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#### CALIFORNIA ENERGY COMMISSION

In the matter of:
Notice of the Convening of )
The Lithium Valley )
Commission )

# NOTICE OF THE CONVENING OF THE LITHIUM VALLEY COMMISSION

REMOTE VIA ZOOM

THURSDAY, MAY 27, 2021 1:30 P.M.

Reported by:

Martha Nelson

#### APPEARANCES

## COMMISSIONERS

Sylvia Paz, Chair

Rod Colwell

Roderic Dolega

Miranda Flores

James C. Hanks

Ryan E. Kelley

Luis Olmedo

Frank Ruiz

Thomas Soto

Jonathan Weisgall

## CEC STAFF

Terra Weeks

Elisabeth de Jong

Deborah Dyer

# PUBLIC COMMENT

Orlando Foote

Eric Reyes

Mariella Lora

## P R O C E E D I N G S

- 1:30 P.M.
- 3 THURSDAY, MAY 27, 2021
- 4 CHAIR PAZ: Hello, everyone, and welcome
- 5 to the Lithium Valley Commission meeting. Before
- 6 we get started, I hand it over to Elisabeth De
- 7 Jong, the Energy Commission Project Manager for
- 8 the Lithium Valley Commission, and she will
- 9 provide some brief housekeeping.
- 10 MS. DE JONG: Thank you very much, Chair
- 11 Paz. This meeting is being conducted entirely
- 12 remotely via Zoom. This means that we are in
- 13 separate locations and communicating only through
- 14 electronic means. We are meeting in this fashion
- 15 consistent with Executive Orders N-25-20 and N-
- 16 29-20 and the recommendation from the California
- 17 Department of Public Health to encourage physical
- 18 distancing in order to slow the spread of COVID-
- 19 19.

1

- 20 This meeting is being recorded as well as
- 21 transcribed by a court reporter. The transcript
- 22 will be posted to the electronic docket; the
- 23 recording of the meeting will be available on the
- 24 Lithium Valley Commission webpage.
- 25 Members of the public will be muted

- 1 during the presentations, but there will be an
- 2 opportunity for public comment on each agenda
- 3 item and an additional opportunity for public
- 4 comment towards the end of the agenda.
- 5 To provide public comment, please use the
- 6 Raise Hand feature in your Zoom application to be
- 7 called on to speak. When you speak, please
- 8 provide your name and affiliation. If you've
- 9 called in by phone, you will need to dial \*9 to
- 10 raise your hand and then \*6 to unmute yourself.
- 11 Before speaking, please say and spell your name
- 12 for the court reporter.
- 13 There is also a Q&A window in the Zoom
- 14 application which you may use to type your
- 15 questions. If you want to provide public
- 16 comments but are unable to raise your hand in the
- 17 Zoom application or by phone, then during the
- 18 public comment portion of the meeting you may
- 19 type your comment into the Q&A window so we can
- 20 relay your comments. We will go over these
- 21 instructions again during the time for public
- 22 comment. Please remember to stay muted until
- 23 you've been called on to speak.
- We also have a chat function available
- 25 for IT support. We ask that the Lithium Valley

- 1 commissioners use the chat only for IT as well.
- 2 Any other comments are considered substantive to
- 3 the conversation and should be made publicly for
- 4 BK compliance.
- I will go ahead and lead us through the
- 6 roll call before handing it back over to Chair
- 7 Paz.
- 8 Okay. So I will call your name. Please
- 9 respond if you are present and turn your camera
- 10 on if you can.
- 11 Rod Colwell.
- 12 COMMISSIONER COLWELL: Present.
- 13 MS. DE JONG: Roderic Dolega. Currently
- 14 unavailable.
- 15 COMMISSIONER DOLEGA: Present.
- MS. DE JONG: Oh, present. Okay. Okay.
- Miranda Flores.
- 18 COMMISSIONER FLORES: Present.
- 19 MS. DE JONG: Thank you. Commissioner
- 20 Martha Guzman Aceves is unavailable to join us
- 21 today.
- Do we have James Hanks? Just checking to
- 23 see if he's in -- yeah, okay.
- 24 CHAIR PAZ: I think he's an attendee and
- 25 may need to be promoted to a panelist.

- 1 MS. DE JONG: Yeah, okay. So I just made
- 2 James a panelist and I'll come back to him and
- 3 just a moment.
- 4 Ryan Kelley?
- 5 COMMISSIONER KELLEY: Yeah, I'm here.
- 6 MS. DE JONG: Great. Jim Hanks, do we
- 7 have your audio? Not yet. Okay.
- 8 Arthur or Richie Lopez is unavailable to
- 9 join us today. Luis Olmedo.
- 10 COMMISSIONER OLMEDO: Present.
- 11 MS. DE JONG: Thank you. Silvia Paz.
- 12 CHAIR PAZ: Present.
- MS. DE JONG: Thank you. Frank Ruiz.
- 14 COMMISSIONER RUIZ: I'm here.
- MS. DE JONG: Thank you. Manfred Scott
- 16 is unavailable today.
- 17 Tom Soto. I believe Tom Soto may join
- 18 late.
- 19 And Jonathan Weisgall.
- 20 COMMISSIONER WEISGALL: Present.
- 21 MS. DE JONG: Great. Thank you. I
- 22 briefly saw James Hanks. Are you able to connect
- 23 to audio? Yeah, it looks like you're muted.
- 24 COMMISSIONER HANKS: Yeah, I am here.
- MS. DE JONG: Great.

- 1 COMMISSIONER HANKS: Can you hear me?
- MS. DE JONG: Yes, we can hear you.
- 3 Thank you.
- 4 Okay, so we have at least eight members.
- 5 We have a quorum. And also in attendance with us
- 6 today is Commissioner Douglas and advisors and
- 7 advisors to Chair Hochschild on the line.
- 8 So I will now hand the meeting back over
- 9 to Chair Paz.
- 10 CHAIR PAZ: Thank you, Elizabeth. So if
- 11 we can review the agenda, the Lithium Valley
- 12 Commission will consider and react on the
- 13 following items that you see on the screen today.
- 14 We have a couple of administrative items. Most
- 15 of our meeting today, however, will be to discuss
- 16 the different sections of the report and really
- 17 do a deep dive into each one of them.
- 18 Towards the end, we will continue to have
- 19 our media and legislative updates and there will
- 20 be opportunities for public comment throughout.
- 21 Thank you. Next slide.
- 22 So this is the approval of the minutes.
- 23 Is there any discussion, edits, or comments by
- 24 any of the members?
- 25 COMMISSIONER WEISGALL: Do you need a

- 1 motion for approval?
- 2 CHAIR PAZ: Yeah, I can take a motion.
- 3 And we'll do the vote after we hear public
- 4 comment.
- 5 COMMISSIONER WEISGALL: Okay. Well, if
- 6 you need, I will so move if this is the
- 7 appropriate time to approve the minutes.
- 8 CHAIR PAZ: Thank you, Jonathan. Is
- 9 there a second?
- 10 COMMISSIONER COLWELL: I'll second.
- 11 CHAIR PAZ: Thank you, Rod. So we'll go
- 12 to public comment.
- 13 MS. DE JONG: All right. So if you are
- 14 joining us on Zoom on your computer, please use
- 15 the Raise Hand feature. If you've called in,
- 16 please dial \*9 to raise your hand and then \*6 to
- 17 unmute your phone line. And first we'll go to
- 18 hands raised in the Zoom application and then the
- 19 phone.
- I am not seeing any hands raised for this
- 21 item, so I'll turn it back to you, Chair Paz.
- 22 CHAIR PAZ: Thank you, Elizabeth. We had
- 23 a motion and a second. Can we please do a roll
- 24 call on this item?
- MS. DE JONG: Yes, happily. When I call

- 1 your name, please let me know if you vote yes or
- 2 no to approving the April meeting action minutes.
- Rod Colwell.
- 4 COMMISSIONER COLWELL: Yes.
- 5 MS. DE JONG: Roderic Dolega. I see you
- 6 have a hand raised. Just one second. I am
- 7 promoting Rod Dolega to the panelist. You should
- 8 be able to unmute yourself now and speak.
- 9 COMMISSIONER DOLEGA: Yeah. Thank you
- 10 very much.
- 11 MS. DE JONG: Thank you. And is that --
- 12 I'm sorry, your vote on this item?
- 13 COMMISSIONER DOLEGA: Yes, yes. Sorry.
- 14 Affirmative. Yes.
- MS. DE JONG: Thank you. Miranda Flores.
- 16 COMMISSIONER FLORES: Yes.
- 17 MS. DE JONG: Thank you. James Hanks.
- 18 COMMISSIONER HANKS: Yes.
- 19 MS. DE JONG: Thank you. Ryan Kelley.
- 20 COMMISSIONER KELLEY: Yes.
- 21 MS. DE JONG: Okay, great. Thank you.
- 22 Luis Olmedo.
- 23 COMMISSIONER OLMEDO: Yes.
- MS. DE JONG: Thank you. Silvia Paz.
- 25 CHAIR PAZ: Yes.

- 1 MS. DE JONG: Thank you. Frank Ruiz.
- 2 COMMISSIONER RUIZ: Yes.
- 3 MS. DE JONG: Thank you. And Jonathan
- 4 Weisgall.
- 5 COMMISSIONER WEISGALL: Yes.
- 6 MS. DE JONG: Great. The motion passes
- 7 and we'll move on to the next agenda item.
- 8 CHAIR PAZ: Before I pass this item in
- 9 conversation to Terra, who will be discussing a
- 10 document that was presented to all of us via
- 11 email on the rolls of the sub-bodies, I do want
- 12 to let you know that in between the meetings,
- 13 there was a lot of thought given to our
- 14 discussion in sub-bodies, and I hope that what
- 15 Terra will be presenting to you today will
- 16 reflect both the discussion and the interest that
- 17 the commissioners had expressed in the various
- 18 topics of the report.
- 19 But, Terra, I'll hand it over to you.
- TERRA WEEKS: Great. Thanks, Chair Paz.
- 21 And hi, everyone. Once again, I am Terra Weeks.
- 22 I am a senior advisor to Chair Hochschild of
- 23 Energy Commission and I'll be serving as the
- 24 project manager for this report from our end.
- 25 So as Chair Paz was saying, we wanted to

- 1 just spend some time just clarifying the
- 2 respective roles of the Lithium Valley Commission
- 3 as a whole, the sub-bodies, and the role of the
- 4 Energy Commission in developing the report. So
- 5 we put together this short document. Hopefully
- 6 you've had a chance to review it, or you can take
- 7 some time after this meeting. But we'll just go
- 8 through the highlights now. And this can be
- 9 thought of as kind of a living document. So if
- 10 there are changes that need to be made, we can
- 11 absolutely do so. It's not going to be approved,
- 12 so you don't have to think of it as a formal
- 13 document. So next slide, please.
- 14 So just to level set on kind of how we're
- 15 thinking about this report, we propose that the
- 16 report will be a concise document summarizing
- 17 findings of review, discussion, and analysis
- 18 provided by the Lithium Valley Commission with
- 19 support from the CEC. And the primary goal of
- 20 the report is to provide specific policy
- 21 recommendations to the legislature along with
- 22 adequate context and considerations to ensure
- 23 that the Lithium Valley effort proceeds
- 24 efficiently, equitably, and in an
- 25 environmentally-conscious manner. Next slide,

- 1 please.
- 2 So after last month's discussion on the
- 3 sub-bodies, we've kind of recalibrated the role
- 4 of the sub-bodies a bit to just ensure that all
- 5 commissioners have an opportunity to discuss and
- 6 provide input on all topics and recommendations
- 7 in the report. And I'll talk a little bit more
- 8 about the sub-bodies on the next slide. But our
- 9 recommendations generally for commissioners in
- 10 terms of engagement on the report are to
- 11 participate in any public and community
- 12 engagement meetings in addition to these monthly
- 13 meetings; to research and identify relevant
- 14 resources, documents, and workshop participants
- 15 that will be used to inform the report; develop,
- 16 discuss, and finalize policy recommendations,
- 17 review and edit report drafts; and then
- 18 coordinate with the Energy Commission Media
- 19 Office to respond to public and media inquiries.
- 20 So we are really here to support you on the media
- 21 front as well. And then of course to review and
- 22 approve the final version of the report before
- 23 it's submitted to the legislature. Next slide,
- 24 please.
- 25 So now I'm getting back to the sub-

- 1 bodies. Again, after the discussion last month,
- 2 it seemed like there was a lot of interest in
- 3 quite a few of the topics, and we really don't
- 4 want to limit participation from any
- 5 commissioners on any topics that you're
- 6 interested in. So we are reformulating the role
- 7 of the sub-bodies to more of a liaison-type role
- 8 where we'll have two people on each sub-body, but
- 9 they will act more as facilitators and liaisons
- 10 between the whole Lithium Valley Commission and
- 11 the Energy Commission staff on specific topic
- 12 areas. So, again, all commissioners will have an
- 13 opportunity to weigh in on all topics of the
- 14 report.
- 15 And then specifically we recommend that
- 16 the sub-bodies work with all commissioners to
- 17 develop a library of key resources related to the
- 18 specified topic, and CEC staff will help assemble
- 19 that library as well.
- 20 And then for workshops on that designated
- 21 topic area, we hope that the sub-bodies will work
- 22 with fellow commissioners to identify workshop
- 23 speakers, develop workshop agendas, and then
- 24 facilitate the workshops. So this includes
- 25 making introductory remarks, moderating

- 1 discussions, and proposing discussion questions
- 2 as needed. And then following the workshops,
- 3 work with our staff to summarize findings and
- 4 outline the key points for the report just to
- 5 make sure we're kind of capturing the same things
- 6 that you were. And then we would also like the
- 7 sub-bodies to review and edit the relevant
- 8 sections of the report prior to going to the full
- 9 commission for review. Next slide, please.
- 10 And then finally I want to clarify the
- 11 CEC's role in report development, which consists
- 12 of researching and synthesizing information
- 13 provided to develop the report as well as report
- 14 writing and technical editing. This piece is
- 15 really kind of key to what we're trying to get
- 16 at.
- 17 So policy analysis and recommendations
- 18 will be developed by the Lithium Valley
- 19 Commission. And CEC staff will write the report
- 20 sections for your review, editing, and approval
- 21 based on your direction. So we really aim to
- 22 capture your perspectives but don't want to
- 23 impose our own views into the report. So, you
- 24 know, we'll kind of help with the work, you know,
- 25 the actual writing of the report, but we really

- 1 want it to be directed by you all.
- 2 So we'll also work with the sub-bodies to
- 3 ensure that the commission, stakeholder, and
- 4 public perspectives are adequately considered and
- 5 reflected. Chair Hochschild and Commissioner
- 6 Douglas and/or CEC staff may also participate in
- 7 discussions and workshops as appropriate. And
- 8 then our staff can also contribute subject matter
- 9 expertise to help inform the report. And so this
- 10 includes areas like EV and batter manufacturing,
- 11 supply chains, electric grid planning, and
- 12 environmental impacts.
- 13 So from here, I'll pass things back to
- 14 Chair Paz to talk about the sub-body assignments.
- 15 CHAIR PAZ: Thank you. So, again, as
- 16 Terra mentioned, we have shifted from the more
- 17 formal structure that we were considering in the
- 18 beginning and we are seeing now the sub-bodies
- 19 really as leads that will engage the entire
- 20 commission. And I just want to clarify that, you
- 21 know, that means that we are not necessarily --
- 22 sub-bodies will not necessarily be meeting
- 23 separate from the Lithium Valley Commission when
- 24 we're discussing the areas of the report, but
- 25 they will be serving as key contacts with CEC to

- 1 help us develop agenda and workshops, things of
- 2 that nature.
- 3 So for that reason, it felt a lot more
- 4 comfortable in limiting the sub-bodies to two key
- 5 leads, and they are listed on the agenda. And I
- 6 hope that everyone sees themselves reflected in
- 7 at least one of the key areas where they
- 8 expressed interest.
- 9 So on Furthering Geothermal Development,
- $10\,$  we have Luis Olmedo and Ryan Kelley. Under Market
- 11 Opportunities for Lithium, Roderic Dolega and
- 12 Arthur Lopez. Under Benefits of and to
- 13 Geothermal Plants, Manfred Scott and James Hanks.
- 14 Overcoming Challenges to Lithium Extraction,
- 15 James Hanks and Frank Ruiz. Lithium Extraction
- 16 Methods, Jonathan Weisgall and Rod Colwell.
- 17 Economic and Environmental Impacts, Luis Olmedo
- 18 and Miranda Flores. Importance of Incentives,
- 19 Jonathan Weisgall and Martha Guzman Aceves.
- 20 Under Workforce Development, Silvia Paz. And
- 21 under Legislative and Regulatory Recommendations,
- 22 Rod Colwell and Tom Soto.
- 23 So if there are no objections -- again,
- 24 this is not a voting area, it's just a way to
- 25 identify the leads and give us some key points of

- 1 who to contact as we address each of the topics.
- Jonathan, I see you have your hand up.
- 3 COMMISSIONER WEISGALL: Yeah, just a
- 4 minor point. When I was testifying yesterday
- 5 before the Select Committee, I kind of stressed
- 6 how we at least talk about lithium recovery, not
- 7 lithium extraction, because we are not mining it.
- 8 This is really a different process from mining.
- 9 And I think extraction sends the wrong message.
- 10 If no one objects, I'd like to talk about -- I'd
- 11 like to change that sub-body for Rod and myself
- 12 to Lithium Recovery Methods instead of Lithium
- 13 Extraction.
- 14 CHAIR PAZ: Luis Olmedo?
- 15 COMMISSIONER OLMEDO: I have much respect
- 16 to the experience of the experts, the operators
- 17 of the geothermal industry. There's a lot of
- 18 questions that remain unanswered, not because the
- 19 information isn't available. I assume that it's
- 20 available. I just wonder if it's premature to be
- 21 making those types of definitions given that
- 22 there is still a lot of information, still a lot
- 23 of experts that I assume will be presenting to
- 24 this commission as well as members of the public.
- 25 Ultimately, I feel that it is the regulatory

- 1 bodies that have to determine what exactly is the
- 2 characteristics and the nature of the operations
- 3 and for us to make the recommendations as a
- 4 commission with information. I think right now
- 5 just beginning to put these committees together,
- 6 we haven't had an opportunity to take a deep dive
- 7 on the information that is out there available,
- 8 or perhaps that is not available and requires
- 9 more research or more information. So for a
- 10 matter of clarity, I would not support that
- 11 request at this time.
- 12 CHAIR PAZ: Is there any other comments?
- 13 Thank you, Luis.
- 14 COMMISSIONER COLWELL: Silvia, it's Rod.
- 15 But if you wanted a hand with the Workforce
- 16 Development part, we are actually engaged in
- 17 that. So I'm happy to assist you if you wish.
- 18 CHAIR PAZ: Yeah. Thank you for that.
- 19 We'll latch you to Workforce Development, Rod.
- 20 In terms -- I see Jonathan Weisgall --
- 21 COMMISSIONER WEISGALL: With all due
- 22 respect to Luis, I don't need a regulator to tell
- 23 me whether I'm extracting lithium or recovering
- 24 lithium. We know what we're doing.
- In western Australia, lithium is mined.

- 1 It's extracted. It's extracted from under the
- 2 earth in these evaporation ponds in South
- 3 America. We are running our geothermal brine and
- 4 we are recovering that brine. So whatever. This
- 5 is not a big deal. I think that's kind of a
- 6 rather strange objection, but if that's the way -
- 7 you know, I really don't know what to say.
- 8 There's plenty of information. We know exactly
- 9 how we're doing this. So it's rather odd to hear
- 10 that kind of objection. That's all I can say.
- 11 CHAIR PAZ: Thank you, Jonathan. And I
- 12 do believe -- I mean, we can explore and go into
- 13 further the sub-bodies. And then once we get
- 14 further, we can reassess how the report is going
- 15 to be reflecting each of these areas or names.
- 16 But I do believe that the language that we have
- 17 in front of us was pulled as closely as we could
- 18 to the language that was on the bill. So that's
- 19 why you see the language here.
- 20 Again, I don't know that we're going to
- 21 have to stick to that or not, but that's
- 22 something that we can definitely continue to look
- 23 at. And for now focused on developing each of
- 24 the content area and the analysis that we want to
- 25 see under each one.

- 1 DEBORAH DYER: This is Deborah Dyer. And
- 2 I just wanted to point out that what the sub-
- 3 bodies are named does not in any way predetermine
- 4 the direction of the report or the findings or
- 5 recommendations of the report. So that would not
- 6 constrain the sub-body or the Commission in their
- 7 direction.
- 8 MS. DE JONG: I see Luis Olmedo has
- 9 raised his hand. Luis?
- 10 COMMISSIONER OLMEDO: Just in response to
- 11 Commissioner Weisgall, I don't want this to be
- 12 interpreted as an opposition, but as a request
- 13 for more information before making substantive
- 14 decisions where the Commission would have at
- 15 least an opportunity to take a deep dive in the
- 16 different subject areas that have been assigned.
- 17 That's all. It should not be interpreted as an
- 18 opposition in principle, but in request for more
- 19 information.
- 20 CHAIR PAZ: Thank you, Luis. So if
- 21 everyone is okay -- again, as Deborah clarified,
- 22 what we have right now in terms of the names of
- 23 the sub-bodies does not predetermine where the
- 24 report is going to end, that this is preliminary,
- 25 and again, the names -- the language right now is

- 1 just very tied to what we have on the bill. And
- 2 so if there's no objection, we will move forward
- 3 to the next item. No, actually, it's public
- 4 comment after, right?
- 5 MS. DE JONG: Yes. Thank you, Chair Paz.
- 6 I actually want to jump in just before we get to
- 7 public comment. I did hear Ryan Kelley's voice
- 8 earlier, but possibly signed in under a different
- 9 name. So, Ryan Kelley, if you can hear me, if
- 10 you wouldn't mind raise your hand or speak and I
- 11 will try to identify you in this list and rename
- 12 you. I guess it is also possible that we lost
- 13 him. Okay. So for now, we'll take it that Ryan
- 14 Kelley is not available. We'll go ahead and turn
- 15 to public comment.
- 16 If you're joining by Zoom on the
- 17 computer, please use the Raise Hand feature. And
- 18 if you've called, please dial \*9 to raise your
- 19 hand and \*6 to unmute your phone line. First
- 20 we'll go through the hands raised in the Zoom
- 21 applications and then the phones. I do see we
- 22 have some written comments as well. If you don't
- 23 want to make that comment verbally, then we can
- 24 read out your comment. So please go ahead and
- 25 raise your hand.

- 1 Okay, I am not seeing hands raised.
- 2 Okay, I see one of the comments. Okay, Orlando
- 3 Foote, I have allowed you to talk. You should be
- 4 able to unmute yourself.
- ORLANDO FOOTE: Can you hear me?
- 6 MS. DE JONG: Yes, we can.
- 7 ORLANDO FOOTE: Good. A comment with
- $8\,$  regard to Mr. Olmedo's comment and in support of
- 9 Jonathan Weisgall. I believe that whatever can
- 10 be done to encourage the deliberate speed of this
- 11 process is critical. There are so many moving
- 12 parts, some of them here locally. I happen to be
- 13 an attorney here in Imperial County. I've
- 14 practiced here in the geothermal area and any
- 15 number of areas for close to 40 years, and I'm
- 16 very anxious for this community to move forward
- 17 and recognize the significance and consequences
- 18 of lithium development and taking advantage of
- 19 the enormous significance of it here in Imperial
- 20 County. So I would just endorse the minimization
- 21 of whatever it takes to speed this process
- 22 forward, to speed the activities of the
- 23 Commission forward and to do whatever is possible
- 24 to move to a full process of taking advantage of
- 25 the resource.

- 1 MS. DE JONG: Thank you, Orlando.
- 2 Eric Reyes, you should be able to unmute
- 3 vourself.
- 4 ERIC REYES: I just want to support Luis
- 5 Olmedo and his position that it's way too early
- 6 for, say, not just you as committee members, but
- 7 us as community members to change -- you might
- 8 call it semantics. It's semantic manipulation we
- 9 feel. There's still a lot of ins and outs. And
- 10 I'm sure you will disagree with us because you
- 11 are experts in your field. But on our end,
- 12 there's so much still to learn. And how we're
- 13 going to be able to make this work in a
- 14 functional manner that doesn't impact the
- 15 community more, we're not too willing to allow
- 16 that manipulation at this time. So I hope you
- 17 stay with extraction as we learn more. Thank
- 18 you.
- 19 MS. DE JONG: Thank you. We have another
- 20 hand raised. Mariella Lora.
- 21 MARIELLA LORA: Hi. I also just want to
- 22 express my support for Luis Olmedo and thank him
- 23 for raising those points. Thank you.
- MS. DE JONG: Thank you. Okay. And I'll
- 25 go ahead and read -- we did have one question

- 1 submitted via -- sorry, that comment from Michael
- 2 Marsden says, "I would like to attend the
- 3 Legislative Regulatory Recommendations sub-body
- 4 meetings and offer my participation." Pacific
- 5 Charter, Michael Marsden, and the email address.
- 6 "Can I attend the sub-body meetings and how can I
- 7 learn about the meetings scheduled?"
- 8 CHAIR PAZ: Should I provide an answer to
- 9 that?
- 10 MS. DE JONG: Sure, if you would like to.
- 11 Yes.
- 12 CHAIR PAZ: So as mentioned earlier, the
- 13 sub-bodies will not be meeting independently to
- 14 discuss the areas of the work. Those will be
- 15 held during our regular Lithium Valley Commission
- 16 meetings. What they will be doing between
- 17 meetings is help plan for the content and things
- 18 like that. So the best way to join the
- 19 discussions is through joining the Lithium Valley
- 20 Commission monthly meetings. And in the case
- 21 where we add meetings for community engagement
- 22 and such, those will also be properly notified.
- 23 MS. DE JONG: All right. Thank you so
- 24 much. I don't see any further comments at this
- 25 time. So, Chair Paz, I'll turn it back to you.

- 1 CHAIR PAZ: Thank you. So, again, I will
- 2 be turning it over to Terra soon. But as we go
- 3 into the discussion of the legislative report, I
- 4 also want to encourage everyone, now that we know
- 5 who the lead person is going to be, to really
- 6 start taking ownership of that sub-topic, what
- 7 you want to see, if there's anywhere you're
- 8 familiar, and engaging your other colleagues in
- 9 those discussions, obviously keeping in mind the
- 10 presentation that was given to us with regards to
- 11 Bagley-Keen. But other than that, just put that
- 12 hat on. And, yeah, I think this report is going
- 13 to be -- and the activities of the committee are
- 14 going to be shaped to the extent that we can all
- 15 be proactive in the different areas of expertise
- 16 that we have.
- 17 Terra, I will hand it over to you.
- 18 TERRA WEEKS: Great. Thanks. So now we
- 19 really wanted to spend kind of the bulk of this
- 20 meeting diving into what you actually want the
- 21 report to say. And so kind of building on the
- 22 presentation, the basically barebones outline
- 23 that we reviewed at the last meeting, starting to
- 24 dive into it and flesh it out. Next slide,
- 25 please. Thanks.

- 1 This is essentially the outline that I
- 2 presented at the last meeting. Really just kind
- 3 of statutory requirements, not much else. So
- 4 essentially kind of thinking about it in three
- 5 chapters. The first one is background, and then
- 6 going into the areas of analysis that are
- 7 required by the statute. So these align pretty
- 8 closely with the sub-bodies. We are adding the
- 9 workforce development topic. So we can kind of
- 10 think through if we want that as a subsection or
- 11 if we want to add, you know, another specific
- 12 section on that. And then the third chapter is
- 13 the legislative recommendations and regulatory
- 14 changes.
- 15 So essentially what I'd like to do at
- 16 this meeting is kind of go through each of these
- 17 topics one by one and basically have kind of a
- 18 brainstorm. This isn't going to be the only
- 19 conversation we're going to have on this, but I
- 20 think it will help us to go through and start
- 21 refining the outline for your review ahead of the
- 22 next meeting. So we really just kind of want to
- 23 get information on how closely you are engaged in
- 24 these topics, what resources you are aware of,
- 25 how we start kind of formulating this report.

- l Next slide, please. Okay.
- These are some questions that we'd like
- 3 you to consider as we move through these topics.
- 4 Are there additional topics that you would like
- 5 included in the report? What sub-topics should
- 6 be included in each section? What analyses
- 7 already exist in these areas? Is there
- 8 quantitative analysis that needs to be completed,
- 9 and if so, what resources, expertise, and/or data
- 10 would be required? And we may be able to support
- 11 some of this within the Energy Commission. We've
- 12 also talked about potentially having the
- 13 resources to bring on a consultant if there is a
- 14 specific quantitative analysis that's required.
- 15 And then are you aware of relevant literature or
- 16 resources that can support report development in
- 17 these areas, and what work have you engaged on
- 18 and what other relevant efforts are you aware of
- 19 for each of these topic areas? Next slide
- 20 please.
- 21 So actually if you could go back one
- 22 slide. I just want to pause here and see if
- 23 Chair Paz or Vice Chair Kelley have anything that
- 24 you wanted to add.
- 25 CHAIR PAZ: I think I added my piece.

- 1 Ryan Kelley, do you have anything you would like
- 2 to add here?
- 3 MS. DE JONG: I don't believe Ryan Kelley
- 4 is connected right now into the meeting. We did
- 5 hear him earlier. But if he is on, please speak.
- 6 CHAIR PAZ: Okay. I can bottom line
- 7 again that we're going to be depending on
- 8 everybody's involvement in developing the report.
- 9 And to the extent that you have the expertise or
- 10 have been talking to other people to bring that
- 11 to bear and let us know and be active throughout
- 12 the report. And some of these questions today
- 13 will help us to start with the brainstorm, but
- 14 really should lead into a more active-oriented
- 15 conversation for the meetings after today where
- 16 we can start workshopping all of the topics and
- 17 compiling the research and information that's
- 18 going to help us answering the guestions that we
- 19 are tasked with.
- Back to you, Terra.
- 21 TERRA WEEKS: Great. I think
- 22 Commissioner Olmedo had his hand up. If you want
- 23 to jump in.
- 24 COMMISSIONER OLMEDO: No, I was just
- 25 going to -- I think Mr. Kelley may have left and

- 1 will be back. But I don't think he's on the call
- 2 at this moment.
- 3 TERRA WEEKS: Okay, thanks. Okay, so
- 4 moving on. Next slide, please.
- 5 So now we'll just jump into the
- 6 individual sections. And we have about ten
- 7 minutes allocated per slide. And so again, this
- $8\,$  is just going through each topic area one by one.
- 9 Some will probably take longer than others, but
- 10 just want to give everyone a chance to just kind
- 11 of provide some additional thoughts and guidance.
- 12 So Chapter 1 is on the background. The
- 13 first two sections should be really
- 14 straightforward. So first is just an overview of
- 15 the bill and what it requires. Then we'll have
- 16 an overview of the Lithium Valley Commission,
- 17 including a summary of the public meetings and
- 18 the public engagement process. So I think the
- 19 first two bullets should be really just kind of
- 20 factual summaries, basically.
- 21 And then the third bullet is a high-level
- 22 discussion of your vision for Lithium Valley.
- 23 And so we did have kind of a brief discussion on
- 24 this at the February monthly meeting. So some of
- 25 the key points that were brought up in that

- 1 discussion were around creating a lithium or
- 2 battery hub and supply chain in California,
- 3 creating benefits that reach the local community
- 4 with a focus on workforce development and high
- 5 road job creation, tying into support of local
- 6 environmental mitigation efforts, focusing on
- 7 developing a clear regulatory and legislative
- 8 framework that spurs investment in the region,
- 9 acknowledging local challenges and community
- 10 history with previous industries. And then there
- 11 was also a discussion around possibly setting
- 12 some goals for the effort, like a five or ten-
- 13 year lithium production goal.
- 14 So I wanted to just kind of open that
- 15 discussion back up, see if folks have other items
- 16 they would like to bring up. And maybe
- 17 especially hear from the commissioners who didn't
- 18 have a chance to chime in to that discussion in
- 19 February. So I'll just kind of open it up from
- 20 here.
- So, again, this is just kind of hearing
- 22 your overall vision for this effort. Just
- 23 getting ideas of -- it could be specifically what
- 24 you want to accomplish with this report and this
- 25 commission or kind of how you see Lithium Valley

- 1 fitting into California's overall goals.
- 2 Benefits, just kind of high-level vision what you
- 3 would like to see out of this overall effort.
- 4 CHAIR PAZ: Terra, well -- okay, go
- 5 ahead. Luis, was that you?
- 6 COMMISSIONER COLWELL: Sorry, it's Rod
- 7 here. I guess I can kick some conversation off
- 8 if it's appropriate in regard to vision. The big
- 9 picture I think really five years in goal-setting
- 10 and working backwards. The way as active
- 11 developers and our view, I guess, we're starting
- 12 to see beyond just engagement for lithium supply
- 13 at the moment, which includes power supply for
- 14 additional geothermal energy. But there's active
- 15 discussion going on right now about cathode and
- 16 battery colocation. And I think the concept of
- 17 when we first started this discussion was more or
- 18 less a concept. We sort of got the -- you know,
- 19 we could get the concept of the leading supply
- 20 chain where this particular lithium doesn't need
- 21 to go offshore to Asia or China for post-
- 22 processing and be shipped back again. So I think
- 23 there has been a move for that.
- 24 So the vision now is actually becoming
- 25 sort of somewhere between a reality. And what it

- 1 means is the environmental benefits of Lithium
- 2 production I think were mentioned before. Hard
- 3 rock, the Searles style of mining to say
- 4 geothermal brines which is, you know, there's no
- 5 byproducts, it's clean. And I think the supply
- 6 chain is starting to sort of see that. So we are
- 7 starting to really see this vision accelerate.
- $8\,$  So that's goal-setting and working backwards, I
- 9 think thinking about this as more of a master
- 10 plan.
- Now, on community engagement, I know from
- 12 our point of view, CTR's point of view, jobs is
- 13 first and foremost. So the community engagement
- 14 with the university and colleges on jobs. And
- 15 again, Silvia, looking forward to working with
- 16 you particularly on that matter. So it's really
- 17 sort of how to streamline the -- we're starting
- 18 to picture the ecosystem, if you like, and how we
- 19 fast-track and take advantage of this opportunity
- 20 at the moment.
- 21 CHAIR PAZ: Thank you. Luis?
- 22 COMMISSIONER OLMEDO: I would support the
- 23 suggested subtopics. One of the things that --
- 24 and excuse my ignorance, but do we have a
- 25 translation into Spanish, which is the

- 1 predominant second language in the region? I was
- 2 hoping to get an answer before I complete my
- 3 comment.
- 4 CHAIR PAZ: are you asking whether the
- 5 report will be translated into Spanish?
- 6 COMMISSIONER OLMEDO: Right. Do we have
- 7 translation for the Lithium Commission?
- 8 CHAIR PAZ: Currently there is no one
- 9 translating the Lithium Commission meetings.
- 10 That doesn't mean that it's not going to happen.
- 11 But when we have our communication meetings and
- 12 outreach, that's something that we have
- 13 discussed. And especially via Zoom, it's not
- 14 very complex to include a translator as we move
- 15 forward for those engagement meetings.
- 16 COMMISSIONER OLMEDO: Okay. For
- 17 starters, that's what I would recommend, that the
- 18 Commission budget for a translator through the
- 19 entire process. It's really not up to us to
- 20 decide what access we give, when, and how. It's
- 21 access altogether, completely. Right? That's
- 22 equity. And we need to be able to remove these
- 23 barriers. And community engagement is a long
- 24 process. It's not just those who are working in
- 25 the community, it's the community itself that has

- 1 barriers or reasons as to why it's difficult for
- 2 them to participate and engage. So let's begin
- 3 by bringing in translation and then building an
- 4 informed plan with the public involved.
- 5 I completely support the idea and the
- 6 dream of bringing the lithium technology and the
- 7 entire supply chain locally. I think often the
- 8 fact that a community may want to negotiate
- 9 better conditions or the fact that we have had
- 10 other iterations of renewable energies that
- 11 haven't really quite delivered on the long-term
- 12 jobs, the long-term community benefits, or
- 13 perhaps there were fractures in that system where
- 14 those resources didn't quite reach the most
- 15 economically-depressed areas or help put a dent
- 16 on our local jobs long-term. That should never
- 17 be interpreted as, oh, you're either for or
- 18 against, which is something that I've heard for
- 19 far too many years. Geothermal has been here for
- 20 many years. We have a long history of their
- 21 operation here locally.
- 22 And so I am very much in support of what
- 23 the future could be like here with lithium and
- 24 geothermal. But, again, let's bring as many
- 25 subtopics as necessary to get the whole picture.

- 1 And I truly believe, and I've said this publicly
- 2 before, I think that sometimes looking into --
- 3 trying to exempt or bypass or fast-track, a lot
- 4 of times it turns really good intentions, really
- 5 good ideas into incomplete vision.
- 6 So, anyways, but I support the suggested
- 7 subtopics that are currently being presented
- 8 here.
- 9 CHAIR PAZ: Thank you. Are there any
- 10 other comments?
- I have a few suggestions under the
- 12 Community Engagement Process. And I think it
- 13 would be worthwhile at the beginning or as
- 14 background for us to have a section that's going
- 15 to describe the outreach strategy and the
- 16 implementation more in-depth that we should be
- 17 considering or addressing how the socioeconomic
- 18 conditions of the region led to key components of
- 19 the strategy. So, again, as we're exploring each
- 20 of these topics, keeping community engagement as
- 21 a (indiscernible) and being intentional about how
- 22 the local context, the conditions in the region
- 23 are helping us as a commission develop the
- 24 strategies and recommendations, how is it that
- 25 we're being responsive to each one of them. And

- 1 I think highlighting those things and putting
- 2 them at the forefront will be helpful.
- 3 I think also we should be able to capture
- 4 information on how many people were able to
- 5 participate in the identification of issues and
- 6 the development of recommendations and the
- 7 selection of priorities or key recommendations
- 8 and if possible include where those meetings took
- 9 place and how they were organized. I think every
- 10 subtopic of the report might differ slightly on
- 11 the approach. But again, I think everyone who is
- 12 helping lead a subtopic should help us think
- 13 about a community engagement process and how
- 14 we're going to be bringing in not just for input,
- 15 but really having these conversations with
- 16 various stakeholders to help us shape the content
- 17 of the report. Thank you.
- MS. DE JONG: Elisabeth here. I just
- 19 wanted to jump in because Commissioner Olmedo did
- 20 request a response to his comments on providing
- 21 translation.
- 22 On the CEC side of things, we are going
- 23 to be working with the public advisor at the
- 24 California Energy Commission and talking with
- 25 them about those opportunities of integrating

- 1 translations and implementation moving forward.
- 2 CHAIR PAZ: Thank you, Elisabeth.
- MS. DE JONG: And (indiscernible)
- 4 Commissioner Colwell.
- 5 COMMISSIONER COLWELL: Yes. So if it's
- 6 helpful to the Commission, we are happy to put
- 7 together a short presentation to visualize. It
- 8 may be helpful. A presentation that would
- 9 encapsulate the big picture or ten-year vision of
- 10 Lithium Valley, the big picture of clean jobs,
- 11 colocation, environmental, social, and economic
- 12 benefits. Part two could be development timeline
- 13 for a successful Lithium Valley. And what that
- 14 means is where the market is and sort of
- 15 encapsulating what the opportunity is,
- 16 visualizing the clean energy and auto hub
- 17 opportunity as part of that. So we're sort of
- 18 segregating. So it's visual to that, which is
- 19 colocation opportunities I mentioned before and
- 20 what is to attract cathode battery and auto
- 21 manufacturers to the state. That touches on
- 22 things like tax breaks and things -- you know,
- 23 jobs, et cetera.
- 24 Then of course the final part would be a
- 25 train and maintain type of visualization. Long-

- 1 term clean jobs. Training, education for local
- 2 community, which of course includes -- you know,
- 3 the community engagement includes all four of
- 4 these parts. So if it's helpful, Chair Paz, we
- 5 are very happy to shoot you some visuals of how
- 6 we see it at 60,000 feet and then go from there.
- 7 CHAIR PAZ: Yes. Everything that you
- 8 have in resources will be helpful in helping us
- 9 determine and explore the different subtopics.
- 10 So that would be appreciated. Thank you.
- 11 Terra? I see Jonathan.
- 12 COMMISSIONER WEISGALL: In response to
- 13 Commissioner Olmedo, we have already prepared a
- 14 one-page, just the facts one-pager on lithium
- 15 production and BHE renewables in Spanish. We
- 16 would be delighted to provide that to the
- 17 Commission for distribution to the commissioners.
- 18 CHAIR PAZ: Thank you.
- 19 COMMISSIONER WEISGALL: We recognize the
- 20 importance of translation into Spanish of much of
- 21 what we do.
- TERRA WEEKS: That would be great. And
- 23 we can docket that as well.
- 24 COMMISSIONER WEISGALL: I'll shoot that
- 25 to Elisabeth and Terra.

- 1 TERRA WEEKS: Thank you.
- 2 CHAIR PAZ: Thank you. I think it would
- 3 also be helpful, and maybe it goes to Rod's offer
- 4 around the big, high-level picture. But
- 5 understanding what the different phases and
- 6 stages of lithium development are. Because I
- 7 think understanding from the pilot, which is
- 8 where some of the project started, and from pilot
- 9 to actually getting into market, can we identify
- 10 different phases and then approximately stages,
- 11 like how long does it take. It would help us
- 12 also identify -- and I remember Commissioner
- 13 Guzman was talking about setting goals. Well,
- 14 then having the phases and the stages would help
- 15 us set goals for each one and be a lot more clear
- 16 if we're thinking about creating this roadmap.
- 17 So I don't know, Rod, if that's something
- 18 that you or maybe Jonathan could help with.
- 19 COMMISSIONER COLWELL: Yes, ma'am. We
- 20 will include a program and break that out into
- 21 milestones. I can liaise with Jonathan and his
- 22 team and we'll put something together. If you're
- 23 happy with that, Jonathan.
- 24 COMMISSIONER WEISGALL: Delighted to
- 25 help. Give me a better sense of what you're

- 1 looking for, if you would, Chair.
- 2 CHAIR PAZ: Yes. So for me, I'm thinking
- $3\,$  for example very specific to the workforce sub-
- 4 body. As I'm thinking about what type of
- 5 workforce might be needed, it would be helpful
- 6 for me to understand the different stages. Like
- 7 how do we get from the development of the lithium
- $8\,$  from the geothermal to all the way to when we can
- 9 market it, all the way to -- you know. So what
- 10 does that chain look like.
- 11 COMMISSIONER WEISGALL: Got it. And as
- 12 far as workforce, as I think I may have mentioned
- 13 at a previous meeting but also in testimony
- 14 yesterday mentioned that we are already working
- 15 with Imperial County College on curriculum
- 16 development, but it does need work. And I want
- 17 to follow up with Gloria Garcia as well because
- 18 it's not too soon to think about all of that.
- 19 So, yeah, I would be delighted to work on that.
- 20 Can certainly do it with Rod. And this is an
- 21 example of where I would love to bring in the
- 22 academic folks. And I think Lithium Valley --
- 23 excuse me, Imperial County College would be a
- 24 terrific partner in that regard.
- 25 CHAIR PAZ: Thank you.

- 1 COMMISSIONER WEISGALL: Yes.
- 2 CHAIR PAZ: Luis?
- 3 COMMISSIONER OLMEDO: I just want to take
- 4 the opportunity just to acknowledge both
- 5 Commissioner Weisgall and Commissioner Colwell,
- 6 their offer to bring in information and resources
- 7 and help bridge that gap of knowledge an
- 8 information for the community.
- 9 I am a firm believer that historically
- 10 the industry has had a limited pool of players in
- 11 negotiating business locally. And I think this
- 12 is a historical opportunity where we can broaden
- 13 who those involved are. And I think if we bring
- 14 in the community, we can truly be successful.
- I know that every comment I make isn't
- 16 going to be -- and I apologize, my kid is
- 17 watching cartoons here. So it's bring my kid to
- 18 work today.
- 19 I do believe that historically that has
- 20 occurred. So I hope that whatever ideas or
- 21 recommendations I bring, again, are not
- 22 interpreted as against lithium. I've lived in
- 23 this valley the majority of my life. I want to
- 24 see this dream come true as much as anybody else.
- 25 And with that said, I recognize that the

- 1 industry has had, at least from an environmental
- 2 justice standpoint, we have had considerable
- 3 concerns of what we call the waste stream, or it
- 4 might be called byproduct for the purposes of
- 5 conversation. It would be great to also get
- 6 information of what all that is about. Because I
- 7 understand that geothermal cannot operate without
- 8 certain policies that allow the brine to be
- 9 brought to the surface.
- 10 Again, that's just one example, but I
- 11 think I would like to make sure that those
- 12 conversations do occur. What can be done better,
- 13 what can the state and the federal government
- 14 help support to make it better. And the
- 15 difference is in the technologies as well.
- 16 Because looking at a lot of databases. And one
- 17 geothermal sometimes will not be the same as the
- 18 other. So there's a lot of information that I
- 19 hope is shared with the commission as well as
- 20 with the public. Thank you.
- 21 CHAIR PAZ: Thank you, Luis. And keep
- 22 that in mind as we move toward the other chapters
- 23 and discussing. Because I think some of the
- 24 recommendations or things you want to see would
- 25 be appropriate in some of the other chapters as

- 1 well.
- 2 So if we are done reviewing the
- 3 background, maybe we can move on to another
- 4 chapter. Tara?
- 5 TERRA WEEKS: Yeah. Thanks for that
- 6 discussion.
- 7 So I think we're actually going to go a
- 8 little bit out of order because it sounds like
- 9 Commissioner Soto needs to leave early and we
- 10 want to make sure that he can be involved in the
- 11 he discussion of the sub-area that he is engaged
- 12 on, which is the recommendations.
- So I'm actually going to suggest we jump
- 14 to the discussion of the incentives. And I think
- 15 that will lead nicely into the discussion of the
- 16 recommendations. And then we'll hop back and go
- 17 through the rest of the topics as planned.
- 18 So this is within Chapter 2. So these
- 19 are the areas of analysis that are required by
- 20 the statute. The language on these slides is
- 21 what's in the statute. So it's fairly minimal.
- 22 The incentives section actually has kind of the
- 23 most language.
- 24 And so what it says in the bill for this
- 25 section is to look at the importance of and

- 1 opportunities for the application of local,
- 2 state, and federal incentives and investments to
- 3 facilitate lithium extraction from geothermal
- 4 brines, including, but not limited to the
- 5 following. Use of enhanced infrastructure
- 6 financing districts or community revitalization
- 7 investment authorities, new employment tax
- 8 credits in former enterprise zones, income or
- 9 franchise tax credits under agreements approved
- 10 by the California Competes Tax Credit Committee,
- 11 sales tax exemptions for new manufacturing
- 12 equipment, and leveraging tax incentives in
- 13 federally recognized opportunity zones.
- 14 So I guess I'll just open it up for
- 15 discussion on this item. And I am just trying to
- 16 remember who exactly is on the sub-body for this
- 17 one. I think it was Commissioner Weisgall.
- MS. DE JONG: For Incentives it's
- 19 Commissioner Weisgall and Commissioner Guzman
- 20 Aceves.
- 21 TERRA WEEKS: Oh, right. So maybe I'll
- 22 hand it to Commissioner Weisgall first to just
- 23 kick off the discussion.
- 24 COMMISSIONER WEISGALL: Well, I think
- 25 this is I think a really critical part of what we

- 1 need to do. I've already started working in this
- 2 area. Obviously if we go to commercialization,
- 3 the goal here is going to be to produce lithium
- 4 in a cost-competitive manner with other producers
- 5 in the United States and around the world.
- 6 Sadly, there are a lot of off-takers who don't
- 7 care about the environmental benefits. So we
- 8 could have the world's most environmentally-
- 9 responsible lithium recovery system, but if we're
- 10 not cost-competitive, it's not going to work.
- 11 We all know that doing business in
- 12 California can be challenging. But at the same
- 13 time, the state does offer a number of different
- 14 incentive programs that really cover the
- 15 waterfront, beginning with employer-employee
- 16 credits, these tax credits in enterprise zones.
- 17 There were opportunity zones set up at the
- 18 federal level under the 2017 Trump administration
- 19 tax bill, which unfortunately excludes the exact
- 20 area of the geothermal plants. They do cover I
- 21 believe El Centro and parts of Riverside County.
- 22 But there is some work there that -- again, all
- 23 of these will lead to either low-cost loans, tax
- 24 credits, and the like.
- 25 There are other existing institutions.

- 1 There already is CAEFTA, the California
- 2 Alternative Energy Financing and Transportation
- 3 Authority, that can provide -- yes, it is a
- 4 terrible acronym, Terra, I see you smiling --
- 5 that can provide tax relief for manufacturer
- 6 equipment on sales tax. I know that Tesla used
- 7 that quite successfully.
- 8 There's also the opportunity to use or
- 9 take advantage of the Department of Energy's Loan
- 10 Program Office. Again, another -- you know, we
- 11 read in the newspapers about Solyndra. And
- 12 that's why many republicans have attacked this
- 13 loan program office, because that was a \$500
- 14 million loan that went south. People don't
- 15 remember that another beneficiary of that program
- 16 was Tesla, which paid back the federal government
- 17 with interest. And actually when you look at the
- 18 entire loan program amounts, they actually are
- 19 above water because some of these projects have
- 20 been so successful. But again, there you are
- 21 borrowing at Fed rates. You've got loan
- 22 quarantees. So there's really a whole array of
- 23 state and federal incentives that we just need to
- 24 make sure we apply to Lithium valley. Now,
- 25 obviously any individual developer, whether it's

- 1 ourselves or Energy Source or CTR can go to the
- 2 Loan Program Office, for example, when you're
- 3 ready to go commercial and you need a
- 4 construction loan and you want to borrow at even
- 5 lower than rates that accompany like mine can
- 6 borrow because we are AAA rated. But there also
- 7 I think is the need to look now at extending some
- $8\,$  of these federal programs and state programs to
- 9 make sure Lithium Valley is covered.
- 10 The one example I used, Terra, were the
- 11 Federal Opportunity Zones. And I've already --
- 12 kind of making some noises in Washington about
- 13 trying to amend that program to make sure that
- 14 Lithium Valley is covered.
- 15 So that's the basic purpose. And all of
- 16 this will result in making Lithium Valley more
- 17 cost-competitive and making California's lithium
- 18 competitive in the market. I should say that in
- 19 our demonstration project, that our company
- 20 already has with the California Energy
- 21 Commission, we need to demonstrate that we can
- 22 produce lithium at under \$4,000 a metric ton. So
- 23 that's already one of our requirements, if you
- 24 will, under our demonstration R&D grant from the
- 25 energy commission. But those are some thoughts.

- 1 TERRA WEEKS: That's great. And just
- 2 kind of while I have you thinking about this, you
- 3 know, offhand are there specific folks you would
- 4 want to make sure that we're getting in the room
- 5 for the workshop on this? I mean, I think we
- 6 would obviously engage closely with GO-Biz. But
- 7 are there specific offices or people you would
- 8 recommend from federal or other local levels?
- 9 COMMISSIONER WEISGALL: Definitely GO-
- 10 Biz. Probably Department of Energy, the Energy
- 11 Efficiency Renewable Energy Office, probably the
- 12 Loan Program Office, a number of other folks.
- Tom, you may have some ideas as well.
- 14 COMMISSIONER SOTO: I would say Derek
- 15 Chernow, who is the head of the Pollution Control
- 16 Finance Authority that Jonathan mentioned, I
- 17 think that you want to elevate this as high as
- 18 the state treasurer herself, Finoa Ma, and maybe
- 19 have her participate by Zoom in some of this
- 20 discussion and describe to us what her level of
- 21 priority is to assure that we get that priority.
- There's also an excellent resource we
- 23 have with the Department of Energy. And that is
- 24 the secretary (indiscernible) Granholm is very
- 25 much a Californian. And she worked closely with

- 1 us at New Energy Nexus on a number of studies
- 2 that we were involved with. Now she's secretary
- 3 of energy. And her chief special assistant and
- 4 senior advisor many of us know. Her name is
- 5 Karen Skelton. And Karen and I had lunch in
- 6 Washington probably three weeks ago. And she is
- 7 desperate to identify opportunities that the
- 8 secretary could bring to California.
- 9 So I mentioned our commission and what
- 10 we're doing . So I would suggest reaching out to
- 11 Karen Skelton. And then of course Jigar Shah
- 12 from Generate Capital, who is now the head of the
- 13 loan program that Jonathan described. He's very
- 14 familiar with this topic, very familiar with
- 15 Lithium Valley, and I think could be an
- 16 incredible resource to help to have this
- 17 conversation gain scale toward a funding
- 18 opportunity. If I had my druthers, there would
- 19 be an absolute subdivision on lithium, national
- 20 security, and our future. And this would be the
- 21 hub.
- 22 COMMISSIONER WEISGALL: Yeah. And,
- 23 Terra, let me not take any more time here. But
- 24 there are plenty of other areas. And I think
- 25 maybe what I will do for the next meeting is

- 1 outline some or that. I mean, there are hiring
- 2 tax credits for qualified employees, there's
- 3 sales and use tax credit, there are business
- 4 expense deductions with accelerated depreciation
- 5 where a business can treat up to 40 percent of
- 6 the eligible cost of qualified property as a
- 7 business expense, not a capital expense. There
- $8\,$  are net interest deduction for lenders. Really a
- 9 whole series of different programs.
- 10 And I think that -- and, you know, Tom is
- 11 absolutely right. We've got a Biden
- 12 administration that is looking not just to
- 13 promote a clean energy economy, but to devote 40
- 14 percent of all resources to disadvantaged
- 15 communities. So everything we're doing in
- 16 Lithium Valley checks every one of those boxes.
- 17 TERRA WEEKS: Yeah. That's great. And
- 18 just thinking through the workshop agendas, I
- 19 think it would be great to have you maybe kick
- 20 off that session with just an overview. We can
- 21 continue the planning process as we move forward,
- 22 but I think this is a great starting point.
- 23 COMMISSIONER WEISGALL: Okay. And what
- 24 I'll do is I'll get a slide deck to you and
- 25 Elizabeth just to get that process started.

- 1 TERRA WEEKS: Perfect.
- 2 CHAIR PAZ: Rod?
- 3 COMMISSIONER COLWELL: I'd just quickly
- 4 like to add to Jonathan's comments. I think what
- 5 we're seeing in the marketplace to actually
- 6 compete with the Gulf Coast and Georgia, part of
- 7 this consideration, whether it's Point B or E,
- 8 but there's probably some sort of limited land
- 9 tax exemption for the third party battery cathode
- 10 guys to attract them there. It could be limited
- 11 to a period of time, but some sort of careful
- 12 consideration on that. Because at the moment, a
- 13 hundred percent of nothing is nothing. And to
- 14 get these guys there rather than going to Georgia
- 15 is a real competitive environment at the moment.
- 16 So I just wanted to add that to Jonathan's
- 17 comments.
- 18 CHAIR PAZ: Thank you. Luis?
- 19 COMMISSIONER OLMEDO: Yeah, hello. These
- 20 all seem to be very traditional models of
- 21 incentivizing the community development or
- 22 infrastructure development, industry incentives.
- 23 All very important.
- One thing that I don't see very often is,
- 25 again, the spirit of the direction that the

- 1 federal administration, President Biden wants to
- 2 take the country. You know, buy American. I
- 3 certainly think there's a lot of room to support
- 4 the industry and help both incentivize it as well
- 5 as provide -- make it more competitive in
- 6 California and certainly here in the Salton Sea
- 7 region. I think it would be very interesting to
- 8 see how some of these traditional incentive
- 9 models, how they directly impact the
- 10 disadvantaged population. And what I've seen is
- 11 that there's a lot of fly-by-night industry where
- 12 there's a lot of incentives. But once those
- 13 incentives dry up and, you know, a lot of these
- 14 businesses tend to just pack up and move on to
- 15 their next project. And we have seen them. You
- 16 know? I'm not just making this up. I mean, we
- 17 saw with Biomass and some of the other industries
- 18 that haven't really, you know, delivered on their
- 19 promise. So how these -- how can these -- I
- 20 would like to see if there is a way to tie these
- 21 incentives and whether there's a greater
- 22 opportunities now, you know, as much as we know
- 23 and as much investment the Federal Government and
- 24 the state want to put into lithium, to make that
- 25 calculation. If we go one route, then we take,

- 1 you know, from the community. We go the other
- 2 route, then we don't take from the community but
- 3 we incentivize the industry. Right? And then we
- 4 make this industry successful.
- 5 CHAIR PAZ: Thanks. I would like to see
- 6 in this area how some of these tax credits can
- 7 have a win-win both for the development and the
- 8 community. So the one that I'm most familiar
- 9 with is the enhanced infrastructure financing
- 10 districts, although I know there's just a very
- 11 difficult negotiations that need to happen to
- 12 establish those between the different
- 13 jurisdictions. But I'm using that as an example
- 14 of an incentive that can help both address some
- 15 of the infrastructure challenges that were
- 16 presented during our last commission meeting when
- 17 it comes to roads or transportation. And those
- 18 are some of the same things that our communities
- 19 would benefit from; having enhanced roads, having
- 20 enhanced connections, connectivity, things like
- 21 that.
- 22 So in this area of analysis, I would like
- 23 to see sort of that kind of thought process;
- 24 where is it that some of these incentives can
- 25 have a double win both for directly improving and

- 1 enhancing the surrounding community, but also
- 2 allowing the development of lithium.
- 3 TERRA WEEKS: Other comments on this
- 4 topic?
- 5 COMMISSIONER SOTO: The only other thing
- 6 I would add, Tara, is -- and I don't know where
- 7 it's at. I'd have to check. But remember part
- 8 of the current jobs bill from the President.
- 9 There is a tax credit for freestanding solar or
- 10 freestanding storage. And it's a little bit
- 11 downstream from where we're at because it's those
- 12 who actually deploy the storage. But, you know,
- 13 that is an incentive to invest in storage overall
- 14 and thus it could help to add an additional
- 15 kickstart to what we're talking about here. Up
- 16 until now, storage has not gotten its own
- 17 independent tax credit. It has to be aligned
- 18 with or integrated with solar. So now we have our
- 19 own so that you could have commercial,
- 20 industrial, residential storage. And whomever
- 21 has that could get a credit for it.
- 22 CHAIR PAZ: Jonathan?
- 23 COMMISSIONER WEISGALL: Just FYI. Tom,
- 24 you're right. The wind industry has become very
- 25 successful in the last 30 years, due largely to a

- 1 production tax credit, and the solar industry
- 2 through an investment tax credit. And solar plus
- 3 storage has that. And as Tom says, a standalone
- 4 investment tax credit is probably coming for
- 5 storage. I hope to work -- and it's premature,
- 6 but I do hope to work on a production tax credit
- 7 for lithium production. It fits exactly the mold
- 8 of what has made wind and solar and now storage
- 9 successful. Much like, you know, we're going to
- 10 see an offshore wind production tax credit
- 11 probably by the end of this year.
- 12 So, again, that's something else to think
- 13 about. That will be at the federal level and not
- 14 the state level, but it's one other incentive to
- 15 think about.
- 16 CHAIR PAZ: Thank you. Luis?
- 17 COMMISSIONER OLMEDO: You know, one thing
- 18 that I've been eager to share with the industry
- 19 for quite some time is that I wonder if sometimes
- 20 -- and again, this is -- maybe it will come up in
- 21 conversations in the future unless, you know,
- 22 there's an answer for it. But sometimes I get
- 23 the feeling that the industry feels, look, we've
- 24 done enough. We've given enough to the
- 25 community. And so it will be important to also

- 1 see the entire journey of these resources and
- 2 whether these resources just aren't reaching the
- 3 community or where they're getting stuck
- 4 somewhere where they're not reaching the
- 5 community in terms of benefits. And, again,
- 6 benefits across the board.
- 7 But in all fairness, again, it's just
- 8 sort of a sentiment and an observation and a
- 9 thought that I have had, that maybe the
- 10 geothermal industry feels, hey, we've been
- 11 investing and we have it here and we can show it.
- 12 And I would believe it. But we are living at a
- 13 time where we have been finding more and more
- 14 that there have been inequities, and those
- 15 inequities have resulted in disinvestment and
- 16 creating extremely economic disadvantages,
- 17 economic depressed areas, economic depressed
- 18 neighborhoods.
- 19 So I certainly continue to be
- 20 enthusiastic about the opportunities that come
- 21 with these conversations and how we get it to the
- 22 finish line.
- 23 Jonathan?
- 24 COMMISSIONER WEISGALL: Delighted to
- 25 share that data with Commissioner Olmedo. We

- 1 have 235 employees now. Our employee base is
- 2 about 85 percent Latino. I mean, it reflects the
- 3 demographics. 100 percent of our employees come
- 4 from Imperial County, some from Riverside. But
- 5 that's the whole employee base. And our wages
- 6 are 197 percent the median wage in Imperial
- 7 County. So we pay about double the wage with
- 8 complete health and retirement benefits. But,
- 9 again, if you want that information, we'd be
- 10 delighted to get that.
- I think that there may be a need to clear
- 12 the air here on some concerns in the community
- 13 about what our geothermal industry does. I don't
- 14 have the exact figures, but I think it's safe to
- 15 say we've paid \$45 million in property taxes in
- 16 the last eight years, all for local community.
- 17 So we're very proud of what we do in Imperial
- 18 County.
- 19 CHAIR PAZ: Thank you, Jonathan. I
- 20 wanted also to mention in this area as we're
- 21 thinking about community engagement and having
- 22 engagement as a through line throughout the
- 23 different chapters, having conversations with the
- 24 community about what if any is the impact of
- 25 these tax credits on their communities will be

- 1 important. That way we can understand. And,
- 2 again, I don't have very much -- and I'll repeat
- 3 this. I don't have much understanding of these
- 4 tax credits. But with infrastructure financing
- 5 districts, if it's the different cities that are
- 6 reallocating part of their tax increment for a
- 7 specific project, so what is it that we're saying
- $8\,$  no to so that we can say yes to this. And I
- 9 think having those conversations with the
- 10 community so that they can understand and also
- 11 inform us about what that impact is going to mean
- 12 to them on a day-to-day and that we feel
- 13 comfortable moving in that direction, again, with
- 14 a fully conscious of what that impact is going to
- 15 be. And so that's a particular area of interest
- 16 for me, but I also think it's a very important
- 17 opportunity to be thinking about how we might
- 18 start engaging the community and some of these
- 19 conversations that may seem less -- maybe less
- 20 attractive for community dialogue.
- 21 And I see Tom's hand up.
- 22 COMMISSIONER SOTO: And I can't agree
- 23 with you more, Sylvia, because as deeply involved
- 24 as I am in the energy industry, tax credits
- 25 sometimes remain a mystery to me. And I think

- 1 the best way to promote how these actually
- 2 convert to improve quality of life is working
- 3 with the feds and the state and showing them
- 4 comparables of other communities that benefitted.
- 5 You know, the first one that comes to
- 6 mind of course is the entire fossil fuel
- 7 industry, which gets about \$600 billion a year of
- 8 subsidies, tax credits, and so forth. And that's
- 9 a sector that has built entire communities and
- 10 economics around certain regions of the country.
- 11 And so we are headed in the same
- 12 direction. And because of the types of tax
- 13 credits, production tax credits on solar and
- 14 wind, we now see five million people a morning go
- 15 off to work in the clean tech industry, more than
- 16 in fossil fuels and coal combined. And that's a
- 17 direct result of what Jonathan described. Having
- 18 the type of production tax credits in place that
- 19 help to allow the birth of those sectors and help
- 20 to gain the economies of scale.
- 21 So I think getting examples of where this
- 22 has worked effectively to show the community that
- 23 this is not a rip off of their resources in
- 24 exchange for nothing. You know, it is a very
- 25 good, mutually-beneficial opportunity for the

- 1 scaling of regional economics in the Imperial
- 2 Valley in exchange for a line and extraction
- 3 sector to come in and sustainably prove out
- 4 lithium as a factor of our future.
- 5 CHAIR PAZ: Luis?
- 6 COMMISSIONER OLMEDO: So just
- 7 backtracking a comment from Commissioner
- 8 Weisgall. I did want to let him know that I am
- 9 very familiar with the good jobs that the
- 10 geothermal industry provides. You know, very
- 11 competitive jobs. But it also has a very large
- 12 spectrum of the type of jobs that it creates.
- 13 They're not all great jobs, but I do recognize
- 14 that there are. And we are a small community and
- 15 many of our family members have worked there and
- 16 appreciate what it does.
- 17 But I did want to clarify that, you know,
- 18 there's a whole series of revenues that are
- 19 generated and that do end up in our community.
- 20 And again, I don't want to put the burden on the
- 21 industry itself. I don't want to be on the
- 22 defensive and think this is about the industry.
- 23 We have had projects out here that have gone
- 24 through these same steps and the same journeys
- 25 and end up costing our community tremendously.

- 1 Big, big dollars. National Beef being one of
- 2 them. And the only people that ended up having
- 3 to pay and still paying are the low-income
- 4 residents that populate our neighborhoods, our
- 5 communities.
- 6 So, you know, in order to avoid those
- 7 types of costly outcomes, which again, we have
- 8 seen, you know, bad outcomes, too many bad
- 9 outcomes. So this is a great opportunity. I
- 10 continue to say the same thing. It's a great
- 11 opportunity.
- 12 But I do ask the patience of the members,
- 13 the patience of the industry, commissioners.
- 14 Please know that any questions that I bring are
- 15 certainly questions that are just intended to
- 16 just be more informed and better understand it.
- 17 And I want to support Madam Chair about getting
- 18 more information. You know, we need to know
- 19 more. We need to understand what's the tradeoff
- 20 and what's the win-win scenario. Thank you.
- 21 CHAIR PAZ: Thank you. Are there any
- 22 other comments on this chapter?
- 23 Terra, back to you.
- 24 TERRA WEEKS: Great. Thanks for that
- 25 discussion. I think this is really helpful and I

- 1 think this feeds really well into the discussion
- 2 on recommendations.
- 3 I'm actually going to suggest though that
- 4 we take a quick break just because these meetings
- 5 are very long and we're all staring at small
- 6 screens. So I might suggest we break if it's
- 7 okay with you, Chair Paz, and then reconvene to
- 8 talk about recommendations at 3:00.
- 9 CHAIR PAZ: At 3:00. Okay. Just making
- 10 sure, Tom, you're still going to be here at 3:00,
- 11 correct?
- 12 COMMISSIONER SOTO: Yes, I'll be here.
- 13 CHAIR PAZ: Okay. Thank you.
- 14 (Break)
- 15 TERRA WEEKS: Okay. So thanks again for
- 16 that discussion. I would like to now turn to the
- 17 conversation around recommendations in the
- 18 report. So I think it's probably a little
- 19 premature to really dive into this discussion
- 20 around what types of or what specific
- 21 recommendations we'd like to include in the
- 22 report. We really just wanted to allow for a
- 23 discussion mainly around the types of
- 24 recommendations, if you do have ideas that you'd
- 25 like to vet through this process, or other

- 1 questions around the recommendation development
- 2 process. I think there could be an instance
- 3 where we might not have a unanimous agreement
- 4 across the commission on recommendations. So
- 5 just kind of starting to think through what this
- 6 chapter could look like and kind of how you'd
- 7 like to see those discussions evolve.
- 8 So just reviewing quickly the statutory
- 9 language for this section. It says
- 10 recommendations for legislative or regulatory
- 11 changes that may be needed to encourage lithium
- 12 extraction from geothermal brines. And the one
- 13 specific example it gives is including whether
- 14 the development of a centralized tracking system
- 15 for lithium project permitting by state and local
- 16 regulatory agencies would assist with the
- 17 development of the lithium industry.
- 18 So I think because we just had a robust
- 19 discussion in incentives, maybe we'll talk about
- 20 recommendations outside of the realm of
- 21 incentives and just see are there other ideas or
- 22 types of ideas that you would like to explore.
- 23 CHAIR PAZ: Rod?
- 24 COMMISSIONER COLWELL: Yes. I quess
- 25 kicking this off, this is starting to get -- so

- 1 we've dealt with tax. Yeah, legislative or
- 2 regulatory changes. And I think that there's
- 3 probably three areas here that we could really --
- 4 you know, as a suggestion.
- 5 The first one would be, you know,
- 6 California to administratively approve a new CEQA
- 7 exemption for lithium projects using geothermal
- 8 energy. That's a piece of legislation that
- 9 applies to solar and wind, but it somehow doesn't
- 10 apply to geothermal and lithium. So that would
- 11 expedite the process.
- 12 Also the second part would be I guess GO-
- 13 Biz or the Governor's office could call the White
- 14 House Council of Environmental Quality to declare
- 15 Lithium Valley developments as high priority or
- 16 major infrastructure projects for permitting
- 17 streamlining and accountability. So if we're
- 18 starting to get into particularly related to tax
- 19 where this is becoming a critical industry, which
- 20 I think we all believe, hence we're all here, is
- 21 something that really the federal government
- 22 could get involved in and really sort of help
- 23 fast track and streamline the process. Encourage
- 24 local, state, and federal support to establish
- 25 Lithium Valley an opportunity or an enterprise

- 1 zone is what we've been sort of talking again a
- 2 little bit, I guess, on the tax side is that, you
- 3 know, incentivizes development of cathode and
- 4 battery manufacturing over and above just
- 5 lithium. So that's the point I made earlier a
- 6 little bit about the land tax exemptions or a
- 7 proper enterprise zone.
- 8 So there's three areas there that I'd
- 9 just like to put out there just for
- 10 consideration.
- 11 CHAIR PAZ: Jonathan:
- 12 COMMISSIONER WEISGALL: Tom, why don't
- 13 you go first? You may be on a time pressure.
- 14 I'm fine.
- 15 COMMISSIONER SOTO: Sure. No, that's
- 16 fine. I'm good until about -- I think my call is
- 17 at 4:00, which is a call between Japan and the
- 18 East Coast. So there's this tiny little window.
- 19 You know, I think everything that Rod was
- 20 saying is correct. Some of the points that
- 21 Jonathan brought up with respect to next
- 22 generation of thought legislatively. And what we
- 23 may want to do is see whether there is an
- 24 appetite on the hill with Vargas and others who
- 25 sit on either appropriations, energy and

- 1 commerce, and who represent the area to come up
- 2 with an omnibus bill that has everything from
- 3 working with developing an enterprise zone to the
- 4 production tax credit for lithium production and,
- 5 you know, have a federal path to implementing
- 6 what could be a much greater consideration for
- 7 Lithium Valley to scale and scale much quicker
- 8 under those types of incentives, for one, and do
- 9 the same, frankly, with the State of California
- 10 and see if we can get legislative support or PUC
- 11 support to boost the Energy Commission's capacity
- 12 to maybe designate more specifically, like we
- 13 have with the EPIC program, lithium production.
- I think, Jonathan, you guys are somewhat
- 15 the beneficiary of a small amount of that.
- 16 Hopefully it could be more in the future. But
- 17 there should be a little bit more of an exclusive
- 18 play here given that the disproportional aspect
- 19 of this being such an early stage startup sector,
- 20 the CEC could really be critical in helping it to
- 21 scale and become a meaningful specter.
- We also have to keep in mind that there
- 23 is -- you know, we talked about the DOE's loan
- 24 program, which Jigar runs, and a lot of DOE. But
- 25 we also have great expertise. The former head of

- 1 small business for GO-Biz, Isabel Guzman, is now
- 2 the head of the SBA. And, Rod, folks like you
- 3 and others could be very well-qualified for some
- 4 of the SBA benefits with respect to low interest
- 5 loans. Maybe they could direct you to some of
- 6 the SBIC funds that are looking to contribute to
- 7 the clean tech sector.
- 8 So all of that said, maybe we should just
- 9 explore three things, basically. Administrative
- 10 remedies that could be done at the executive
- 11 level through the White House, i.e. Office of
- 12 White House CEQ, NEC, and others and Department
- 13 of Energy, and then a legislative package at the
- 14 federal level which would include all the things
- 15 that we just discussed. And then the same with
- 16 the state with a state legislative package that
- 17 would amend CEQA to have less onerous review, as
- 18 Rod was indicating, among other things. And then
- 19 administrative with seeing whether we could get
- 20 the PUC and the CEC to work with one another for
- 21 an additional level of oomph for the infant baby
- 22 lithium sector, production sector.
- 23 CHAIR PAZ: Jonathan?
- 24 COMMISSIONER WEISGALL: All great points.
- 25 Couldn't agree more. I am delighted that

- 1 representative Pete Aguilar on appropriations has
- 2 been involved in this. Had meetings with him and
- 3 staff, and he was able to get funding through
- 4 Department of Energy on lithium research. Right
- 5 after I met with Dr. Ruiz, who represents
- 6 Riverside County and sort of the north part of
- 7 the Salton Sea. The plants are, as you say, in
- 8 Juan Vargas' district, but Ruiz actually
- 9 discussed lithium with Secretary Granholm. In
- 10 fact, last week she was asked about this at a
- 11 hearing before the House Energy and Water
- 12 Appropriations Subcommittee and specifically
- 13 talked about the conversation she had just had
- 14 with Dr. Ruiz on lithium. So this is -- this
- 15 checks every box at the federal level.
- 16 I think that in terms of recommendations,
- 17 permitting is critical. The last geothermal
- 18 plant we designed and permitted took four years.
- 19 That's not going to work for lithium.
- 20 Part of the solicitation or the grant
- 21 that we won from the U.S. Department of Energy
- 22 will include some funding to do the engineering
- 23 and to begin the permitting to go commercial.
- 24 But community support, going back to our earlier
- 25 conversation both with Commissioner Olmedo and

- 1 Chair Paz, you know, community support, early
- 2 engagement is going to reduce delays. State
- 3 interagency cooperation and streamlining is going
- 4 to help, as well as the community outreach that
- 5 we've already held with our virtual town hall
- 6 meeting and another one we're going to schedule
- 7 for July.
- 8 So I don't have anything specific there,
- 9 Terra, other than I think we just need to flag a
- 10 permitting streamlining. And of course we don't
- 11 know today what agency would even permit a
- 12 lithium plant. I think it's going to be pretty
- 13 obvious that it should be the Energy Commission
- 14 since the Energy Commission has jurisdiction over
- 15 any geothermal plant above 50 megawatts. And I
- 16 would say we have a number that are 49.9
- 17 specifically to, you know, permit local
- 18 permitting. But the four-year process with their
- 19 big plant, that Black Rock plant I mentioned,
- 20 showed the frustrations we had at the state
- 21 level.
- 22 So I think it's just worth flagging the
- 23 need for streamlining permitting. That does not
- 24 mean end-running CEQA in the slightest. But
- 25 certainly deadlines are critical. Single point

- 1 of accountability is critical, things like that.
- 2 Nobody is talking about avoiding legal,
- 3 you know, requirements and environmental reviews,
- 4 but there really is a need to streamline the
- 5 process assuming the industry is ready to go
- 6 commercial. Those would be my thoughts.
- 7 CHAIR PAZ: Thank you, Jonathan. One of
- 8 the points you made, Jonathan, about the
- 9 importance of community engagement and support
- 10 and how we -- you know, the sooner that we
- 11 address that, the better it will be for the
- 12 development of lithium made me think about a
- 13 comment that I think Rod had mentioned before in
- 14 terms of there being no pathway for the potential
- 15 of royalties that could help restore the Salton
- 16 Sea. And I know that that option and maybe think
- 17 goodwill about dedicating some sort of benefit to
- 18 the restoration of the Salton Sea has been alive
- 19 from the very beginning of the conversations of
- 20 lithium and lithium development from the Salton
- 21 Sea. So some type of legislative recommendation
- 22 around the ability for us to direct funding for
- 23 the restoration. It's probably going to be
- 24 necessary. Whether it's legislative or
- 25 administrative, I'm not sure. But having some

- 1 type of recommendation around that.
- 2 Luis?
- 3 COMMISSIONER OLMEDO: On the topic of
- 4 streamlining, in the two decades that I've been
- 5 working on environmental justice, I haven't
- 6 really seen a very clear benefit in permit delays
- 7 always translating into greater protections,
- 8 whether it be the environment, public health, or
- 9 greater community benefit. Exemptions though are
- 10 another subject matter that often does result in
- 11 having significant impacts. Right?
- 12 So I just wanted to just make that
- 13 distinction that a lot of times delays in
- 14 permitting or the involvement of environmental
- 15 organizations because they weren't brought in
- 16 early, which I am very thankful to that level of
- 17 agreement that the community and stakeholders
- 18 need to be involved early on, that delays I don't
- 19 think benefit anyone necessarily. And I keep
- 20 seeing messages about timing. And I think it's
- 21 clear that this is a once in a lifetime
- 22 opportunity. Don't want to see delays. Delays
- 23 in permitting don't always translate into
- 24 community benefits.
- 25 So I hope that opens up kind of -- oh,

- 1 and another area of thought and perhaps even
- 2 agreement that that's the last thing I would want
- 3 to see is delays and then be blamed on, well,
- 4 it's the environment. It's not always that.
- 5 It's the bureaucracy a lot of times doesn't move
- 6 things quickly enough. And there's also a big
- 7 difference.
- 8 I know that -- thank you for mentioning
- 9 that geothermal right now operates below the
- 10 threshold that, you know, keeps it at the local
- 11 permitting. And, you know, there are some pros
- 12 and cons. And it goes back to the message I keep
- 13 putting out there, is that I like to see the
- 14 industry have a much larger conversation.
- 15 Historically we have had a few people or a few
- 16 hands that seem to be the ones that control the
- 17 permitting and manage all of that. That's not
- 18 sustainable and that's not a long term -- I think
- 19 big companies like those that operate around the
- 20 Salton Sea deserve a better opportunity for long-
- 21 term sustainability and better relationships with
- 22 the community. And that's going to require a
- 23 much larger conversation.
- So I do hope that this really transforms
- 25 the way that the industry operates out here for

- 1 the betterment of all.
- 2 CHAIR PAZ: Jonathan?
- 3 COMMISSIONER WEISGALL: Commissioner
- 4 Colwell, you were the one who suggested payments
- 5 to Salton Sea restoration at the last meeting.
- 6 Do you want to outline what your thoughts are?
- 7 Because I think we are maybe a little bit -- have
- 8 a slightly different view. But I'd like to hear
- 9 your thoughts.
- 10 COMMISSIONER COLWELL: Well, I guess the
- 11 reference probably pertains to us more so than
- 12 you guys, Jonathan. We are in the playa. The
- 13 situation is a practical one for us, which
- 14 includes the wider Imperial Valley all the way up
- 15 (indiscernible). So, you know, close to 5,000,
- 16 6,000 of exposed playa is not exactly what we,
- 17 our people want to work in as well. So whether
- 18 it's administratively or just by moving forward
- 19 and doing community collocated work or whether
- 20 it's work with DWR, you have to be determined.
- 21 But the point is, you know, there's a large
- 22 expanse of playa. You know, geothermal is a
- 23 relatively low footprint, but it does actually
- 24 open up the opportunity for other mitigants for
- 25 playa, whether it's ag use, whether it's

- 1 (indiscernible), whether it's actual habitat or a
- 2 culmination of all of that is what we are
- 3 interested in exploring. So whether it's a per-
- 4 ton tax or not.
- 5 But the main point was specific to dust
- 6 and we are very cognizant of that issue out
- 7 there. And that's something that we're quite
- 8 keen to explore.
- 9 And for those of you who have been to Red
- 10 Hill Bay, respectfully, you know, we've seen
- 11 reports and ring binder folders. I mean, you can
- 12 cover the whole bay with ring binder folders and
- 13 it would probably be more effective than the work
- 14 that's been done.
- So as a private business, I think we're
- 16 very capable of getting out there and assisting,
- 17 working with communities and groups to deal,
- 18 really tackle the issue, at least on our part of
- 19 the lakebed, so to speak. So that's where I was
- 20 referring, Jonathan, and we're pretty keen to
- 21 take a proactive approach on that real issue.
- 22 COMMISSIONER WEISGALL: Yeah. Let me --
- 23 Chair Paz, let me just give you a couple of
- 24 thoughts in that regard if I could.
- I don't know what your company's

- 1 community investment activities are, Rod. But I
- 2 will tell you all of the Berkshire Hathaway
- 3 energy companies participate very actively in
- 4 community investment, scholarships, family case,
- 5 farm bureau, food banks, educational scholarships
- 6 and the like. We certainly will be increasing
- 7 those community investment funds if we're
- 8 successful in our demonstration projects and we
- 9 move to full commercial deployment. Our plants
- $10\,$  did not cause any problems at the Salton Sea.
- 11 They are adjacent to the Salton Sea, but they're
- 12 not related at all to the Salton Sea. We're very
- 13 good neighbors with the Sonny Bono Salton Sea
- 14 National Wildlife Refuge which is immediately
- 15 adjacent to our geothermal plants. I think we've
- 16 shown that this land can support both habitat and
- 17 geothermal and mineral production. We've worked
- 18 very closely with the Salton Sea Authority.
- 19 I think really the issue here is are we
- 20 looking at this industry all of the sudden
- 21 supporting Salton Sea restoration? I mean,
- 22 Governor Newsom I believe is now allocating \$220
- 23 million for the ecological crisis of the Salton
- 24 Sea from getting worse. I would hope that
- 25 President Biden's proposed \$2 trillion or now

- 1 \$1.7 trillion infrastructure program with 40
- 2 percent allocated for disadvantaged communities
- 3 and with a clean energy emphasis could help. But
- 4 those are not -- those are huge numbers. I've
- 5 seen estimates of Salton Sea restoration also in
- 6 the billions.
- 7 I don't think it's wise to start throwing
- 8 out numbers for Salton Sea support when not one
- 9 ounce of lithium has been produced yet. And I
- 10 said earlier if all this exercise involves is
- 11 producing lithium at a cost that is not
- 12 competitive with the world market, we haven't
- 13 accomplished anything. We need to show as a
- 14 company we know on our demonstration project what
- 15 our limitations are from the California Energy
- 16 Commission itself, which is to produce at under
- 17 \$4,000 a ton.
- 18 If you start from the get-go from not
- 19 even -- you know, Tom, you're right; we are in
- 20 our infancy. We are in the top of the first
- 21 inning right now with just a demonstration
- 22 project for which we have not even broken ground.
- 23 I mean, we will in a couple of weeks. But that's
- 24 where we are.
- 25 So I would just say it's premature to

- 1 start talking about major Salton Sea restoration.
- 2 That's a different topic. Community investment?
- 3 absolutely. Close relationship with Imperial
- 4 county, we already have that and we will greatly
- 5 increase that community investment as we spend
- 6 more investment dollars of our own. But I don't
- 7 think that translates into any obligation of a
- 8 lithium industry somehow to be responsible for
- 9 cleaning up the Salton Sea.
- 10 CHAIR PAZ: I hear where you stand,
- 11 Jonathan, and where your comments are coming
- 12 from. And again, my -- it may be premature, but
- 13 I don't think it's out of the question. At least
- 14 in the hearing yesterday that we participated in
- 15 that came up. And it's come up even before
- 16 (indiscernible). So it's not something that I'm
- 17 putting forth as my idea, but it's something that
- 18 has definitely been attached to the conversation
- 19 of lithium. And while it may be premature now, I
- 20 wouldn't want to not explore what a possible
- 21 benefit to the restoration of the Salton Sea, if
- 22 any, and what might allow us to get there.
- 23 Luis?
- 24 COMMISSIONER OLMEDO: First of all, I
- 25 want to thank Commissioner Weisgall for his

- 1 constantly direct and honest explanations and
- 2 enlightenment of the situation of the industry
- 3 and its operation in the Salton Sea and basically
- 4 a very logical view of how things are and how
- 5 things should be looked at.
- 6 It is also a question that constantly
- 7 have me seeking a better understanding as to, you
- $8\,$  know, years and years ago there was the push for
- 9 geothermal. And I get it, it's a great baseload
- 10 energy, it's sustainable. There are some
- 11 concerns that continue to bring at the
- 12 appropriate times and perhaps even the
- 13 subcommittees. But sometimes I feel it is
- 14 premature to be talking about geothermal or
- 15 lithium as being the driver of restoration in the
- 16 Salton Sea given that there are very, very clear
- 17 responsible parties and agreements that have been
- 18 in existence for the Salton Sea. And it should
- 19 not be these -- if this strategy then becomes an
- 20 economic opportunity for some of the land owners,
- 21 then I understand it. But the industry itself, I
- 22 don't see it as the promise of the Salton Sea.
- 23 Those agreements have already been made and those
- 24 responsible parties have already been identified
- 25 and the resources and who is supposed to make

- 1 those investments have already been agreed upon
- 2 and identified. Whether they're following
- 3 through with their commitments, that's another
- 4 question.
- 5 And I do agree that these benefits do
- 6 need to reach our communities. I continue to
- 7 repeat that I will continue to ask the industry
- 8 members and the industry as a whole to broaden
- 9 the conversation because it is one of the
- 10 fundamental reasons why the majority of the
- 11 population is not seeing these benefits. Because
- 12 we live in a community that is disengaged, that
- 13 is not involved, that perhaps will be very
- 14 difficult for them to, even in the early stages
- 15 or even through this entire process, to
- 16 participate in the masses. So it really does put
- 17 the responsibility back on responsible industry,
- 18 businesses, and every member on this commission
- 19 to assure that that voice, whether present or
- 20 not, is uplifted and is part of the conversation
- 21 and that the benefits truly reach the community.
- 22 With that, I also want to thank
- 23 Commissioner Weisgall because it has been my
- 24 suspicion that it would not be in the best
- 25 interest of Berkshire Hathaway to play a role of

- 1 interfering with these hybrid projects, both
- 2 habitat and the potential future speculation of
- 3 lithium production and geothermal. And Red Hill
- 4 Bay being a perfect case study that I would like
- 5 to ask Madam Chair Paz and the commissioners that
- 6 perhaps we can use Red Hill as an example as to
- 7 what are some of those complicated scenarios that
- 8 may occur because of these early conversations
- 9 and speculations of lithium and geothermal.
- 10 Thank you.
- 11 CHAIR PAZ: Thank you. Frank?
- 12 COMMISSIONER RUIZ: Hi, everyone. This
- 13 is Frank. I totally agree with Commissioner
- 14 Olmedo and Paz. And although the lithium
- 15 industry should not be held responsible for the
- 16 Salton Sea, this issue already became part of the
- 17 community's issues. And it is already an
- 18 integral part of the community, some culture in a
- 19 way.
- 20 So to have a discussion early on, to make
- 21 sure that how can this industry benefit, this
- 22 problem that already became part of the
- 23 community. I don't think it should be
- 24 disconnected in any way from what is happening in
- 25 the larger context of the whole community, I

- 1 think it will be beneficial to discuss it early
- 2 on and the benefits or the impact. I really hope
- 3 and I am very positive that the impact to the
- 4 Salton Sea and the environment will be a positive
- 5 one. But I think it is important to have these
- 6 early on conversations, how can some of these
- 7 revenues, how can these royalties benefit the
- 8 Salton Sea directly. Obviously we are struggling
- 9 to find the monies to even implement a ten-year
- 10 plan. And currently we don't even have a funding
- 11 mechanism for operation and maintenance.
- 12 So I think even though this industry is
- 13 not responsible for it, we already know who is
- 14 legally obligated to take care of the problem. I
- 15 think that having this early on discussion will
- 16 definitely benefit how we proceed, how we go
- 17 about this in the context of the benefits to the
- 18 communities.
- 19 CHAIR PAZ: Thank you, Frank. Luis?
- 20 COMMISSIONER OLMEDO: Madam Chair, I'm
- 21 sorry, did you say I can go ahead and speak?
- 22 CHAIR PAZ: Yes. Do you have your hand
- 23 up? Yes.
- 24 COMMISSIONER OLMEDO: Yes. I do want to
- 25 give support to Commissioner Paz and -- Madam

- 1 Chair Paz and Commissioner Ruiz. No, I fully
- 2 agree with the early conversations. Where I come
- 3 from, just my concerns is that this is a new
- 4 resource, new revenues. Don't want to make it
- 5 convenient for those commitments and existing
- 6 revenues that should be going to Salton Sea to be
- 7 replaced. And these new benefits, I'd prefer to
- 8 see them reaching the community that is least
- 9 likely to have new resources.
- 10 I understand the opportunity to do the
- 11 growth of the industry, the footprint that could
- 12 help manage and mitigate dust, suppression type
- 13 of infrastructure. I understand all those
- 14 benefits. But again, I think we've seen where
- 15 there are resources. And right now currently
- 16 there is no transparency. We don't know where
- 17 those resources are going. You know, there's
- 18 DJPA dollars, the state has certain commitments,
- 19 the landowners have certain commitments. And I
- 20 wouldn't like to get too far into trying to put
- 21 this responsibility on the industry when these
- 22 are new resources that are going to -- new
- 23 opportunity for new resources for our community
- 24 to decide where those resources are most greatly
- 25 needed. And it could be the Salton Sea. I'm not

- 1 disputing that, by the way.
- 2 CHAIR PAZ: Thank you. Any other
- 3 comments for this section? Okay. Back to you,
- 4 Terra.
- 5 TERRA WEEKS: Great. And I think this is
- 6 a good discussion to have and these are exactly
- 7 the types of discussions that we can tee up in
- 8 the workshop too to make sure we're looking at
- 9 the recommendations from all perspectives and
- 10 really helping you to think through them as a
- 11 group. And I think just in addition to what was
- 12 already said, thinking through some of the
- 13 downstream I quess opportunities, recommendations
- 14 specifically to support the supply chain. And I
- 15 think there was a comment in another meeting
- 16 around really focusing this report just on
- 17 supporting lithium development directly. So
- 18 those may be out of scope. But just another idea
- 19 to kind of throw out there.
- 20 So we are actually going to move
- 21 backwards now, kind of going back to the
- 22 beginning of this presentation. I think actually
- 23 the three areas that we touched on, vision,
- 24 incentives and recommendations, are really meaty
- 25 areas. So I think some of these may be a little

- 1 bit brief. Hoping to get just high-level input
- 2 and just being aware of time. I think we had
- 3 allotted until 4:00 for this discussion. We can
- 4 go a little bit over that because we don't have
- 5 that many more administrative items after this.
- 6 But really just kind of want to brainstorm, get
- 7 some initial input on where we're going.
- 8 Okay. So next slide, please. Where are
- 9 we? Okay, great. So this is the first topic
- 10 listed in the bill and this is on furthering
- 11 development of geothermal power. So the bill
- 12 reads, "To look at actions that will support the
- 13 further development of geothermal power that have
- 14 the potential to provide the co-benefit of
- 15 lithium recovery from existing and new geothermal
- 16 facilities". And then just going back to see who
- 17 -- so we have Commissioner Olmedo and Vice Chair
- 18 Kelley as the sub-body on this one. So maybe
- 19 I'll just pass it over to either of you.
- 20 MS. DE JONG: I don't believe Vice Chair
- 21 Kelley has joined us on the meeting or been able
- 22 to join us again. So Commissioner Olmedo maybe.
- 23 COMMISSIONER OLMEDO: Again, I think
- 24 there's been so much conversation across the
- 25 different areas. You know, I'm sure the

- 1 conversation we've also discussed supporting the
- 2 development of geothermal power. You know, I
- 3 think our goal is essentially everything that's
- 4 been discussed. It's identify the opportunities
- 5 and hear from all stakeholders, try to take
- 6 advantage of whatever incentives are out there,
- 7 tax type of incentives, and see how we can get
- 8 this industry. You know, like I said, this is a
- 9 once-in-a-lifetime opportunity to bring this
- 10 industry, and not only support the geothermal
- 11 development. And like I've mentioned earlier, I
- 12 think there's going to be a need for gathering a
- 13 lot of information, hearing from the experts in
- 14 the room, hearing from other, you know,
- 15 independent researchers that can also help
- 16 enlighten us and try to figure out what's
- 17 happening right now, what are the opportunities
- 18 to make it better, what does the industry need to
- 19 operate better, more efficiently, cleaner. And I
- 20 understand that there are some facilities that
- 21 have been around for a long time and some newer
- 22 ones that operate much more efficiently. How can
- 23 we get them all? You know, to the best, most-
- 24 efficient model or better.
- 25 And again, I think that the industry has

- 1 operated here for a very long time. This is a
- 2 long history. Again, it is my assumption just
- 3 from what I've read and what I've seen, I'm
- 4 really seeing the roadmap of how the revenues and
- 5 the royalties of minerals, the spirit of what the
- 6 legislation -- extraction, how that has operated
- 7 and is it actively occurring and how lithium will
- $8\,$  be different from that. And again, at the end of
- 9 the day it's how can we put a plan forward that
- 10 allows this lithium industry to thrive locally.
- 11 Right? And it's important. It's understood,
- 12 it's loud and clear. So, again, once-in-a-
- 13 lifetime opportunity and timing is of the
- 14 essence. And we would hope that this commission
- 15 is able to deliver a good plan that is agreeable
- 16 by all. And I believe that it is possible.
- 17 So that's my commitment as being part of
- 18 this, and I will ask the members, again, for
- 19 enlightening me as a commissioner as well as the
- 20 community and all other experts that can help us
- 21 develop this chapter. Thank you.
- 22 CHAIR PAZ: So I know -- and I see that
- 23 Ryan Kelley has just joined us. But I know that
- 24 there hasn't been a lot of investment in
- 25 geothermal power. And maybe IID, James Hanks

- 1 might have also some insight as to what are some
- 2 of the things that have limited the growth of
- 3 geothermal power.
- 4 So not to put you on the spot, James, but
- 5 when you are ready, I really think that the
- 6 experience that IID has had might be helpful in
- 7 this area. But I do see Rod's hand up.
- 8 COMMISSIONER HANKS: Yeah. I'd be happy
- 9 to jump in there.
- 10 First of all, I would make this point
- 11 very clear, that the lithium deposits are not
- 12 just anywhere that you drill. And they are also
- 13 not found in every producing geothermal well in
- 14 Imperial County. It is isolated to, so far that
- 15 we know of, to the area known as the Known
- 16 Geothermal Resource Region, which is at the south
- 17 end of the sea.
- 18 Now, whenever we talk about expediting
- 19 projects and so forth, the first thing that's got
- 20 to be developed is geothermal power. And there's
- 21 a certain amount of the power that would be
- 22 needed in the recovery of the lithium. So first
- 23 of all, that kind of -- that's going to help
- 24 offset the higher cost of geothermal just by
- 25 itself. So that's going to be helpful.

- 1 With the incentives that's being given to
- 2 other types of renewable resources, it would give
- 3 the impression that geothermal is more expensive.
- 4 But if you start adding up all the additional
- 5 costs we are fully aware of now with geothermal,
- 6 about 4:00 or 5:00 in the afternoon in the peak,
- 7 hot summers, the production of energy starts
- 8 tailing off to the point now from about 5:00 to
- 9 10:00 we have a real tough time meeting demands,
- 10 especially with shutting down the natural gas
- 11 generators and so forth.
- 12 So there's an opportunity here with
- 13 investors to come in, off-takers of the lithium,
- 14 to become involved in the geothermal production,
- 15 too. We're going to need that.
- 16 One of the biggest users of electricity
- 17 in the State of California deals with the
- 18 movement of water in the state. And a lot of
- 19 that was being generated from the use of coal,
- 20 and now the state generators. So this is going
- 21 to be a big plus. It will be a big plus for the
- 22 state to get involved and move this power to help
- 23 move the water. It is renewable, it is 24/7.
- 24 There could be times in peak shortages that they
- 25 could do some demand calls on some of this power

- 1 and help the state through those days. Sometimes
- 2 those days may only be five or six days a year.
- 3 But we're being told for this year it may be a
- 4 whole summer, and I'm very concerned about that.
- 5 But these off-takers are interested in
- 6 the development of geothermal power, they're
- 7 interested in getting it on their transmission
- 8 lines and getting it to other places in the
- 9 state. It helps build inertia in our lives
- 10 that's needed to move the energy. So there's all
- 11 types of co-benefits that will be provided by the
- 12 lithium recovery.
- 13 We have some existing plants that we know
- 14 have lithium in the brine. And once the R&D is
- 15 completed and we know the cost of recovery, I
- 16 think you will see an additional benefit because
- 17 I think that's going to help in the pricing of
- 18 the energy that's being produced and make it very
- 19 competitive. But you can't anticipate just going
- 20 to drill a well somewhere around the Salton Sea
- 21 and hit the lithium. It is a very expensive
- 22 discovery in drilling the wells. You have to
- 23 find sufficient brine. And there's hundreds of
- 24 millions of dollars invested that these
- 25 developers are going to need to recover their

- 1 expenses.
- Now, as far as the Salton Sea and
- 3 assisting in the restoration of the Salton Sea,
- 4 keep in mind that all of this energy that's
- 5 produced, all of the off-takers that purchase the
- 6 lithium, all of the associated businesses that
- 7 come along with it, from the trucking to rail to
- 8 possibly battery buildout, they all contribute to
- 9 the revenue of the State of California. And
- 10 someone mentioned that we all know who is
- 11 responsible for the Salton Sea.
- 12 And I'll just say this. Whenever there
- 13 was a need to move the water out of the imperial
- 14 valley, there was waves of regulatory folks that
- 15 got involved. And I'll just use the example of
- 16 mining the All-American Canal. It was being
- 17 challenged, it was tied up in court. Everything
- 18 come to a halt. And Congress added an amendment
- 19 to a very popular bill that had language in it,
- 20 notwithstanding any other provision of law, that
- 21 canal will be built. And the very next day, it
- 22 was dismissed. All the charges, all the
- 23 complaints was dismissed and the equipment
- 24 finished that job.
- On the negotiations on the QSA, it was

- 1 being held up because of the impact on the Salton
- 2 Sea. And there was language that was put in to
- 3 protect the IID and the residents here in
- 4 Imperial County and the water district from the
- 5 restoration costs. Also the impacts that would
- 6 be created by the lowering of the shorelines and
- 7 so forth.
- 8 So as it was mentioned, those impacts
- 9 have been assigned and agreed to by those that
- 10 recover those impacts. And that is separate from
- 11 the lithium extraction recovery.
- 12 If there are impacts associated with
- 13 that, then we should (indiscernible) the industry
- 14 to handle any impacts that they're responsible
- 15 for. That's part of the cost of doing business.
- 16 But I think if we're not careful and you start
- 17 penciling into the bottom line -- and as Jonathan
- 18 mentioned, there is a threshold that they're
- 19 expected to be able to produce lithium within
- 20 that threshold, these all become additional
- 21 costs. It dries that number up.
- But on the other hand, the production of
- 23 lithium, a successful program that we're
- 24 responsible to help set up, it will generate
- 25 revenue to this state. And I've been very happy

- 1 with the efforts that Governor Newsom has made to
- 2 meet the obligation of the restoration of the
- 3 Salton Sea and move it forward. The federal
- 4 government has some responsibility. They will
- 5 have property that's probably loaded in lithium
- 6 and possibly other minerals. And that may be
- 7 something to look at. But I look for them to be
- 8 an off-taker.
- 9 One of the bills that I'm watching very
- 10 close is one that Assemblyman Garcia is
- 11 sponsoring on a percentage of the lithium that
- 12 would need to be used in California. Now, I'm
- 13 very aware of the commerce clause in the
- 14 government, that's the authority of the federal
- 15 government. But there's also a provision for the
- 16 states to set certain criteria if it is to offset
- 17 costs of the production of -- whether it's a
- 18 product or whether it's produce, whether it's
- 19 minerals. And by adding that in, that again will
- 20 help revenue in the State of California. All of
- 21 that becomes part of a revenue stream for the
- 22 state to fulfill their obligations on the Salton
- 23 Sea. And we can't take that away. And I think
- 24 it would be unfair to our region if we put that
- 25 burden back on the region. The region has,

- 1 through the impacts of the water and so forth, we
- 2 have been hammered. We have been overlooked for
- 3 years.
- 4 In the development of the geothermal 40
- 5 years ago, there were some incentives that were
- 6 given and then pulled away by the courts. And it
- 7 made it very tough because the development at
- 8 that time was exploratory. It needed to succeed,
- 9 just like this lithium needs to succeed. And
- 10 once we turned that corner, it took about 30
- 11 years for geothermal because part of the
- 12 technology that they had to develop was different
- 13 alloys of metals that hold that brine, which is a
- 14 very, very tough source, very caustic, has to be
- 15 pumped back into the ground, and so forth. So
- 16 there's been a number -- I understand there's one
- 17 engineer has about 40 patents himself of
- 18 different improvements that have been made. So
- 19 we've got a leg up on that in moving forward with
- 20 the geothermal.
- 21 But this geothermal, there's no reason
- 22 why we can't expedite some of this and move it
- 23 forward and get the power flowing. There's a
- 24 need for the power right now. And as the
- 25 technology is completed on the research and

- 1 development, everything will be in place and the
- 2 brine (indiscernible) will be there. And I think
- 3 all the way around there is a co-benefit. And
- 4 from an environmental standpoint, I think that's
- 5 something that, yes, we need to be aware of it
- 6 and we need to make provisions for it and we need
- 7 to encourage it to be able to coexist with the
- 8 development of the geothermal power and the
- 9 lithium recovery.
- 10 And in the area of lithium, there's
- 11 improvements being made all the time. And I read
- 12 an article today of another mineral that they can
- 13 add to the lithium and extend the mileage in the
- 14 electric cars, also helping the storage of
- 15 energy. And that is another mineral that is
- 16 available in this same area that down the road we
- 17 have to get lithium booming and get it into the
- 18 marketplace. And when we talk about five years,
- 19 ten years or -- I think our leases and the
- 20 landowners and so forth, it will reflect the
- 21 benchmarks and requirements.
- 22 And that's something now that this
- 23 commission needs to be aware of. There are
- 24 benchmarks that's placed in these leases that
- 25 these developers have to meet. And it's a very,

- 1 very strict timeline. And we need to be
- 2 sensitive and aware of what these are so that we
- 3 don't put up delays or barriers that would cause
- 4 them to have to forfeit their lease or have it
- 5 assumed by someone else after they have spent
- 6 millions of dollars in the development and the
- 7 research and the preparation for the effort that
- 8 we're involved in.
- 9 CHAIR PAZ: Thank you. James, I think
- 10 you're bringing up a very good point. And as you
- 11 were speaking I had that same question. And
- 12 maybe that's something that we could add or
- 13 identify in future discussions, Terra, around
- 14 what those benchmarks are and what that threshold
- 15 that both James and Jonathan have referred to
- 16 when we're talking about there's a certain
- 17 threshold that will make lithium more viable in
- 18 terms of looking at the market and what it can
- 19 sustain. But thank you so much, James.
- 20 Terra, you're probably looking at the
- 21 time. It's 3:56 and there's a few other people
- 22 that I think wanted to comment on this section.
- 23 So, Mr. Hanks, do you want a final
- 24 thought on this before I hand it over to another
- 25 commissioner?

- 1 COMMISSIONER HANKS: Yeah. I want
- 2 everybody to be aware -- and I probably mentioned
- 3 this before -- what the benefits of geothermal is
- 4 to the community. I was a school superintendent
- 5 for 20 years in Calipatria. And we were able to
- 6 come in and replace our old, dilapidated
- 7 buildings. And it was built -- affordability of
- $8\,$  it was based on the impact that geothermal had on
- 9 our tax base in that region. One of the core
- 10 socioeconomic areas in the State of California.
- 11 And the tax base without that was very minimal.
- 12 It ended up paying for 70 percent of the bonds
- 13 for the school. And they were also very involved
- 14 with our programs, our industrial arts programs,
- 15 our business classes. We had a wonderful welding
- 16 program where kids right out of high school had
- 17 their own welding apparatus and vehicles that
- 18 they had put together there at school. And they
- 19 were ready to go to work.
- 20 So I know of the positive benefits and
- 21 their contributions to the community. Thank you.
- 22 CHAIR PAZ: Thank you so much. Thank you
- 23 for that. I think I saw Rod's hand up before
- 24 Ryan. So, Rod, if you have -- do you still have
- 25 a comment before I call on Ryan?

- 1 COMMISSIONER COLWELL: Yeah. I think
- 2 Commissioner Hanks absolutely covered it well
- 3 there. I was just saying simple terms, you know,
- 4 furthering geothermal development was PAL
- 5 purchase agreements. I note that the CPUCs made
- 6 a move with the decommissioning of Diablo Canyon.
- 7 And for the commission and the audience, we could
- $8\,$  -- the number-one geothermal resources are of
- 9 Imperial Valley could replace Diablo Canyon. So
- 10 I think PPAs is the big driver on the front end
- 11 and to finance these expensive projects.
- 12 Director Hanks or Commissioner Hanks
- 13 touched on -- you know, I think that the auto
- 14 industry with its charging network where you
- 15 charge your car overnight, geothermal is critical
- 16 to that because it's 24/7 as a renewable, not
- 17 just -- you know, the sun doesn't set on
- 18 geothermal. And grid and reliability. That's
- 19 all I had to add, Chair Paz. Thank you.
- 20 CHAIR PAZ: Thank you. Ryan?
- 21 VICE CHAIR KELLEY: I only wanted to say
- 22 I apologize for my tardiness. Events overtook
- 23 me. But I'm here and ready to participate.
- 24 CHAIR PAZ: Thank you. Welcome.
- 25 Terra, I'll hand it back to you.

- 1 TERRA WEEKS: Okay, great. So we're
- 2 approaching 4:00, which was our planned allocated
- 3 time for this item. We still have quite a few
- 4 topic areas to discuss. So, Chair Paz, I think I
- 5 would defer to you. If you want to keep going --
- 6 you know, I think we can keep going for a little
- 7 bit and still get all the administrative items on
- 8 the agenda completed before 5:00. Or we could
- 9 defer some of the remaining sections to the next
- 10 meeting, or we could actually defer the rest of
- 11 the administrative items and just keep going on
- 12 this until closer to 5:00.
- 13 CHAIR PAZ: I'm looking for my agenda.
- 14 Hold on.
- 15 TERRA WEEKS: I think we have Media and
- 16 Legislative updates after this. Elisabeth, I
- 17 don't know if you want to hop in if you have the
- 18 agenda in front of you.
- 19 CHAIR PAZ: I think we can keep going. I
- 20 have it in front of me. We have legislative
- 21 report discussions and then the determination of
- 22 the agenda topics and speakers for future
- 23 meetings. We can keep going maybe one more
- 24 depending. One or two more.
- 25 TERRA WEEKS: Okay, that sounds great.

- 1 Were there other comments on this then? I think
- 2 just thinking through how this revenue stream
- 3 kind of ties back into lithium will be a
- 4 conversation to be had. I've heard, I think it
- 5 was Commissioner Weisgall talk about the lithium
- 6 tail wagging the geothermal dog. So just kind of
- 7 thinking through things along those lines. You
- 8 know, what does that additional revenue stream
- 9 actually look like. And I think actually having
- 10 Commissioner Guzman Aceves' input on this, too.
- 11 You know, thinking about the rate-making process
- 12 or what it actually looks like from the utility
- 13 perspective. And I think having Commissioner
- 14 Hanks on this commission is really valuable. But
- 15 I just want to see if there are other comments.
- 16 It looks like Commissioner Olmedo.
- 17 COMMISSIONER OLMEDO: Yeah. Again, I'm
- 18 going to continue to drive on the message. The
- 19 region is very rich in its natural resources.
- 20 And you're going to hear me say it again and
- 21 again. The resources have been very poorly
- 22 distributed and this is an opportunity to
- 23 redistribute those resources, make the table much
- 24 larger. And I cannot thank Assemblymember
- 25 Eduardo Garcia enough for creating this first of

- 1 its kind here in our region commission to be able
- 2 to level the playing field for the region and for
- 3 all stakeholders, in particular the disadvantaged
- 4 communities which the wealth and the resources of
- 5 this valley have not reached them. And there's
- 6 no reason and no excuse that the valley is in the
- 7 conditions that it is. The wealth gap is
- 8 enormous. It's irresponsible. And we have to be
- 9 paying attention and supporting the development
- 10 moving forward. But responsible development,
- 11 equitable development. And you'll hear me repeat
- 12 those words until we create the model. And not
- 13 only for here, for the entire state, the entire
- 14 country, and the entire world perhaps. Thank
- 15 you.
- 16 TERRA WEEKS: Okay. So why don't we move
- 17 on to the next slide then, next topic. So this
- 18 is on market opportunities for lithium. There's
- 19 actually no additional language in the bill. So
- 20 this one is a pretty wide open topic. So I might
- 21 see if Commissioner Dolega is on and wants to
- 22 maybe kick off this discussion since you're on
- 23 the sub-body for this topic.
- 24 COMMISSIONER DOLEGA: Yeah, sure.
- 25 Obviously this is kind of wide open. Some videos

- 1 that -- maybe if we want to subdivide this, I
- 2 mean, the market opportunity for Lithium from a
- 3 global perspective is fairly huge given the EB
- 4 segment growth. We could divide this up into
- 5 regional opportunities or if we wanted to focus
- 6 on specific opportunities in North America and
- 7 what that would mean in terms of other challenges
- 8 in the space.
- 9 Sorry? Okay, sorry. I thought I heard
- 10 somebody chime in.
- 11 And that would open up other challenges
- 12 in terms of where that lithium could flow into
- 13 North America given the fact that currently there
- 14 are no cathode producers located here. So I
- 15 think Rod was mentioning earlier what that means
- 16 in terms of potential incentives to bring
- 17 additional businesses into the region or into
- 18 North America to be consumers of Lithium
- 19 directly. And so that would be potentially one
- 20 recommendation if we wanted to divide this into
- 21 more of a regional look instead of just a global
- 22 market for lithium.
- 23 The other thing that potentially this
- 24 body could look at is there is a host of third
- 25 party analysts out there that are studying the

- 1 total market, and there's forecasts for EB
- 2 penetration. So we can look at people like
- 3 Benchmark Minerals that have done a lot of work
- 4 with reports to the federal government on these
- 5 minerals. And, you know, they could be
- 6 potentially experts in the field in terms of
- 7 showing what the total addressable market for
- 8 lithium could be, especially as it relates to the
- 9 EB sector.
- 10 CHAIR PAZ: Thank you. Jonathan?
- 11 COMMISSIONER WEISGALL: I'm not sure what
- 12 we can -- I mean, I agree, Rod, I think those are
- 13 good points. I'm not sure we as a commission can
- 14 do -- we can't come up with any new ideas on
- 15 market opportunities. Benchmark minerals is --
- 16 they are the Cadillac. They are looking at
- 17 lithium prices every day. They're looking at
- 18 markets, they're looking at contracts.
- 19 I think the challenge for California --
- 20 you know, we need to make -- I think our job -- I
- 21 don't want to call us cheerleaders. Obviously
- 22 we've had a robust discussion about related
- 23 issues. But to the extent this commission does
- 24 get comfortable with all of the challenges and
- 25 barriers, I want to see us promoting domestic

- 1 production of lithium. That's a huge plus for
- 2 the Fords and General Motors of this world. And
- 3 not just U.S. companies.
- I mean, there's an interesting article I
- 5 saw this morning about the upcoming elections in
- 6 Peru. And Peru actually does produce lithium,
- 7 and the recommendation from one of the financial
- 8 institutions about possibly pulling investments
- 9 in Peru because of potential nationalization of
- 10 the mining industry or exorbitant royalties. I
- 11 mean, you know, 40, 50 percent royalties which
- 12 essentially are nationalizing. So I think there
- 13 are some very important political things.
- 14 Ultimately what I'd like to see as a
- 15 recommendation, I want whoever is going to be the
- 16 governor of California to sponsor a reverse trade
- 17 mission to tout that California is now on the
- 18 map. I will tell you that in February, Governor
- 19 Sisolak of Nevada gave his state of the state
- 20 address, and he devoted some of his address to
- 21 Nevada's lithium potential. I'd like to see
- 22 Governor Newsom and other top state officials get
- 23 on board with their lithium goals. I think
- 24 that's the best we can do. We can't make any
- 25 more private sector market opportunities that

- 1 aren't already out there. You know, Tesla and
- 2 Ford and GM and batter manufacturers and off-
- 3 takers, you know, they know who they are. We
- 4 just need to make sure that Lithium Valley gets
- 5 on the map.
- 6 COMMISSIONER DOLEGA: Yeah. And I think
- 7 I was more so going in terms of if the commission
- 8 wanted to define how big the market opportunity
- 9 is for lithium and how the Valley could fit into
- 10 that. And just in terms of scope and size, we
- 11 could set some boundary conditions I guess or at
- 12 least some forecasts in terms of what the Valley
- 13 could provide in terms of North American
- 14 potential demand forecasts.
- 15 And so I don't think there's going to be
- 16 a shortage of off-takers or where this lithium
- 17 can go, to be honest, just given the size of the
- 18 market. But it just depends on -- and my kid all
- 19 of the sudden decided to start screaming in the
- 20 background, so that's good.
- 21 But I agree, getting lithium production
- 22 up and running is going to be the key. And also
- 23 supporting localized cathode production where
- 24 there can be a consumer of this lithium so we're
- 25 not exporting it is going to be key to getting

- 1 this developed in North America.
- 2 CHAIR PAZ: Jonathan, did you have
- 3 something else to add?
- 4 COMMISSIONER WEISGALL: Yeah, one more.
- 5 CHAIR PAZ: Go ahead.
- 6 COMMISSIONER WEISGALL: First of all,
- 7 clearly your child has some views on this, and I
- 8 think we may need to hear. You know, if he's got
- 9 something to contribute, I want to hear that.
- 10 Terra, I think of the things worth noting
- 11 is Lawrence Berkeley National Labs wants to work
- 12 on quantifying the amount of lithium in the
- 13 Salton Sea Known Geothermal Reservoir. I think
- 14 that's important at least to reference. And
- 15 we've made very clear as a company we would love
- 16 to support that in any way we can.
- 17 UC Riverside has opined that the Salton
- 18 Sea Known Geothermal Resource has the largest
- 19 lithium deposit in the world. It would be nice
- 20 to quantify it. So I think that falls under
- 21 market opportunities. The fact that Salton Sea
- 22 has at least a 75 if not 100-year supply of
- 23 lithium, if not longer I think is another huge
- 24 market opportunity. So I just wanted to flag
- 25 that.

- 1 CHAIR PAZ: Thank you. Luis?
- 2 COMMISSIONER OLMEDO: I just want to add
- 3 -- and I'm sorry, I walked away from my attention
- 4 here. I don't know if it was discussed already,
- 5 but it's important to recognize that while
- 6 there's supply and demand, market forces, policy
- 7 is a big factor also in determining increased
- 8 markets or new markets. And so I think that's
- 9 our task here, is to develop policy
- 10 recommendations. And those policies could have
- 11 an impact on new market opportunities for
- 12 lithium.
- 13 CHAIR PAZ: Thank you, Luis.
- 14 TERRA WEEKS: I have a question to pose
- 15 to the group. So from our perspective in Chair
- 16 Hochschild's office, we're getting contacted by a
- 17 lot of battery manufacturers and battery
- 18 component manufacturers interested in developing
- 19 facilities in California. And so I think it
- 20 sounds like we are it sounds like most likely
- 21 going to facilitate some kind of round table from
- 22 the Energy Commission side to discuss
- 23 opportunities. But I'm wondering if a similar
- 24 discussion would be of interest to this group as
- 25 part of a workshop potentially kind of bringing

- 1 in some more folks from various supply chain
- 2 components to just discuss opportunities. You
- 3 know, some of those who are already manufacturing
- 4 in California and what their experience has been,
- 5 and then maybe others who are interested.
- 6 COMMISSIONER WEISGALL: Great idea.
- 7 COMMISSIONER COLWELL: I agree, Terra. I
- 8 think that the interactions at the moment is
- 9 understanding the cost benefit to co-location, as
- 10 I mentioned before. So I think that would be
- 11 very, very helpful. And the numbers that are
- 12 being touted around by not simply bagging lithium
- 13 and moving it away, to actually collocating and
- 14 running a pipe through a wall is just a
- 15 tremendous savings for that industry. So I think
- 16 that would be very, very helpful.
- 17 CHAIR PAZ: Thank you. Jonathan?
- 18 COMMISSIONER WEISGALL: Yeah. I think
- 19 great idea. We've spoken to a couple of EB
- 20 manufacturers. And I think that having a
- 21 workshop like that under the auspices of the
- 22 government of the State of California lends more
- 23 credence and more support. So I think it's a
- 24 great idea. And we can go obviously beyond EB
- 25 manufacturers, as we've heard from others. So I

- 1 think it would make a lot of sense.
- 2 TERRA WEEKS: That sounds great. And
- $3\,$  we'll look at the Bagley-Keene issues. You know,
- 4 I think if we could have all of you or some of
- 5 you participate in the energy commission
- 6 roundtable that we're talking about, that would
- 7 be fantastic. And then we can talk about hosting
- 8 I guess an additional discussion through one of
- 9 the workshops with the Lithium Valley Commission
- 10 itself.
- 11 Okay. Were there other comments on this
- 12 topic? Great. So moving right along, next
- 13 slide, please. Okay.
- 14 So this one kind of ties back to the
- 15 first topic, but my reading of it is it's a
- 16 little bit more grid-focused. And I do think
- 17 this is actually an area where the Energy
- 18 Commission can plug in here. But the topic is to
- 19 examine the potential benefits of and added value
- 20 to existing and new geothermal facilities and
- 21 areas that contain mineral-rich brines for the
- 22 state, Western Energy Grid, and the United
- 23 States, including but not limited to grid
- 24 stability, reliability, and resiliency.
- 25 So just looking back to see who is on the

- 1 sub-body for this one. It looks like
- 2 Commissioner Scott and Commissioner Hanks. And I
- 3 believe Commissioner Scott is not on, right? So,
- 4 Commissioner Hanks, do you want to kick off this
- 5 discussion?
- 6 COMMISSIONER HANKS: I think my comments
- 7 before kind of bled over into this. But I would
- 8 say this. Right now we need to put our full
- 9 concentration on lithium. But that brine is, as
- 10 it states here, is a mineral-rich brine. And I
- 11 think at some point in time as technology is
- 12 developed, it will extend much further than even
- 13 just lithium.
- 14 But if we develop sufficient geothermal
- 15 to get to the lithium development stage, we're
- 16 going to see thousands of megawatts fed into the
- 17 system on the grid. And I can't impress upon
- 18 everybody enough for them to know the batteries
- 19 that it's going to take to keep our system
- 20 resilient is going to be a very large number.
- 21 Just about everywhere where you see wind or
- 22 solar, you're going to see need for batteries.
- 23 And then beyond that, you're still going to need
- 24 -- can't get back to the inertia. And I really
- 25 need a technical person to explain the importance

- 1 of inertia into the grid.
- 2 But this -- you know, our task here is
- 3 lithium. But beyond that it's just mind-boggling
- 4 of the richness of the brines that it's going to
- 5 bring to this area.
- 6 But the door to that is going to be the
- 7 geothermal development and the lithium. And it
- 8 will open up the other doors to the development
- 9 of these other rich brines. And I don't want to
- 10 take us off the focus, but lithium needs its due.
- 11 Its time is now. We have markets needing the
- 12 lithium and we have off-takers looking in every
- 13 corner they can in this universe to find a
- 14 supply. And there's no better supply than right
- 15 here in Lithium Valley.
- 16 CHAIR PAZ: Thank you. Luis?
- 17 COMMISSIONER OLMEDO: Well, there's no
- 18 denying or argument in terms of the need for
- 19 stable, reliable energy. You know, we see as we
- 20 have a greater demand for -- or there's policy.
- 21 Again, going back to the market forces and policy
- 22 driving the demand for lithium, for renewable
- 23 energy. And it's sort of bittersweet to hear the
- 24 momentum around offshore wind because it's great
- 25 to see that, but the disadvantaged environmental

- 1 justice communities don't live on the coast. You
- 2 know? They live in areas like Coachella and
- 3 Imperial, the Central Valley, San Joaquin Valley
- 4 and many inner cities, oil producing areas. And
- 5 certainly we would like to see that this type of
- 6 energy succeeds and this mineral-rich brines that
- 7 gets handled in a way that it produces benefits,
- 8 and those benefits don't have an impact on the
- 9 local community. But far too often we've seen
- 10 the exploitation of natural resources and
- 11 disadvantaged areas leave a legacy of hazardous
- 12 conditions and health impacts.
- 13 So as we talk about the benefits, it's
- 14 important to always continually tie it to the
- 15 responsible operation, the responsibility of
- 16 being good stewards to the land, of the
- 17 environment, being good neighbors to the public.
- 18 And I just can't help but think that we have
- 19 energy production here that is a public entity,
- 20 and that's IID. And we have what appears to be a
- 21 very brittle infrastructure and it continues to
- 22 generate sources of revenues. And I haven't see,
- 23 you know, a resilience fund, an environmental
- 24 justice fund, a disadvantaged communities fund.
- 25 And so, again, those conversations need

- 1 to be tied together. Otherwise, we repeat
- 2 history over and over. We need to support the
- 3 development of industry. We need to support
- 4 innovation in terms of how we produce energy but
- 5 at the same time I ask the commissioners to
- 6 really consider that we continue to tie them
- 7 together, because I think that's how we're going
- $\boldsymbol{8}$  to succeed in this opportunity before us.
- 9 CHAIR PAZ: Now, on the topic of the
- 10 infrastructure, my understanding was that one of
- 11 the challenges to additional geothermal plants is
- 12 the transmission lines. So I would recommend --
- 13 and I don't know if it's in this chapter or if it
- 14 belongs in another chapter -- but that we do have
- 15 an analysis and understanding of our transmission
- 16 lines and whether they can support the growth.
- 17 The other question that I have that I
- 18 think we should look into is whether -- you know,
- 19 lithium development cannot happen without the
- 20 geothermal plants. And we've been talking or
- 21 referencing the potential capacity at the Salton
- 22 Sea, how many years. Well, how many geothermal
- 23 plants will it take so that we can reach those
- 24 capacities?
- 25 And again, I don't know -- at some point

- 1 we're going to be discussing goals. I don't know
- 2 what our goals are going to be throughout time.
- 3 But thinking about geothermal and lithium hand in
- 4 hand and what that timeline is going to look like
- 5 and what it's going to require so that we can
- 6 meet those goals that we set up is going to be an
- 7 important part of this analysis as well.
- 8 Jonathan?
- 9 COMMISSIONER WEISGALL: No, I'm just
- 10 saying we have stated publicly that our existing
- 11 geothermal plants, which are about 350 megawatts,
- 12 could support as much as 90,000 metric tons of
- 13 lithium. Greenfield development could support
- 14 another 700 megawatts of power which in turn
- 15 could produce about 200,000 additional tons.
- Now, again, the concentrations of lithium
- 17 are not the same throughout the known geothermal
- 18 resource, but that's a ballpark idea. So we have
- 19 stated publicly that at least under leases that
- 20 our company has, we could go as high as 300,000
- 21 tons.
- But your point is a very good one,
- 23 Silvia. I think that there is a need to at least
- 24 reference transmission challenges if there is to
- 25 be more geothermal development.

- 1 CHAIR PAZ: Thank you. Rod?
- 2 COMMISSIONER COLWELL: I think Jonathan
- 3 covered that. But basically for every hundred
- 4 megawatts of geothermal, new build geothermal,
- 5 that's equivalent to 40,000 tons per year of
- 6 (indiscernible) lithium hydroxide. So just as a
- 7 number -- and Jonathan is right. You know,
- 8 300,000 tons and we're in a similar capacity. So
- 9 every 100 megawatts that's procured from
- 10 California, the grid, the offtake markets is
- 11 really the driver, really the backbone to get
- 12 lithium underway, will produce 40,000 tons per
- 13 state. So it's directly related. Obviously, you
- 14 know, the tail is wagging the dog when it comes
- 15 to revenues, but certainly geothermal really is
- 16 and always will be the backbone to successful
- 17 lithium production.
- 18 CHAIR PAZ: Thank you for that. And I
- 19 appreciate your willingness to at least bring in
- 20 all these things in this report. Because when we
- 21 present it to the legislature, they're not going
- 22 to be experts in the field or have all the other
- 23 -- or be looking at many other reports. So to
- 24 the extent that some of this knowledge can
- 25 already be reflected here, I would highly

- 1 recommend that we put in as much as we can that
- 2 will be relevant to the legislature as we present
- 3 the report.
- 4 Frank?
- 5 COMMISSIONER RUIZ: Yeah. It seems that
- 6 geothermal will benefit big-time from lithium
- 7 recovery. And we are encouraged to see that
- 8 geothermal energy is a much cleaner energy and it
- 9 will be (indiscernible), perhaps more affordable.
- 10 And that's the question that I have in the area
- 11 about affordability. How can this benefit the
- 12 community at large? Especially with climate
- 13 change exacerbating the cost of cooling off their
- 14 homes, how will this have an impact or an
- 15 immediate impact to the nearby communities since
- 16 geothermal energy will be perhaps more affordable
- 17 and even more available to the region?
- 18 CHAIR PAZ: Thank you. Ryan?
- 19 VICE CHAIR KELLEY: Well, Frank, I'll
- 20 take the cue and I'll jump right into something
- 21 then.
- 22 So geothermal is the largest taxpaying
- 23 entity of private property within the county.
- 24 And as Jim mentioned, it's helped Calipatria
- 25 school almost make it to the goal line of being

- 1 self-sufficient without additional funding from
- 2 the State of California. The only school
- 3 district in Imperial County.
- 4 One of the things that I've already
- 5 started and shared with Silvia -- and I know it's
- 6 later on the agenda, but I'll just jump into it
- 7 because I'd like to get this into the
- 8 conversation. I've been looking at other
- 9 jurisdictions and county ordinances. And I've
- 10 written a draft and had a meeting within the
- 11 county on an ordinance on minerals. So a natural
- 12 resources ordinance. And we're talking about a
- 13 fee or a tax, a general tax on minerals produced
- 14 in this valley. And I know that Rod and Jonathan
- 15 are probably grinding their teeth at this moment,
- 16 but I think that once we get to talk about it a
- 17 little more, you may see where there is a mutual
- 18 benefit in it. The money raised through this
- 19 idea would go into percentages towards
- 20 infrastructure and to mitigation conservation of
- 21 the land.
- Now, we are still looking into what our
- 23 jurisdiction is and the authority. California is
- 24 different, but I've seen models from Washington,
- 25 Nevada, Utah. And I think it is important. I

- 1 heard Luis talking about something about
- 2 royalties being promoted by Eddie. I haven't
- 3 read that yet, but that is a very good question.
- 4 Because royalties were shared on federal land
- 5 with the county at a greater share. And
- 6 California took that share and reduced the amount
- 7 that came to Imperial County. So I'm not sure
- 8 how that would actually filter down, to Frank's
- 9 question, to the local community.
- 10 And we would hope maybe that through the
- 11 commission or through an independent, faster
- 12 track to get this on the radar with the
- 13 legislature if that's the path to be able to give
- 14 us jurisdiction, the benefit for Cal Energy and
- 15 of CTR is that some of those conversations about
- 16 mitigation and infrastructure would be addressed
- 17 directly by this ordinance.
- 18 It wouldn't be an obligation anymore, Rod
- 19 or Jonathan, it would be based on volume, tons
- 20 produced, that there would be a fee attached to
- 21 that. And this is open for conversation. And
- 22 according to the Keene rules, I'm going to
- 23 probably only be able to talk to one of you about
- 24 this in person. But I think this is good.
- 25 And for Luis and Frank in regards to the

- 1 community and for how it would address the needs
- 2 of community needs and reflecting outreach and
- 3 support, this would also be putting money back
- 4 into the area. It would not be site-specific,
- 5 but it would be putting money back into the area.
- 6 It costs us a million dollars a mile to build a
- 7 road. Well, we're just talking about -- you
- 8 know, buildout for Jonathan, 700 potential
- 9 megawatts. That would be 14 powerplants just at
- 10 50 megawatt per plant. That's a lot of
- 11 infrastructure. Not power lines, but roads and
- 12 access to be able to get to those locations.
- 13 And as Rod knows, there are some roads
- 14 that are already failing in the area. So I'm
- 15 happy to share it with you. It's a draft. It's
- 16 open for comment. But I think it's mutually
- 17 beneficial because you are hearing what the
- 18 community-based groups are saying. You're
- 19 hearing what industry is saying. And I believe
- 20 that one thing that you haven't heard is that the
- 21 County of Imperial, although we do benefit from
- 22 the property tax and the leasehold improvement on
- 23 ground up there, we would not benefit very much
- 24 on new development on federal land. And if the
- 25 State of California, which we've advocated for,

- 1 whatever percentage, and the federal government
- 2 giving their royalties towards local development
- 3 and infrastructure, then there's another
- 4 conversation. But not hearing anybody respond to
- 5 those questions, we should take things in our own
- 6 hands. And that's where we're at.
- 7 So I'm bringing it to you, and I think it
- 8 would also ask for some allowances on CEQA to be
- 9 able to use this information to be able to share
- 10 in CEQA how certain mitigation efforts are being
- 11 addressed.
- 12 CHAIR PAZ: Thank you, Ryan, for sharing
- 13 that with all of the members. Are there any
- 14 comments? Jonathan?
- 15 COMMISSIONER WEISGALL: Look forward to
- $16\,$  speaking with you, Ryan, and looking forward to -
- 17 let me leave it at that.
- VICE CHAIR KELLEY: Let me just add one
- 19 other thing. So we've had an internal
- 20 discussion. I've talked to Silvia about it and
- 21 with Terra and Elisabeth, and I can't remember
- 22 who else was on the call. But we will -- I'm
- 23 going to start my process of engagement and
- 24 development and we'll reach out and create a work
- 25 group and start bringing product back on this

- 1 discussion.
- 2 And I am encouraging all of you that have
- 3 something that's going to be more of a
- 4 deliverable item that we can participate in, that
- 5 you start. You start working in that way rather
- 6 than having more conversations about what the
- 7 potential is and what the great things are, let's
- $8\,$  start moving this thing along. And I challenge
- 9 all of you to make it happen.
- 10 CHAIR PAZ: Thank you. Rod, did you have
- 11 something?
- 12 COMMISSIONER COLWELL: I look forward to
- 13 catching up, Ryan, in the next week or so. I'll
- 14 reach out separately. Cheers.
- VICE CHAIR KELLEY: Cheers.
- 16 CHAIR PAZ: Thank you. If there are no
- 17 more comments, I think, Terra, maybe this is a
- 18 good spot to pause until the next meeting.
- 19 Oh, I see Luis's hand up. Luis?
- 20 COMMISSIONER OLMEDO: Is there time for a
- 21 quick comment on this?
- 22 CHAIR PAZ: Yes.
- 23 COMMISSIONER OLMEDO: I was just going to
- 24 agree with Commissioner Kelley. We need to --
- 25 and I brought this up. State lands or -- in this

- 1 case state lands opening for lithium -- I'm
- 2 sorry, for geothermal exploration. And
- 3 certainly, you know, their business models having
- 4 these royalties go back to their states -- for
- 5 the state to use, you know, in their pension
- 6 funds or others. If I recall correctly, reading
- 7 that information in their plans. I believe that
- 8 those -- you know, I don't know if it's
- 9 necessarily say don't build on state or federal,
- 10 but I think we have to make the best land use
- 11 decisions. But certainly assure that the state
- 12 and the federal government operate by the same
- 13 rules. You know? They're opening their land and
- 14 our communities to making sure those benefits
- 15 stay in our community. And certainly whatever
- 16 share goes to state and federal. And certainly
- 17 they have a right to that, too. But just to
- 18 take, you know, off the top the benefits that
- 19 should stay here. Certainly not in support. And
- 20 I agree with Commissioner Kelley on his comments.
- 21 CHAIR PAZ: Thank you. I know we are
- 22 running out of time, and I see a couple hands.
- 23 So I will ask you, again, to briefly get to the
- 24 point so we can move on. We still have a couple
- 25 items we would like to get to.

- 1 James and then Jonathan.
- 2 COMMISSIONER HANKS: Did you say James?
- 3 CHAIR PAZ: Yes, please.
- 4 COMMISSIONER HANKS: Yeah. I would just
- 5 like to add to the comment of Ryan. I think one
- 6 of the things that we have to look at for the
- 7 local community is not just the resource, but the
- 8 end product. It's very critical that the
- 9 ancillary businesses be located here. And that's
- 10 where the value to the county and to our
- 11 different programs that come from the cell stacks
- 12 and so forth on the end project from these
- 13 resources.
- I think, again, I get back to what is the
- 15 benchmark that we have set. If it's \$4,000 per
- 16 ton, then we have to keep it under that and we
- 17 have to look at the other issues. You can't just
- 18 look at it as a resource coming out, a raw
- 19 resource. Because there's all types of costs in
- 20 producing that. But it's going to be very
- 21 important that whether it's development of the
- 22 batteries or whatever product that comes out,
- 23 that that be looked at so that you can keep the
- 24 cost of the recovery within the guidelines.
- 25 Thank you.

- 1 VICE CHAIR KELLEY: I would like to offer
- 2 that what Jim said is absolutely true. And our
- 3 intent is that if the material is shipped out of
- 4 this county, that natural resource, that the fee
- 5 is higher than if the material is kept within the
- 6 county and a value-add finished product is
- 7 produced in Imperial County. And that's open for
- 8 conversation, too. But we want to encourage that
- 9 manufacturing, that finished product to occur in
- 10 the same place it was drawn from.
- 11 COMMISSIONER HANKS: Agreed.
- 12 CHAIR PAZ: Thank you. Jonathan?
- 13 COMMISSIONER WEISGALL: This is hardly
- 14 the place, three hours into the meeting, to talk
- 15 about royalty payments to Salton Sea, restoration
- 16 royalty payments to Imperial County, taxes to
- 17 others.
- 18 I will just say that as a company as we
- 19 look forward to lithium production and hundreds
- 20 and hundreds of high paying jobs, we are
- 21 competing against Chile, Argentina, China, and
- 22 Australia. Those are pretty hard companies to
- 23 compete against, especially when you're talking
- 24 about raw commodities. If we can't produce
- 25 lithium on a cost-effective basis, we're wasting

- 1 our time, period. Thank you.
- 2 CHAIR PAZ: Thank you, Jonathan. And I
- 3 want to mention that we are going to have
- 4 difficult conversations in this commission,
- 5 right? And it doesn't mean that the way
- 6 sometimes things are presented are going to be
- 7 the way in which we end. But it's important for
- 8 all of us to be able to express both where we're
- 9 coming from and ultimately believe that we're all
- 10 coming from the same place, that we all want to
- 11 achieve something that's good and lead the
- 12 process of lithium development in the best way
- 13 possible, both for the communities, for the
- 14 state, for the nation globally with the industry
- 15 as partners.
- 16 So I just want to encourage us to be as
- 17 open to hearing each other's sides. We all come
- 18 from a different perspective. But I have no
- 19 doubt that we're going to be able to reach a good
- 20 end product at the end. And that's not going to
- 21 happen without having difficult conversations.
- 22 So, again, I want to thank Ryan for
- 23 bringing this topic up and also for the
- 24 willingness of everyone else to listen, express
- 25 the areas of discomfort, and then be open to a

- 1 discussion about how can we make this a win-win
- 2 for everybody. That's the only way I think we're
- 3 going to make progress. So, again, thank you.
- 4 And I'll hand it back to Terra, but I don't think
- 5 we have the time to finish all of the discussion
- 6 on the sub-topics.
- 7 So, Terra, do you want to tell us sort of
- 8 what to look forward or how this is going to
- 9 continue?
- 10 TERRA WEEKS: Yeah. First I just want to
- 11 say thanks for this discussion. I think we got a
- 12 lot of insight into thinking through the outline.
- 13 We do have three more topics. So I quess we'll
- 14 just continue this at the next meeting. So we'll
- 15 talk about the technical and economic challenges,
- 16 looking at different methods of lithium
- 17 extraction and how the Salton Sea would compare
- 18 to traditional methods. And then looking at
- 19 potential economic and environmental impacts.
- 20 And that will include the workforce conversation,
- 21 which I think will be a big topic, too. So I
- 22 think we've made it pretty far in this meeting.
- 23 But we'll just move those topics to the next
- 24 meeting.
- 25 So with that, Chair Paz, I'll hand it

- 1 back to you to go through -- I guess we'll
- 2 recommend that we defer the media and legislative
- 3 updates to the next meeting, but we can still
- 4 have the discussion around agenda items for the
- 5 next meeting. And then we would like to still do
- 6 a public comment period.
- 7 CHAIR PAZ: Yes, that's perfect. And I
- 8 believe there is a public comment just on what
- 9 we've been discussing as well. So, Elisabeth,
- 10 I'll hand it over to you to open up the
- 11 discussion for public comment.
- MS. DE JONG: Thank you so much. So as
- 13 we move into public comment, if you are joining
- 14 us by Zoom on the computer, please use the Raise
- 15 Hand feature. If you've called in, please dial
- 16 \*9 to raise your hand and \*6 to unmute your phone
- 17 line. First we'll go to those hands raised in
- 18 the Zoom application, then the phones if there
- 19 are any. And then if there are written comments
- 20 that we've received in Q&A.
- 21 So I see a hand raised. It says T-R-U-N-
- 22 -G-E. I've gone ahead and allowed you to talk.
- 23 You should be able to unmute yourself.
- Okay, while we wait for that listener, I
- 25 do want to give -- there was one other hand

- 1 raised by Orlando Foote. I have gone ahead and
- 2 given you the permission to speak as well, if you
- 3 want to unmute yourself.
- 4 ORLANDO FOOTE: Can you hear me?
- 5 MS. DE JONG: We can, yes.
- 6 ORLANDO FOOTE: Very good. A couple of
- 7 things. Number one, comments that have been made
- $8\,$  in particular by Jonathan Weisgall as well by Jim
- 9 Hanks are very well taken. The treasure here is
- 10 truly the geothermal production itself. And the
- 11 other things that are related to it have kind of
- 12 come and gone.
- 13 Lithium I think it's fair to say is
- 14 generally accepted to be the handmaiden of
- 15 geothermal. But we still have to recognize that
- 16 the pricing of geothermal is really what drives
- 17 the entire process. And in particular, the
- 18 comment that geothermal has to stay competitive
- 19 from a pricing standpoint is essential.
- 20 A perfect example of this is the
- 21 difficulties that have been experienced by
- 22 geothermal by being subordinated to solar
- 23 production in terms of the taxing activities of
- 24 local government. They were hung out to dry in
- 25 that regard.

- 1 But I just want to emphasize based on my
- $2\,$  own experience and also negotiating geothermal
- 3 and mineral extraction leases for many number of
- 4 people for a long period of time, including IID
- 5 for that matter, that geothermal is truly the
- 6 core industry other than agriculture that needs
- 7 to be -- needs to receive as much care,
- 8 attention, and support as possible. That's it.
- 9 MS. DE JONG: Thank you so much. I
- 10 wanted to check in real quick -- sorry, I can't
- 11 tell what your name is, but it says T-R-U-N-G-E.
- 12 If you are able to unmute yourself, please speak.
- Okay, so then --
- MARIELA: Hello?
- MS. DE JONG: Yes. If you want to go
- 16 ahead and make your comment.
- 17 MARIELA: Oh, hello, everyone. I don't
- 18 know if that's the correct person. I'm Mariela.
- 19 I don't think I'm the T-N-U.
- 20 MS. DE JONG: Oh no, please go ahead
- 21 though.
- 22 MARIELA: Okay, thank you. Thank you,
- 23 Elisabeth. I am with leadership counsel. And my
- 24 comment is based on the conversation that
- 25 happened in the very beginning of this section.

- 1 I just wanted to bring to this group the
- 2 experiences that we've had with the community.
- 3 The community has been very interested in
- 4 learning about the future of lithium in the
- 5 Salton Sea. We have actually received a lot of
- 6 questions on this topic and community coming to
- 7 us wanting to get involved. In our most recent
- 8 community meeting, they actually expressed their
- 9 interest in attending these commission meetings.
- 10 However, they were not accessible to them because
- 11 of language but also time.
- 12 So I'm glad to know that you guys are
- 13 working with CSE, which I think I heard earlier,
- 14 to provide translation. But if there's a way to
- 15 also make it time-accessible, that would also be
- 16 great. Thank you.
- 17 MS. DE JONG: Thank you for your
- 18 comments. Without seeing other hands raised,
- 19 I'll turn quickly to the written comments that we
- 20 received in Q&A. And this one was submitted by
- 21 Michael Marsden in regards to the incentive item.
- 22 "Time is often more important than money
- 23 incentives. To accelerate the regulatory
- 24 approval times would be a tremendous incentive,
- 25 added incentive of fast regulatory approval that

- 1 would shorten the development time." And then a
- 2 follow-up that just says, "Time is often more
- 3 important than money".
- And we have another several comments here
- 5 from Victor Beas. It says, "I applaud the way
- 6 this commission is constituted, very balanced in
- 7 its representation. I think it is a great step
- 8 forward that the California plans and the Biden
- 9 Administration seeks to promote the use of
- 10 electronic vehicles, but we must be sure that it
- 11 is done the right way for the benefit of all, not
- 12 just private industry.
- "The legislative subcommittee where Mr.
- 14 Weisgall, who represents a company that is not
- 15 only involved in energy, but in real estate
- 16 business around the Salton Sea, looks like a
- 17 (indiscernible) business, or the incentive
- 18 subcommittee with Mr. Colwell seems very
- 19 strategic for the industry. That is why the work
- 20 of Mr. Soto and Ms. Guzman is key.
- 21 "Inappropriate CEQA exceptions should not
- 22 be allowed. Tax avoidance incentives, tax
- 23 credits for industry (indiscernible) that they
- 24 generate an industry that benefits the
- 25 environment. We need taxes to directly benefit

- 1 the communities around the Salton Sea."
- 2 Another part of this comment says, "We
- 3 need the community to know what is going on in
- 4 their back yards. We need a local production and
- 5 supply chain that benefits both the industry and
- 6 the community on a permanent basis, not just
- 7 generating hundreds of thousands of temporary
- 8 construction jobs that after a couple years will
- 9 be unemployed. I believe that together, the
- 10 community and industry can do great things to
- 11 make a win-win."
- 12 And there was one final thought on there
- 13 in support of the Spanish translation.
- Okay. So let me really quickly turn to
- 15 see if there are any additional hands raised. I
- 16 don't see any. Okay. We are all done with the
- 17 public comment for this report discussion. We
- 18 can go on to the future meetings topic. Chair
- 19 Paz, if you'd like to kick us off.
- 20 CHAIR PAZ: I was speaking and I was on
- 21 mute. I will borrow from Vice Chair Kelley's
- 22 comments around using the next agendas to start
- 23 bringing things forward that will help us move
- 24 and shape the activities of this commission. So
- 25 this is an opportunity again for us to start

- 1 brainstorming where are we ready to start and how
- 2 can we start scheduling those deeper
- 3 conversations and start producing products, you
- 4 know, drafts, things of that nature.
- 5 So with that, I am open to any ideas and
- 6 recommendations of where we might -- where do we
- 7 want to be by the next meeting? Rod?
- 8 COMMISSIONER COLWELL: Yes. Chair Paz,
- 9 as I proposed earlier, with your okay or the
- 10 commission's okay, we can put together a high-
- 11 level -- you know, there where Lithium Valley,
- 12 what it will visually look in five to ten years.
- 13 Development timeline of a successful Lithium
- 14 Valley basically in some sort of Gann chart, the
- 15 clean energy and auto hub visually and the
- 16 strategy around train and maintain clean energy
- 17 jobs. I think one of the previous comments
- 18 about, unlike solar, this industry will beyond
- 19 just construction maintain a very long workforce.
- 20 So we can visualize that if that's
- 21 appropriate.
- 22 CHAIR PAZ: Thank you, Rob. Luis?
- 23 COMMISSIONER OLMEDO: I assume we have a
- 24 technical writer. But is that -- am I to assume
- 25 that correctly? And the committees will all have

- 1 a technical writer?
- 2 CHAIR PAZ: Terra, can you answer the
- 3 question about how the writing and the support
- 4 that the CEC is going to be providing as we
- 5 approach each of the subtopics?
- 6 TERRA WEEKS: Yeah. So the framework
- 7 report -- what is it called? The report
- 8 development framework document that we sent out
- 9 ahead of this meeting should provide some clarity
- 10 on that. But essentially we are assembling a
- 11 team on the energy omission side to provide
- 12 technical writing expertise. So we will help you
- 13 write the report. But just to be clear, we'll
- 14 write it with your guidance. You know? So I
- 15 think we're really trying to not impose our own
- 16 views as the Energy Commission. This is your
- 17 report. So we are here to support you and we'll
- 18 actually write up the sections for your review.
- 19 But just want to make sure that we're capturing
- 20 your input and discussions.
- 21 And so just on the point around the next
- 22 meeting. So I think if it's okay, we'll continue
- 23 this conversation, review those last three
- 24 topics.
- I think we probably won't have a fleshed-

- 1 out outline for review until we finish that
- 2 discussion. So I think that might be getting
- 3 bumped one more month. But I think it would be
- 4 helpful for us too to start thinking about
- 5 workshops. And so we talked about each sub-body
- 6 kind of coordinating one, possibly two workshops.
- 7 So that might be another suggestion for
- 8 discussion.
- 9 COMMISSIONER OLMEDO: Just for clarity,
- 10 may I, Madam Chair?
- 11 CHAIR PAZ: Go ahead.
- 12 COMMISSIONER OLMEDO: So was the answer
- 13 yes, we have a technical writer or we don't have
- 14 a technical writer? I guess that was my -- I
- 15 appreciate, Terra, the Energy Commission's
- 16 support and staff support. The role of a
- 17 technical writer is a very specific trade and
- 18 many times is an independent facilitator that
- 19 comes with a background of both technical writing
- 20 and also within those themes often either the
- 21 capacity lives in one person or a team where
- 22 there's conflict resolution as well to assure
- 23 that it's not just about taking notes and
- 24 writing, but it's about facilitating the dialogue
- 25 and then assuring that that's getting put in a

- 1 document in a well-facilitated, well-balanced
- 2 manner. Is that the kind of support we're going
- 3 to be getting from the Commission staff?
- 4 TERRA WEEKS: Yeah. So we have a number
- 5 of technical writers. We don't have unlimited
- 6 resources, but we are assembling a small team.
- 7 It looks like we'll have one staff who is a PhD.
- $8\,$  He is very technical, has written a lot of
- 9 reports. I've done quite a bit of technical
- 10 writing myself. And then we'll have other
- 11 subject matter experts from the commission help
- 12 develop certain sections. So we'll have folks
- 13 from our R&D team who are really familiar with
- 14 battery manufacturing and battery supply chains,
- 15 you know, assist with that chapter. We'll have
- 16 folks from our fields and transportation division
- 17 weigh in as well. And then as needed, we can
- 18 pull in some folks from our Energy Assessment
- 19 Division that's doing long-term electric grid
- 20 planning. So kind of thinking through some
- 21 aspects around geothermal benefits and actual
- 22 grid impacts. So things along those lines.
- 23 That being said, we don't have specific
- 24 expertise in Lithium Valley per se since it's a
- 25 new topic. And if there is specific quantitative

- 1 information or analyses that you would like to be
- 2 done, I think we would need to talk about
- 3 bringing in a consultant in thinking through
- 4 potential resource streams to support that.
- 5 So we are assembling a team of technical
- 6 writers essentially to help with this project.
- 7 But if there's specific analyses that you're
- 8 looking for that we may not be able to provide,
- 9 we can have that conversation and think through
- 10 options.
- 11 COMMISSIONER OLMEDO: Thank you, Tara.
- 12 Madam Chair, I'd like to recommend to the
- 13 commission members and the Energy Commission that
- 14 I think we will need the support of a moderator,
- 15 of a conflict resolution type of consultant, you
- 16 know, with the level of leadership that's in this
- 17 commission. I think we all can use a little bit
- 18 of that if we're eating up too much space or
- 19 things just become difficult to move those types
- 20 of facilitation. It would help us be more
- 21 successful. I have seen it and I'm sure all of
- 22 you participate in many of these endeavors. I
- 23 have never seen it where we've been able to be
- 24 successful without that type of expertise in the
- 25 room. Thank you.

- 1 CHAIR PAZ: Thank you, Luis. And you
- 2 bring a good point. These are conversations that
- 3 I have raised to the CEC staff about having
- 4 somebody who could facilitate in those resources.
- 5 And really I think, Terra, we're listening to
- 6 Luis. And where I'm coming from is we wouldn't
- 7 want to put also like the CEC in a position where
- $8\,$  you are having to facilitate and negotiate and
- 9 maybe feel uncomfortable because you are
- 10 representing the CEC and not -- you know,
- 11 uncomfortable not because you're not, but
- 12 uncomfortable of not being seen neutral. And I
- 13 think that's where Luis is coming from. And as
- 14 you heard, there are different topics that are
- 15 going to make some of us more or less passionate,
- 16 more or less comfortable discussing. And having
- 17 somebody who can be neutral, who can help us get
- 18 to a resolution, compromise maybe even on how
- 19 this commission is going to be moving forward is
- 20 needed I believe as well.
- 21 So it is -- and this is probably not some
- 22 that the Commission can tell us what to do. But
- 23 maybe for us as the Lithium Valley Commission, it
- 24 is budget time. And if there is a request that
- 25 we need to make, I think we need to move on it

- 1 quickly. Maybe, I don't know, through
- 2 Assemblymember Garcia's office or others. But
- 3 that's a thought. I think if that's how this
- 4 commission feels, we do need to put in a request
- 5 fairly quickly.
- 6 And I see Ryan and then James.
- 7 VICE CHAIR RYAN KELLEY: I was just
- 8 wondering. So I know that conversation, Silvia,
- 9 you had brought that up already. And I was under
- $10\,$  the impression that that was a nonstarter. So I
- 11 support it if there is some kind of staff to help
- 12 with the work groups. That's fine. I just would
- 13 rather have an answer quickly than later.
- 14 CHAIR PAZ: Correct. James?
- 15 COMMISSIONER HANKS: Yes. On
- 16 determination of agenda topics and presentation,
- 17 I think now might be a good time if we could get
- 18 our geothermal experts to give us an indication
- 19 about how many megawatts would be needed from say
- 20 a 49.9 megawatt generator for the lithium
- 21 recovery and whatever parasitic load that they
- 22 may need with the geothermal. And also if they
- 23 could kind of give us a rule of thumb about how
- 24 much water they're going to need, I think that
- 25 would be good information. And take one more

- 1 maybe estimated number of employees that would be
- 2 associated with a 49.9 megawatt geothermal and
- 3 the associated recovery of lithium with it.
- 4 Thank you.
- 5 CHAIR PAZ: Thank you. Any other
- 6 comments?
- 7 Okay, so it's looking like for the next
- 8 meeting, we will finish doing our deep dive
- 9 conversation on each of the sub-topics. And
- 10 there are some potential (indiscernible)
- 11 information, I don't know if it's a workshop, but
- 12 the things that both Rod and James brought up I
- 13 think are -- it's already information that's
- 14 going to be helpful for us to capture in the
- 15 report. So to the extent that we can start
- 16 capturing and have someone drafting and capturing
- 17 all of that. I just wouldn't want to jump into
- 18 it if we're not ready. So maybe that's a
- 19 conversation that can happen in the planning of
- 20 the agenda for the next meeting with Elisabeth
- 21 and Terra and the CEC staff just to make sure
- 22 that, again, we are ready and that these
- 23 conversations are now leading to the creation of
- 24 some material that is going to be useful for all
- 25 of us.

- 1 And if there is no objection from anybody
- 2 in the commission, I would like to then proceed
- 3 on having a conversation both with Chair
- 4 Hochschild and with Assemblymember Garcia's
- 5 office around the topic of resourcing the
- 6 commission with a consultant that can help us
- 7 both with the technical writing, but the
- 8 facilitation of the conversations. Okay. All
- 9 right. I think we are ready then for -- I think
- 10 there is a public comment. So the public comment
- 11 will be around the determination of future
- 12 agendas. Elisabeth?
- 13 MS. DE JONG: Yes, thank you. So if you
- 14 are joining us by Zoom on the computer, please
- 15 use the Raise Hand feature. And if you've called
- 16 in, please dial \*9 to raise your hand and then \*6
- 17 to unmute your phone line. First we'll go to
- 18 those hands raised in the Zoom application and
- 19 then the phones. And I do want to point out that
- 20 immediately after this we would go into a general
- 21 public comment period as well. So there is a
- 22 good amount of opportunity here.
- 23 I see a hand raised from Orlando Foote.
- 24 You should be able to unmute yourself.
- ORLANDO FOOTE: Can you hear me?

- 1 MS. DE JONG: Yes.
- ORLANDO FOOTE: Okay. One final comment
- 3 or suggestion with regard to the dispute
- 4 resolution. It kind of jumped out at me. But it
- 5 seemed to me one thing you might want to
- 6 seriously consider is hiring somebody who is a
- 7 professional alternate dispute resolution
- 8 mediator or someone with a background. And I
- 9 don't want to in any way diss the CEC, but I
- 10 would suggest that it probably should be somebody
- 11 other than an ALJ from the commission. Probably
- 12 somebody maybe in the private sector that is
- 13 experienced in this area. But I can certainly
- 14 see a vast potential for disputes from a
- 15 philosophical, political perspective, just
- 16 completely disregarding the economic components.
- 17 So I would encourage you to seek out an
- 18 ADR if not from the -- perhaps from an
- 19 independent public source or even from the
- 20 private sector. Okay? That's it.
- 21 MS. DE JONG: Thank you. All right. I
- 22 don't currently see any other hands raised.
- 23 Let's check for any written comments. I think
- 24 that's good.
- 25 So we will just glide right into the next

- 1 just general public comment period. And this is
- 2 open for any public comments not pertaining to a
- 3 particular agenda item. So please go ahead and
- 4 use that Raise Hand feature either in the Zoom
- 5 app or by dialing \*9.
- 6 Chair Paz, I'm not seeing any public
- 7 comments. So would you like to move to adjourn?
- 8 CHAIR PAZ: Yes. So thank you,
- 9 everybody. Great discussion. And, yes, I have a
- 10 motion. And I don't know if we need a second,
- 11 but the meeting is adjourned at 5:07.
- 12 (Off the record at 5:07 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 8th day of July, 2021.

MARTHA L. NELSON, CERT\*\*367

Martha L. Nelson

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IN WITNESS WHEREOF, I have hereunto set my hand this 8th day of July, 2021.

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