called in the media, back into -- where
11 does that go exactly? Does that eventually end
12 up in the Salton Sea or does that go on --
13 somewhere on their parcel of property? Is there
14 anywhere that we can maybe, as independent
15 researchers, take a look at those impacts
16 ourselves? Because that's kind of hard to find.

17 The other kind of comment I have is that,
18 with all due respect to the maybe last commenter
19 who made a comment, jobs don't fix the health
20 issue. And the health issue is the real
21 pressing, immediate priority here. And jobs are
22 great but jobs don't save lives immediately in
23 the way that they need to be saved down there at
24 the Salton Sea today.

25 And so that's what a lot of people are

1 pressing upon, the health issues and the
2 environment, because if we ignore and keep on
3 ignoring this environment, we say, oh, we've been
4 down there for 30 years, but you can just say the
5 same that, as the other person said, that the
6 asthma rates are high, you could just as easily
7 say that those extraction processes may have
8 accelerated the issues that we are seeing today.

9 So I'm just mainly wondering, where
10 exactly can we kind of look where the brine is
11 going physically?

12 Thank you very much for your time.

13 CHAIR PAZ: Jonathan?

14 COMMISSIONER WEISGALL: We have 23
15 production wells. They go about, roughly, a
16 mile-and-a-half deep under the earth's surface.
17 And we have about the same number of what are
18 called injection wells. So the reason geothermal
19 is renewable and sustainable is that we want that
20 geothermal resource to go on forever. So in the
21 35 years we've been operating there's been no
22 decrease in the pressure of the reservoir because
23 the brine goes right back into the reservoir.

24 You did hear Elisabeth make a
25 presentation at the beginning about lithium.

1 There are 250 parts per million of lithium in
2 that brine, so that will not go back into the
3 geothermal reservoir. But pretty much the rest
4 of it is designed to go right back into the
5 geothermal reservoir so that geothermal can
6 continue to be sustainable. There are -- I mean,
7 that's a general comment.

8 Again, it's a good question, and things
9 like this need a written answer. But I hope that
10 at least gives you a rough idea of how all that
11 works.

12 The injection wells are also a mile to a
13 mile-and-a-half deep, probably a little bit more
14 shallow than the production wells but not by
15 much.

16 CHAIR PAZ: Martha?

17 COMMISSIONER GUZMAN-ACEVAS: Well, I was
18 just going to elaborate on the suggestion and see
19 if Jonathan, or maybe a couple of the others, Rod
20 or others, because I've seen it work very
21 constructively in other settings, which is, you
22 know, particularly with COVID, maybe there's an
23 opportunity for a virtual tour, just to -- it
24 just helps sometimes for people to have the
25 visual opportunity.

1 You know, having had the privilege of
2 visiting some of these facilities, I think it
3 helps, you know, just helps to make it tangible,
4 make it, in some ways, less scary, and also maybe
5 identify things that we're not looking at from a
6 lens that we see. You know, as from the energy
7 side, we see so much value from this resource,
8 but it is a good thing. And perhaps, some sort
9 of a virtual tour that we could have, that the
10 community could have access to clicking on and
11 seeing what this looks like, and maybe
12 demystifying some of what we are talking about
13 when we talk about what you just described,
14 Jonathan.

15 And so if we could be helpful in that
16 process, please let us know. But I know that,
17 certainly, you have the more relevant players
18 here as part of the Commission that could offer
19 that.

20 CHAIR PAZ: Thank you, Martha.

21 Next question.

22 MS. DE JONG: Thank you.

23 Margaret Slattery?

24 MS. SLATTERY: Yeah. Am I un-muted?

25 MS. DE JONG: Yes.

1 MS. SLATTERY: Okay. Great. Thank you
2 so much. And thank you to everyone for staying
3 up late and hosting this event. This is Mag
4 Slattery, S-L-A-T-T-E-R-Y. I'm a PhD student
5 studying lithium battery materials at UC Davis.
6 And I'm also an affiliate of the Lithium Resource
7 Research and Innovation Center at Lawrence
8 Berkeley National Lab.

9 We have been fairly closely following the
10 Commission meetings and have created a survey
11 based on topics that are frequently mentioned by
12 Commissioners, presenters, and members of the
13 public. The purpose is to understand what
14 potential positive and negative impacts are the
15 most important to people who will be involved in
16 or effected by lithium extraction.

17 And then we will use that information to
18 make sure our research is useful to the Committee
19 and to local community members. Because, in
20 answer to some of the questions that have come up
21 before, the research really is an early
22 development phase in terms of the environments
23 impacts just because the technology is so new.

24 And, for example, I think it's clear to
25 me that any analysis of environmental impacts

1 needs to explicitly connect them to public
2 health, and then clearly explain why or why not
3 they're significant. And really, through this
4 survey, we're hoping to get more feedback like
5 that about what kind of information people would
6 like to see studies in academic literature.

7 The survey is available in Spanish and
8 English and should take no more than ten minutes
9 to complete. So we really encourage folks, if
10 you're able, to consider sharing your
11 perspective, and also sharing the survey with
12 your networks, if possible. And earlier I shared
13 links to the survey in the chat, as well as my
14 email address in case anyone has questions.

15 So thank you, again, for the time to
16 speak. And thanks to everybody who participated
17 in one of the livestream events.

18 CHAIR PAZ: Thank you.

19 Next question.

20 MS. DE JONG: Ronald Spears, you should
21 be able to un-mute yourself.

22 MR. SPEARS: Okay. Hi. Sorry. And I
23 know it's late, so I'll try to make it as quick
24 as possible. Ron Spears, S-P-E-A-R-S, President
25 of the Bahia Del Mar Property Owners Association

1 at Desert Shores. And I just have a real simple
2 question. I'm a pretty simple guy.

3 I'm confused at how you're extracting the
4 lithium from the Salton Sea but you're not using
5 water from the Salton Sea. If you can explain to
6 me how -- what this reservoir is and what its
7 relationship is to the Salton Sea, I'd be a
8 little more clear in how you're using water
9 sources but you're extracting lithium from the
10 Salton Sea. So if someone could explain that to
11 me, I'd appreciate it.

12 CHAIR PAZ: Rod?

13 COMMISSIONER COLWELL: Yeah. Thanks Ron.
14 Good question. And that's probably the most
15 important question to try to clear up.

16 There's no connection whatsoever to the
17 Salton Sea at all. We do not extract lithium
18 from the Salton Sea. We don't use water from the
19 Salton Sea. We're located, probably, a couple of
20 miles from the Salton Sea, so it's just a
21 geographical reference, and I understand why it
22 would cause some confusion.

23 The reservoir itself is approximately
24 7,000 to 8,000 feet below, you know, off the
25 Salton Sea on the southeast corner, and it runs

1 in about three miles from the shoreline. So that
2 brine is brought up, superheated brine, again,
3 flash the steam. We extract the lithium from the
4 brine in a closed loop. Then, as Jonathan
5 mentioned, it's reinjected back into the
6 formation.

7 I hope that helps.

8 COMMISSIONER WEISGALL: I just had one
9 quick point, which is the Salton Sea's maximum
10 depth is 43 feet. And our wells are a mile-and-
11 a-half deep, so there's really no relation.
12 There is no brine taken from the Salton Sea, no
13 water taken from the Salton Sea.

14 We need to get this clear, Madam Chair,
15 in writing. You know, it's a good question.
16 Clearly, everybody talks about Salton Sea
17 geothermal brine, so a question like this is a
18 perfectly logical one to ask, and it needs a full
19 explanation.

20 CHAIR PAZ: Thank you. Yes.

21 You know, it is almost 9:00. My
22 intention is for us to be done by 9:00. So I see
23 two more questions, hands up, aside from Ron's.
24 And then we will read the comments and see if
25 there are any other public comments left. But

1 we're going to try to do this all in the last ten
2 minutes. Thank you, everyone, for staying with
3 us.

4 MS. DE JONG: Thank you.

5 If we could turn to Ivette Torres? You
6 should be able to speak.

7 MS. TORRES: Yeah. Good evening. I also
8 left a comment but it wasn't sent to everyone, so
9 wasn't sure if I could -- I just wanted to ask
10 here.

11 I just wanted to echo what community has
12 been asking for, a public health Commissioner or
13 someone to also guide and give that perspective,
14 as well, as that should be a concern for the
15 community and has been mentioned multiple times
16 tonight. So I really wanted to stand in
17 solidarity with that.

18 But I also have a question in regards to
19 what research is being done with like community
20 benefit agreements? And as the recovery process
21 would continue and more developers would want to
22 invest, what would be the maximum; right? Like
23 where does the stop? Like how many acres around
24 the Salton Sea and the Imperial Valley and
25 Coachella Valley will be taken up by this

1 industry in the future? And I think that's
2 important to know, right, because a lot of the
3 issues that we have now were because things
4 weren't projected and looked at in a wholistic
5 view.

6 So I think that's something that's really
7 important for this Committee, these Commissioners
8 to look at, like what is the maximum? When is
9 enough?

10 Thank you.

11 CHAIR PAZ: Jonathan?

12 COMMISSIONER WEISGALL: Real comment.
13 Another very good question.

14 It's a little premature on our part but I
15 think that, give or take, 30 acres would be about
16 the most we would use for lithium production, and
17 probably a lot less. So I would put 30 acres at
18 the absolute tops. And it would be in lands
19 immediately adjacent to our existing geothermal
20 plants.

21 CHAIR PAZ: Thank you.

22 Elisabeth, I think that concludes the
23 last -- that was our last question from the
24 phone, if you want to go ahead and read the
25 comments and questions?

1 And again, I think some of those might be
2 repeated, so my -- what I want to mention is that
3 all of these questions are questions that are
4 going to be influencing, right, the types of
5 questions that we want to address in the report,
6 so I just want to give you, again, that
7 reassurance. Even if we do not answer right now,
8 I mean, the report is not due until October. And
9 so just want to ask for your understanding, even
10 if you feel that some of your questions are not
11 answered right now, it's because we might not
12 just have the answers right at this moment.

13 MS. DE JONG: Thank you, Chair Paz. So I
14 will read questions from the question and answer
15 box and, as you noted, one comment per person.

16 So the first one that I'll read is from
17 James Silva.

18 "Development of lithium brine recovery
19 technology represents competition for
20 existing suppliers of lithium
21 internationally, as mentioned. What is the
22 opportunity for existing suppliers to pivot
23 and undermine the ability of domestic
24 production to become sufficiently competitive
25 to secure long-term investment?"

1 I'm sorry. So I'll continue or -- I do
2 see a hand raised from Commissioner Colwell.

3 COMMISSIONER COLWELL: Sorry. Yeah, just
4 a quick one.

5 I think the Salton Sea resources are
6 competitive, probably, globally. There's still a
7 lot of work to be done. But compared to hard
8 rock mining and processing offshore, I think we
9 are in that first cortile of cost, so -- but
10 again, a little bit more work to be done.

11 And again, the environmental credentials
12 of this type of lithium is -- has a value, as
13 well.

14 Thank you.

15 MS. DE JONG: Great. Thank you.

16 The next written comment is from Isabella
17 Arezano Saltero (phonetic), and that is,

18 "There is a lot of mention of job creation.
19 Will the lithium extraction companies
20 actually offer these jobs to community
21 members that don't have the required training
22 and invest the money in training them, or
23 will the companies import workers from other
24 municipalities that already have the
25 necessary training that's not benefitting the

1 local community?"

2 I see a hand raised from Commissioner
3 Weisgall.

4 COMMISSIONER WEISGALL: Yeah, we've
5 covered this, and it's a very good question.

6 There's no benefit to bringing folks in
7 from outside Imperial County. You lose those
8 workers. We want to hire locally. We want to
9 hire people who know what it's like to live in
10 Imperial County. Will we train folks? Of course
11 we will. A lot of the folks we hire are young
12 folks out of high school without even
13 certificates from community college. Others are
14 community college graduates.

15 So believe me, you know, it's not going
16 to be easy to recruit the numbers that we're
17 looking at. Look at what's happening right now
18 throughout the country, the great resignation. I
19 mean, you've got folks leaving jobs. We have
20 a -- we're going to have a big task recruiting
21 here. And we're going to have every interest in
22 training, in job fairs, in career days to explain
23 what we've got to offer in internships and the
24 likes.

25 So, absolutely, to the strongest interest

1 in local hires and would only bring in workers if
2 we can't hire locally. Why would you not hire
3 locally? Of course you would. That's what we
4 want to do.

5 MS. DE JONG: Thank you.

6 The next written comment says,
7 "I am encouraged by the rationale fact-based
8 discussion I have heard so far in today's
9 meeting. I especially appreciate the
10 Commissioners support for improving local
11 economy and education.
12 "One of the biggest questions from local
13 residents is how do the Commissioners
14 anticipate that the lithium extraction
15 companies will support the restoration of the
16 badly degraded Salton Sea? The biggest
17 concern in this regard is controlling the
18 emissions of toxic dust from the contaminated
19 salt deposits of the playas/beaches of the
20 Salton Sea. Please provide actual
21 specifics."

22 All right, I will move on.

23 There was a question submitted that said,
24 "Can Rod elaborate on the current project?"

25 Michael McKibben said,

1 “The evidence for a complete lack of
2 connection between the sea and the geothermal
3 reservoir is presented in Williams and
4 McKibben 1989.”

5 And if I could ask the translator to help
6 with translating the comment that came in from
7 Sergio Rodriguez? There are three in the Q&A
8 box.

9 (Spanish translation provided off mike.)

10 MS. DE JONG: Thank you.

11 And there is one more comment by Senator
12 Ramirez, if you wouldn't mind reading?

13 (Spanish translation provided off mike.)

14 MS. DE JONG: Great. Thank you.

15 Those are all of the questions submitted.
16 Oh, I'm sorry, there is one more.

17 “What does Supervisor Kelley believe the
18 positive benefits will be for his North End
19 Energy Commission District?”

20 Okay. Those are all of the questions
21 submitted that are from unique submitters. so
22 comments that -- commenters that had already had
23 an opportunity earlier -- or sorry, had not
24 already had an opportunity earlier in the
25 meeting.

1 So we'll move to you, Chair Paz, for
2 public comment. I do see that you have --

3 CHAIR PAZ: Thank you.

4 MS. DE JONG: -- a hand raised.

5 CHAIR PAZ: Thank you, Elisabeth.

6 And, yeah, this is the opportunity for
7 general public comment from anybody who's still
8 in the audience.

9 MS. DE JONG: Thank you. And Chair Paz,
10 I do see a hand raised from Commissioner Kelley.

11 CHAIR PAZ: Okay. We'll go to
12 Commissioner Kelley after the public comment if
13 that's okay?

14 MS. DE JONG: All right. Thank you.

15 MARIA: Hello. Maria Nava-Froelich,
16 Calipatria City Council.

17 I just want to thank the Lithium Valley
18 Commission for all their hard work that's been
19 happening behind the scenes.

20 I want to thank Mr. Kelley and Mr. Hanks,
21 Jose (phonetic) Olmedo and Eric Ruiz. There's
22 different people that have been really
23 participating and advocating for the North End.

24 I want to thank the CalEnergy, the
25 EnergySource, the Controlled Thermal Resources.

1 They've been really good partners to our
2 Calipatria School District. They have
3 contributed millions of dollars to our North End
4 community.

5 I want to say that I have been a long-
6 time activist and environmentalist, working
7 really hard. What I could see is this is going
8 to bring minimal negative impacts but I think
9 it's going to bring huge positive impacts to our
10 community. I look forward to the continued work
11 with the lithium workshops that have been taking
12 place that I've had the privilege of
13 participating in, really learning a lot.

14 We have members of the community that are
15 here today from the Niland Chamber of Commerce,
16 the Calipatria Chamber of Commerce, the Latin
17 American Club, the North End Alliance, all here
18 in support. Yes, we do have concerns. We want
19 to be able to have some leverage in regards to
20 some of the jobs that are coming to our
21 community. We want to have some leverage in
22 regards to some of the community benefits that
23 we're hoping to benefit from.

24 We are struggling economically. We are a
25 disadvantaged community. There is some

1 environmental issues that are taking place.
2 There's high asthma. And our Calipatria School
3 District is very supportive, as well as the City
4 of Calipatria.

5 There's talk about needing some water,
6 possibility of lithium project maybe using some
7 water from the sanitation district. I think our
8 city council will be open, yet, as to discuss and
9 approve.

10 But I want to thank our city Mayor for
11 being here, Huston Hisel, and Councilmember
12 Chavez, as well.

13 Thank you very much for allowing us to
14 speak today. And we look forward to the lithium
15 project coming to fruition. Thank you.

16 CHAIR PAZ: Thank you.

17 And Commissioner Kelley?

18 VICE CHAIR KELLEY: Thank you,
19 Commissioner Paz -- or Chairperson Paz.

20 That question was, I think that Elisabeth
21 read last, was where do I see or what am I
22 looking forward to for the development --

23 CHAIR PAZ: What are some --

24 VICE CHAIR KELLEY: -- and the impacts?

25 CHAIR PAZ: Yeah. What are the benefits

1 that you see?

2 VICE CHAIR KELLEY: The benefits I see?

3 And I know that Mr. Reyes and Ms. Nava have
4 spoken about it, and Mr. Weisgall has talked
5 about it, that we've been having these
6 conversations.

7 The benefits that I see is that because
8 of the action by the Public Utilities Commission
9 on June 24th that made geothermal recognized and
10 included in the Integrated Resource Plan for
11 California, lithium became an -- it became,
12 basically, a no-brainer for energy and mineral
13 extraction to happen in Imperial County.

14 And what I see as the benefit is that our
15 county has the opportunity to see an industry of
16 energy, of resource production and, hopefully,
17 manufacturing with that. And that would change
18 the demographics of what you've heard about,
19 being disadvantaged communities, underserved,
20 distal, rural, agricultural. We could double our
21 property tax value in the next eight years for
22 the entire county based off of what is being
23 proposed.

24 And there is more that needs to be
25 understood about what the impacts are

1 financially, environmentally, but all the
2 benefits that have already been shared through --
3 with this Commission and this workshop lead us in
4 the direction that we will see an opportunity for
5 our children and our grandchildren to be able to
6 live and thrive in Imperial County.

7 That's all.

8 CHAIR PAZ: Thank you, Vice Chair Kelley.

9 Elisabeth, back to you for public
10 comments.

11 MS. DE JONG: Yeah. Thank you, Chair
12 Paz. So we do have a number of comments written
13 into the chat for public comment. Would you like
14 me to read through all of those?

15 CHAIR PAZ: There's still one person in
16 Calipatria, so if we can recognize that person,
17 and then go through the written comments?

18 MR. LOPEZ: Good evening. My name is
19 Luis Lopez. And I want to thank everyone for
20 their hard work in making this community forum
21 happen.

22 And I want to thank the members of the
23 public who have come and joined us today, even
24 though the majority did leave because it is
25 pretty late, but this okay.

1 Lithium presents a unique opportunity for
2 the residents of Imperial County and Coachella
3 Valley. As you all may or may not know, Imperial
4 County is the poorest county in California with
5 one of the highest unemployment rates in not only
6 California but in the United States. The
7 recovery of lithium can provide jobs to many
8 people here in the county who are in desperate
9 need of providing for their families. This is
10 why it is imperative that the residents of
11 Imperial County and Eastern Coachella Valley are
12 prioritized when assembling the workforce for
13 lithium extraction.

14 Many of the lithium is found on public
15 lands, so it is only fair that the public is
16 taken into consideration. Taking the public into
17 consideration does not only mean providing them
18 with jobs, but it also means using some of the
19 money generated from lithium recovery to directly
20 benefit our disadvantaged communities.

21 For example, the revenue produced from
22 the mineral recovery could provide much needed
23 support of the IID's restoration of the Salton
24 Sea's dry lakebed which is exposing our
25 communities to toxic elements and damaging their

1 lungs.

2 This is a great and fortunate opportunity
3 for Imperial County and Coachella Valley. We
4 need to all make sure that lithium recovery
5 benefits everyone and not a select few.

6 Thank you.

7 CHAIR PAZ: Thank you.

8 And Elisabeth, I think that concludes our
9 public comments. I have a suggestion, given the
10 time, that the public comments that were
11 submitted written are all maybe docketed for
12 public record and made available to all the
13 Commissioners, so on our own time we can review
14 them at our own time, if that's possible?

15 MS. DE JONG: Yes, I believe we can go
16 ahead and docket what is submitted into the chat.

17 And I do just want to acknowledge,
18 Calipatria Community Center did raise their hand.

19 CHAIR PAZ: Thank you.

20 So is there another person in Calipatria?
21 I believe that was the last one. Okay.

22 I think that was it, Elisabeth. Thank
23 you for noticing that.

24 So we have a few comments. Next slide,
25 please.

1 Closing remarks. And I will start with
2 Vice Chair Kelley, see if you have any closing
3 remarks?

4 VICE CHAIR KELLEY: No, nothing. Thank
5 you.

6 CHAIR PAZ: Thank you.

7 Assemblymember Garcia, any closing
8 remarks?

9 ASSEMBLYMEMBER GARCIA: Thank you all for
10 participating. Looking forward to another
11 conversation where we continue to engage the
12 community, regardless of whether someone likes
13 the format or not, you know, that's not the issue
14 at hand.

15 The issue at hand here is that there are
16 numerous ways for the community to continue to
17 stay engaged. And I'm hopeful that the Lithium
18 Valley Commission will pursue other forms beyond
19 just the regular meetings happening once a month
20 or the meetings in between. Our office would be
21 more than happy to participate in those
22 conversations.

23 And look, there were not a lot of answers
24 to some questions, clearly because we are still
25 at the very beginning of doing our research to be

1 able to answer those questions substantively.

2 So with that being said, thank you to all
3 who participated. Look forward to you remaining
4 engaged and part of this process every step of
5 the way.

6 Thank you and have a good night.

7 CHAIR PAZ: Thank you.

8 Thank you, everyone. I am taking a lot
9 from all of the participation and discussion
10 tonight. And as the Assemblymember mentioned, we
11 are early in the process. And to, you know, to
12 the extent that some of these questions, if we
13 feel there are no answers, I think the Commission
14 will have to, at that point in their
15 recommendations, explore some of these, maybe a
16 recommendation to the legislature pointing out,
17 these are the areas where there is still
18 additional research or -- research and/or
19 resources needed; right?

20 So just, again, there's a lot of food for
21 thought and for us as Commissioners to consider
22 as we explore the upcoming topics in the
23 Commission.

24 So again, thank you, everybody, for
25 participating and staying with us.

1 And next slide.

2 That concludes our forum, so everyone
3 have a good night.

4 (The meeting adjourned at 9:11 p.m.)

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CERTIFICATE OF REPORTER

I do hereby certify that the testimony in the foregoing hearing was taken at the time and place therein stated; that the testimony of said witnesses were reported by me, a certified electronic court reporter and a disinterested person, and was under my supervision thereafter transcribed into typewriting.

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IN WITNESS WHEREOF, I have hereunto set my hand this 1st day of December, 2021.



MARTHA L. NELSON, CERT**367

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MARTHA L. NELSON, CERT**367

December 1, 2021