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25	Brittany Flores, CSR 13460
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1 **PROCEEDINGS:** 2 October 19, 2018 3 MS. RAITT: All right. Good morning, 4 5 everybody -- or folks here. I'm Heather Raitt. I'm the manager of the IEPR, and today's workshop is on the 6 7 Draft 2018 IEPR Volume -- IEPR Update Volume 2. I'11 8 just quickly go over our housekeeping items. If there's 9 an emergency and we need to evacuate, please follow 10 staff out the doors and to Roosevelt Park, which is 11 across the street and diagonal to the building. And we 12 are recording this meeting, so we'll have a -- so we're 13 broadcasting over WebEx and we're recording it and we 14 will post the recording on our website and we are 15 also going to have a written transcript of our 16 meeting. 17 I'm going to give a short presentation after the commissioners make opening remarks, and then we'll have 18 19 an opportunity for public comment. And so folks in the 20 room, if you wanted to make comments, please go ahead and fill out a blue card and go ahead and give it to me. And, 21 22 folks on WebEx, you can let our WebEx coordinator know 23 that. 24 And materials for the meeting are on -- in the 25 entrance to the hearing room and also posted on our CALIFORNIA REPORTING, LLC (510) 224-4476.

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1	website. And just a reminder, we also welcome written
2	comments, and they're due on November 2nd. And the
3	notice gives you all the information for submitting
4	written comments. With that, I'll turn it over to the
5	dais. Thank you.
6	COMMISSIONER MCALLISTER: Well, great.
7	Well, thanks, Heather.
8	And I see we've clearly hit a nerve here because
9	we have such incredible attendance, and it's good to see
10	that the ISO works on Fridays. Thanks, Delfine. But in
11	actually by the way, Delfine, for the, the symposium
12	and just on behalf of all of us to all of you, I think
13	it was really a great event again once again. So
14	really terrific and excellent attendance and just a
15	you know, so that was great.
16	So I'm Andrew McAllister, lead on energy
17	efficiency at the Energy Commission, also taking a big
18	interest in forecasting along with the chair going
19	forward for next year and among, you know, other topics.
20	I think well, I'll just say this: Part 2 of the IEPR
21	is kind of where a lot of the meat is this year,
22	and, you know, Part 1 was really, kind of, focused on
23	the Global Climate Action Summit and, you know,
24	Commissioner Hochschild has led it, I think, to have
25	much more resonance than maybe typically the IEPR has in
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1 terms of its accessibility to pubic and, sort of, a
2 highlighting of all the great things that are happening
3 here in California.

So this Part 2 is, kind of, where some of the 4 substance policy discussions have gone, and it's 5 really 6 reflecting a lot of work as always, but, you know, on 7 the topics we'll talk about today, on behalf of all five 8 commissioner offices, I would say everybody's taken an 9 interest in, in the particular topics that they lead but certainly this -- we're in this phase where we're having 10 11 to integrate lots of different policy themes and that is only going to continue in earnest. And I would say on 12 an even deeper level, next year, when we do a full IEPR 13 14 and a full forecast, and we try to integrate some of these ongoing legislative implementation issues around 15 SB 350 and other pieces of legislation in the recent past 16 17 but also some new stuff that came through this past 18 legislative session -- and there's a lot of focus on 19 decarbonization; a lot of focus on analytics; and a lot 20 of need for putting together new tools to take advantage of a lot of the modern amenities that we have for 21 22 understanding energy consumption and developing polices. 23 So anyway, I think in that context, this -- kind 24 of, see this Part 2 of the 2018 IEPR as setting the

25 table in a way for this -- for next year's discussion

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1 and, and also dealing with some of the current policy 2 issues that Heather's going to give us a briefing about 3 after we give our comments initially.

So just thank everybody for coming, everybody in 4 the room and online. Looking forward to getting this on 5 6 the table. We might not go very deep today. I think 7 this will be, kind of, a general presentation meeting 8 today, but then obviously when people dig into it and 9 they really have a chance to develop their comments and 10 fully form their ideas and put those on paper, we'll 11 look forward to hearing those and seeing those on the 12 docket as we go forward. And, you know, the process is 13 really meant to incorporate the stakeholder comments, and that's why we do these things. And that's how --14 that is really the process that's the lifeblood of 15 getting to good results in IEPR and other proceeding 16 17 here at the Commission. So thanks again, and I'll pass it on to my, colleague, Commissioner Karen Douglas. 18 19 COMMISSIONER DOUGLAS: I'll join 20 Commissioner McAllister in welcoming all of you here and 21 whoever is on WebEx, and I am looking forward to 22 the discussion and the comments. And I just -- I'll 23 just jump on everything he said. 24 Pam. 25 MS. DOUGHMAN: Hi. Yes. Thank you for

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1	coming. Chair Weisenmiller asked me to draw your
2	attention to three key points included in this report.
3	Reducing greenhouse gases continues to be a high
4	priority especially in the transportation sector.
5	Improving resilience to the impacts of climate change is
6	another high priority for California. Also, it is
7	important to reduce barriers to ensure equal access to
8	the energy transformation for all Californians.
9	COMMISSIONER MCALLISTER: Ken.
10	MR. RiDER: Yeah. Hello. I'm Ken Rider,
11	chief of staff to Commissioner Hochschild, who is the
12	lead on this IEPR, and we just encourage anyone if they
13	haven't read Volume 1, Volume 1 of the IEPR is, is
14	published, and it's a nice report and there is a nice
15	video that goes along with it. And my boss would certainly
16	suggest that you all check it out and share it widely.
17	This, this Volume 2 is in draft form, so comments
18	are really important to help us finalize it. And I just
19	want to, again, kind of, along the lines of what Pam
20	just said, just emphasize that this report really, kind
21	of, embodies three things, which is continuing to keep
22	the lights on in California. What do we need to do and
23	how do we need to plan for that? You know, addressing
24	energy equity is really important, and it's embodied
25	here. And then also, our fight against climate change

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1	is also in this report. So those are three, I think,
2	main themes that run in this report and look forward to
3	a some discussion today about it.
4	MS. RAITT: Thank you.
5	Okay. Great. So just to give a high level
6	overview, the Energy Commission prepares the IEPR every
7	two years. That includes assessments of energy supply
8	and demand, market trends, and major challenges with
9	updates in the intervening years. Of course, this is an
10	update year. Through the IEPR, the Energy Commission
11	develops energy policies and recommendations to protect
12	the environment, ensure energy reliability, enhance the
13	state's economy, and protect public health and safety.
14	As we discussed, Commissioner Hochschild is the
15	lead for this year's IEPR, and Volume 2 of the 2018 IEPR
16	Update follows up on several energy issues examined in
17	the 2017 IEPR and puts forward recommendations for
18	further work. The report draws on information gleaned
19	from both public workshops and webinars, and another
20	workshop is scheduled for December to discuss the
21	results of the updated electricity forecast. So on the
22	very high level, as already has been mentioned, the IEPR
23	continues to focus on transforming California's energy
24	system to reduce greenhouse gas emissions to increase
25	the resiliency in the state's energy system to climate

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1 change.

In August 2018, the Governor's Office of Planning 2 3 and Research, the California Natural Resources Agency, and the Energy Commission released California's fourth 4 climate change assessment, and this provides new cutting 5 edge research on climate change building on efforts 6 from 7 The fourth assessment translates the previous years. 8 global climate model into regionally relevant reports 9 that help identify and plan for the impacts of the 10 change in climate on a local scale. Regional workshops 11 that bring together scientists, local government 12 representatives, and community members are being held around the state to help communicate the findings 13 and 14 build partnerships in order to better serve local planning needs. The results of the fourth assessment 15 are sobering and show a future punctured by severe wild 16 17 fire, rising sea levels, increased flooding, coastal 18 erosion, extreme heat events, and more frequent and 19 longer droughts.

California has a history of leadership in climate policy with a few key policy pieces of legislation listed here, which most of you are probably very familiar with. AB 32 called for reducing greenhouse gas emissions to 1990 levels by 2020. SB 32 calls for a 40 percent reduction below 1990 levels by 2030. Achieving

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these goals requires changing our transportation fuels, changing our electricity systems to use more renewables, increasing efficiency in reducing methane and other potent greenhouse gas emissions. SB 350 was a key piece of legislation to help advance those goals and also to ensure benefits of clean energy are realized by low income and disadvantaged communities.

8 Last month, the Governor signed SB 100 by Senator 9 de Leon, which calls for 100 percent zero carbon electricity resources by 2045. 10 It also increases the 11 2030 renewables target from 50 percent to 60 percent. 12 The Governor also signed executive order B-55-18, which sets a new statewide goal to achieve carbon neutrality 13 by 2045 and to maintain negative emissions thereafter. 14 At about the same time we posted the draft Volume 2, the 15 Intergovernmental Panel on Climate Change released a 16 17 special report on global warming 1.5 degree celsius. Ιt 18 shows that limiting global warming to 1.5 degree celsius 19 significantly reduces the impacts of climate change and 20 avoids the catastrophic consequences of a greater than 2 degree warming. To avoid going past 1.5 degrees celsius 21 warming, IPCC found that by 2030, global CO2 emissions 22 23 must decline by about 45 percent below 2010 levels and 24 reach net zero by about 2050. The Governor's executive 25 order calling for carbon neutrality by 2045 is consistent

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with IPCC findings. Californian continues to lead by example working with others to advance greenhouse gas emissions reductions on a global scale, and California continues to be active on a international stage to spur action. Most recently, California hosted the Global Climate Action Summit in San Francisco to strengthen the push for greater emissions reduction internationally.

8 California's electricity sector is leading the 9 state's efforts to reduce greenhouse gas emissions. In 2016, greenhouse gas emissions from the electricity 10 11 sector were 37.6 percent below 1990 levels. Although, 12 California's greenhouse gas goals are statewide, in 13 2016, the electricity sector surpassed the 2020 14 greenhouse gas goal and nearly met the 2030 goal. The electricity sector accounted for only 16 percent of 15 statewide emissions. In 2017, about 32 percent of 16 California's electricity was served from renewable and 17 18 for the first time, solar outset all of the remaining 19 sources, accounting for about 36 percent of the state's 20 renewable generation.

21 California's electricity system has achieved some 22 gains in integrating increasing amounts of renewables 23 since the 2017 IEPR, but more work is needed to manage 24 the daily and minute to minute changes in renewable 25 generation. There has been progress in developing

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1	performance standards for inverter-connected solar and
2	wind power plants that will improve reliability,
3	increase services to the grid Energy storage has grown,
4	but more is needed. One opportunity is to repurpose used
5	electric vehicle batteries for the grid. Grid
6	regionalization is a promising solution that has not yet
7	been realized. Still, the western energy and balance
8	real-time energy transfers in the west and is growing.
9	It has helped avoid curtailment of 715,000 megawatt
10	hours of renewable energy since 2015 and has saved more
11	than 300,000 metric tons of carbon dioxide equivalent.
12	Increasing the flexibility of loads will also be key.
13	One tool is time-of-use rates and that encourage
14	energy use to be better aligned with the resource
15	availability. Another is demand response that can allow
16	loads to be fully integrated as a grid resource. While
17	policymakers are working to reshape the electricity
18	system, California's Californians are increasingly
19	making household choices about how and from where they
20	get their electricity. This is profoundly changing the
21	market and provides new opportunities as well as new
22	questions about the state's climate and energy goals
23	will be realized.
24	As California's electricity system evolves, so
25	does the Energy Commission's efforts to develop

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electricity demand forecasts. The forecast is used by 1 2 the California Public Utilities Commission and the 3 California Independent System Operator for Planning Purposes. The Energy Commission is updating 2017 4 forecast with an additional year of historical data and 5 6 updated economic and demographic information. For the 7 first time since the Energy Commission started doing 8 annual updates to the forecast. Results will also 9 include refresh projections of solar PV, system adoptions plug-in electric vehicle adoptions, community choice 10 11 aggregators, and time-of-use rate impacts. The update 12 also improves upon the hourly load model that was developed in 2017. This will allow the Energy 13 14 Commission to adopt a forecast of monthly peak loads The forecast extends alongside its standard forecast. 15 to 2030 and will be available in late 2018 and considered 16 17 for adoption in early 2019.

18 As California look to reduce greenhouse gas 19 emissions, it must address admissions that come from 20 buildings, which are second only to the transportation 21 sector. Working towards zero emission buildings requires 22 reducing greenhouse gas emissions from the entire 23 building including electricity, natural gas, other fuels, 24 as well as refrigerants that typically use highly 25 potent greenhouse gases. Electrification is a key

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strategy. With electrification, achieving zero emission 1 buildings requires a recognition that emissions from 2 3 electricity systems are not the same each hour of the day. Emissions are lowest during peak solar generation. 4 Thus electrification must be coupled with load management 5 strategies such as time-of-use rates and demand response 6 7 to shift when energy is consumed in order to maximize 8 the use of renewable energy. Increasing energy 9 efficiency is a key part of decarbonizing buildings and achieving the state's goal, to double energy efficiency 10 11 savings by 2030. Investments made during new construction 12 retrofitting buildings and replacing appliances to 13 provide precious opportunities for increased energy 14 efficiency and has long-term implications on the state's ability to meet its climate goals. 15

The agriculture and manufacturing sectors provide 16 17 promising opportunities for expanding energy efficiency. 18 Still, the state needs to expand energy efficiency efforts, development initiatives, innovative market 19 20 solutions, harness energy, harness emerging technologies, 21 and develop progressive program designs across all sectors of economy. In 2018, the Energy Commission took 22 23 a bold step towards reducing emissions from buildings and 24 increasing energy efficiency by adopting the first in 25 the nation building standard that requires solar on new

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homes starting on -- in 2020. The standards reflect 1 2 rigorous assessment of homeowner financial benefits of 3 rooftop solar systems and build on four decades of establishing cost-effective efficiency requirements 4 in building design and construction. 5 6 Integral to the state's energy goals is to increase the 7 equitable distribution of the benefits of clean energy 8 and to create an inclusive clean energy economy. The 9 Energy Commission examined the barriers of energy efficiency and weatherization investments; renewable 10 11 energy generation and contracting opportunities for local small businesses and low-income and disadvantaged 12 communities. Likewise, the California Air Resources 13 14 Board reported on barriers to accessing zero emission and near zero emission transportation and mobility 15 options. Progress implementing the recommendations in 16 the 17 two-part barrier study is underway. For example, in 18 June 2018, the Energy Commission launched the energy 19 equity indicators web page to identify opportunities for 20 improving clean energy access, investment, and resilience in California's low-income and disadvantaged 21 22 communities. Recognizing that nearly half of low-income 23 Californians live in multifamily rental housing, the 24 Energy Commission also developed a clean energy 25 low-income multifamily buildings action plan. The

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1	report is expected to be adopted next month. CARB's
2	efforts concentrate on expanding education and
3	outreach and developing a one-stop shop pilot project
4	for its low carbon transportation equity projects.
5	While pursuing a cleaner energy system with
6	benefits to all Californians, the state continues to
7	grapple with making sure energy supplies are reliable in
8	the near future, particularly in southern California. The
9	Energy Commission, CPUC, and the California ISO continue
10	to work together to address reliability issues related
11	to the 2012 closure of San Onofre nuclear generating
12	station, compounded by the expected closure of several,
13	coastal natural gas power plants. The agencies
14	periodically review progress on preferred resources as
15	well as conventional generation and transmission
16	projects. The ways of a large transmission projects that
17	will increase the capability to import electricity into
18	the region that meet the Mesa loop-in project we're
19	watching. The joint agencies are also addressing a second
20	reliability issue with the additional partnership of the
21	Los Angeles Department of Water and power. The second
22	issue stems from the 2015 massive leak at the Aliso Canyon
23	natural gas facility compounded by outages of key pipelines
24	of the Southern California gas system. Summer 2018 marks
25	the third analysis by the joint agency team and natural
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1	gas and electricity systems. They found that pipeline
2	capacity is more constrained in 2018 than 2017, meaning
3	there was greater risk of service interruptions. Since
4	posting the draft IEPR, the state joint agencies
5	released an updated winter assessment that similarly
6	found that the system is more constrained in 2018 than
7	2017 due to the pipeline outages. So I'd like to conclude
8	by saying that California is making progress in reducing
9	greenhouse gas emissions from its energy system.
10	There's still a lot of work ahead. California's
11	leadership continues to be critical as climate change is
12	a global problem with impacts being felt in California
13	and worsening. That's why we're advancing science to
14	increase our resilience to climate change and setting
15	groundbreaking goals to reduce greenhouse gas emissions.
16	While undertaking these efforts, California's economy
17	has grown 46 percent since 2010 and the state is working
18	to ensure the benefits of a clean economy are equitably
19	shared. The IEPR puts forward a number of
20	recommendations aimed at meeting our climate and energy
21	goals. So with that, I invite comments on how we can
22	improve the report, and we'll take oral comments today,
23	and written comments, as I mentioned, are due November
24	2nd. Thank you.
25	COMMISSIONER MCALLISTER: So straight to

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public comment, correct? 1 MS. RAITT: Yep. 2 3 COMMISSIONER MCALLISTER: So I only have one blue card. If anyone else wants to make a public 4 comment, please get in line or submit a blue card and/or 5 6 get in line first so that you can ask for the blue cards 7 that we do have. 8 So I just have the one from Brian -- is it 9 Kolodji? 10 Yeah. Come on up, please. 11 Okay. So just reminding everybody, three-minute 12 public comment, and anything you can't say in three minutes, please put on paper and submit on the docket. 13 14 All right. So thank you. Thanks for being here. MR. KOLODJI: Thank you, Ms. Doughman, 15 commissioners, staff. My name is Brian Kolodji. I'm 16 17 with Swan -- Black Swan, Incorporated. It's a California company, and we are in the race of removing 18 19 greenhouse gases from the environment. I'm also the 20 chair of the American Institute of Chemical Engineers, 21 carbon management session, and invite Heather to present 22 this wonderful report to our international audience that will be present in New Orleans here in March. 23 24 By the Governor's executive order, five million ZEVs will replace almost one-third of the 15 million 25

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gasoline driven cars. This means five billion gallons of gasoline will not be combusted, but over 200,000 gigawatts hours, which almost -- of energy must be produced to supply power to these -- to charge these batteries for these five million cars, and that has not been considered in this report. That means the number that you came up with has to be doubled.

8 Okay. I'm a chemical engineer. I know what I'm 9 talking about. I looked at your numbers, and you didn't 10 consider the power to charge the ZEVs in your report. 11 That means you need to, literally, double all the power 12 in California to supply power to those cars. It's an amazing amount. Okay. And the consideration for 13 additional power plants to supply this power to ZEVs, 14 again, has not been considered in the report and the ZEV 15 requires more power than a gasoline car. So it's less 16 17 efficient. Gasoline is the highest density fuel out 18 there today. Electricity powered cars are not as 19 efficient, but they are zero emission, so I'm all for 20 them. But the thing is, is the forecast in the report 21 is ignoring the fact that we got to charge those 22 batteries with new power plants. It requires new power 23 plants. 60 percent required, per this SB 100, for 24 renewable energy is certainly not enough to accommodate doubling the power. Okay. So again, we need more 25 ZEVs.

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We need more power plants to charge those ZEVs. 1 And 2 they -- I recommend you look at natural gas fired power 3 plants again and allowing technology that removes carbon from stack of power plants. 4 This is what my business is. We remove carbon 5 6 directly, CO2 directly from the stack and feed it to the 7 crops. We double the crops. I presented a -- I made а 8 presentation to California Department of Food and 9 Agriculture, scientific advisory panel. They've 10 accepted this technology. It's recognized. It's been 11 in practice for over a hundred years. We need to remove 12 power -- we need to consider technology that removes 13 carbon directly from the stack of the existing power plants and new power plants that you need to build to 14 run these ZEVs. 15 COMMISSIONER MCALLISTER: Thanks for your 16 comments. 17 18 MR. KOLODJI: You're welcome. 19 COMMISSIONER MCALLISTER: Put your more extensive 20 thoughts on the docket in written format that would be great. 21 MR. KOLODJI: I sent written comments in 22 electronically and I'll send -- I also provided a slide 23 presentation that I presented to the California 24 Department of Food and Agriculture yesterday. 25 COMMISSIONER MCALLISTER: Great. Thanks. CALIFORNIA REPORTING, LLC (510) 224-4476-

MR. KOLODJI: And it shows how we remove 1 all 400 million --2 3 COMMISSIONER MCALLISTER: Thanks a lot. Appreciate it. 4 5 MR. KOLODJI: -- with one technology. You 6 don't need all this -- this technology will remove all the greenhouse gas and get it carbon neutral in less --7 8 in two decades faster. 9 COMMISSIONER MCALLISTER: Thanks a lot. 10 for your comments, I appreciate it. Tim Carmichael. 11 12 MR. CARMICHAEL: Good morning, commissioners, staff. Tim Carmichael with Southern 13 14 California Gas Company. Just a few comments. We will also be submitting written comments. Just a few 15 16 comments today. 17 Thank you for the opportunity to speak about the 18 draft IEPR update. Southern California Gas believes that 19 maintaining a diverse energy portfolios ensures California -- Californians will have access to safe, 20 reliable, and affordable energy. And we think the IEPR 21 22 should reflect this. Decarbonizing buildings has been 23 identified as a key focus in reducing GHG emissions to meet the state's 2030 and 2050 climate goals. And as we 24 have recently discussed with some commissioners and 25

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staff, SoCal Gas is supporting -- supportive of building 1 decarbonization strategies and we believe they 2 should 3 include renewable gas production to decarbonize the qas supply. This pathway will help keep consumer costs down 4 but also enable customer choice. While we appreciate 5 6 CEC has acknowledged there's some potential to 7 decarbonize buildings, we're disappointed that the R and 8 G pathway has largely been dismissed in, in this -- in 9 the near-term plans for the CEC. The CEC, in the IEPR, 10 talks about reevaluating this strategy in four years, 11 and we're concerned about that because we expect the CEC 12 and other agencies to actively develop policies in the next few years during that window. And we believe this 13 R and G strategy should be part of that. 14 The draft IEPR states that there are no incentives for R and G in 15 buildings at this time, but the report makes no mention 16 17 of recently passed legislation, Senate Bill 1440 by 18 Senator Hueso. We expect that the PUC rulemaking on 19 that legislation will create a framework that will make 20 R and G an option for residential and commercial sector 21 but for greater use in the residential and commercial 22 sector.

The 2018 IEPR also includes a robust discussion on climate change adaptation and resiliency. However, natural gas is largely overlooked in this section of the

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1	report. The natural gas grid is a valuable asset that
2	provides reliable and affordable energy and is less
3	vulnerable to service disruption caused by wildfires and
4	other natural disasters. In addition, underground
5	storage is an integral part of maintaining energy
6	resiliency, and with appropriate regulation and
7	oversight, the risk associated with underground storage
8	can be managed and mitigated. California's current
9	energy system needs natural gas and gas storage to run
10	reliably. The California Council on Science and
11	Technology, CCST, was tasked with preparing an
12	independent and scientific assessment on the long-term
13	viability of underground natural gas storage facilities.
14	COMMISSIONER MCALLISTER: We need to wrap it
15	up Tim.
16	MR. CARMICHAEL: Okay. That draft report
17	included consultation with CEC, and there was a workshop
18	on that earlier this year. We believe that should
19	the findings of that report should be included in the
20	IEPR. And in closing, we just ask for more attention to
21	the potential for underground storage and the
22	infrastructure system be part of the solution, and we
23	will be submitting additional comments in writing.
24	Thank you.
25	COMMISSIONER MCALLISTER: Great. Thank you.
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Thanks for your time. 1 2 Is there anybody else in the room who'd like to 3 provide comments? That's it for the blue cards. So -- oh. And the 4 speakers -- actually, in particular, first speaker 5 6 could you give the court reporter your contact 7 information, please. 8 And then do we have anybody on the line? MS. RAITT: It sounds like we don't have anybody on 9 WebEx who is asking questions. 10 Okav. Great. Well, we push this thing out into 11 the world, and hopefully, people will read it and submit 12 comments. That's it for the agenda, right? 13 MS. RAITT: I think that's it.So yeah, comments are 14 15 due November 2nd. COMMISSIONER MCALLISTER: Okay. So November 2nd. 16 17 Got a couple weeks. And looking forward to hearing all those and reading them and revising the 18 document, getting it out here expeditiously. 19 20 So I don't think we really need closing comments. 21 All right. We're good. Thanks everybody, again, for 23 being here, and we are adjourned. Thanks. 2.4 (Whereupon the proceeding concluded at 10:33 a.m.) 25 --000--CALIFORNIA REPORTING, LLC (510) 224-4476-

I, Brittany Flores, a Certified Shorthand Reporter of the State of California, duly authorized to administer oaths, do hereby certify:

That the foregoing proceedings were taken before me at the time and place herein set forth; that a record of the proceedings was made by me using machine shorthand which was thereafter transcribed under my direction; that the foregoing transcript is a true record of the testimony given.

I further certify I am neither financially interested in the action nor a relative or employee of any attorney of party to this action.

IN WITNESS WHEREOF, I have this date subscribed my name.

Dated: Nov. 19, 2018

Brittar

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