1 BEFORE THE ARIZONA POWER PLANT AND 2 TRANSMISSION LINE SITING COMMITTEE 3 4 IN THE MATTER OF THE) DOCKET NO. APPLICATION OF SALT RIVER) L-00000B-21-0393-00197 PROJECT AGRICULTURAL 5 IMPROVEMENT AND POWER) LS CASE NO. 197 DISTRICT, IN CONFORMANCE WITH) 6 THE REQUIREMENTS OF ARIZONA) 7 REVISED STATUTES, SECTIONS) 40-360, et. seq., FOR A 8 CERTIFICATE OF ENVIRONMENTAL) COMPATIBILITY AUTHORIZING THE) 9 EXPANSION OF THE COOLIDGE) GENERATING STATION, ALL WITHIN) THE CITY OF COOLIDGE, PINAL 10) COUNTY, ARIZONA.) 11) 12 At: Casa Grande, Arizona 13 Date: February 10, 2022 14 Filed: February 22, 2022 15 16 REPORTER'S TRANSCRIPT OF PROCEEDINGS 17 VOLUME IV 18 (Pages 608 through 837) 19 20 21 COASH & COASH, INC. 22 Court Reporting, Video & Videoconferencing 1802 N. 7th Street, Phoenix, AZ 85006 602-258-1440 Staff@coashandcoash.com 23 24 Kathryn A. Blackwelder, RPR By: Certified Reporter 25 Certificate No. 50666

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1 INDEX TO PROCEEDINGS 2 ITEM PAGE 615 3 Public Comment Session 4 5 INDEX TO EXAMINATIONS 6 WITNESSES PAGE 7 CHRISTINA HALLOWS (via videoconference), ANNE RICKARD, 8 KRISTIN WATT, KENDA POLLIO, DEVIN PETRY 9 Continued Direct Examination by Mr. Acken 619 Cross-Examination by Mr. Rich 622 Cross-Examination by Mr. Stafford 673 10 Cross-Examination by Ms. Post 681 11 Cross-Examination by Ms. Ust 704 Redirect Examination by Mr. Acken 706 12 13 SARA ELIZABETH GRINESKI, via videoconference 14 Direct Examination by Ms. Post 736 Cross-Examination by Mr. Acken 756 15 Redirect Examination by Ms. Post 771 16 TIMOTHY WILLIAM COLLINS, via videoconference 17 Direct Examination by Ms. Post 773 Cross-Examination by Mr. Acken 18 791 Cross-Examination by Mr. Rich 808 19 Redirect Examination by Ms. Post 810 20 BILL MCCLELLAN - RECALLED 21 Further Redirect Examination by Mr. Acken 831 22 23 24 25 COASH & COASH, INC. 602-258-1440

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1		INDEX TO EXHIBI	TS	
2	NO.	DESCRIPTION	IDENTIFIED	ADMITTED
3	SRP-5	Air Permit Application	681	
4 5	SC-2	2021-12-10 SRP Response to Commissioner Kennedy Letter dated November 19, 2021	668	
6	RR-13	Resume of Timothy Collins	790	
7	RR-14	Liu, J., et al. Disparities		
8 9		air pollution exposure in t United States by race-ethni and income, 1990-2010. Environmental Health Perspe	city	
10		129 (12), 127005. (2021).	,	
11	RR-15	Tessum, C.W., et al. PM2.5 polluters disproportionatel		
12		and systemically affect peo of color in the United Stat Sciences Advances, 7(18),		
13		eabf4491. (2021).		
14	RR-16	Jbaily, A., et al. Air poll exposure disparities across		
15		population and income group Nature, 601(7892),228-233.	s.	
16	RR-17	Tessum, C.W., et al. Inequi	ty 781	
17		in consumption of goods and services adds to racial-eth	nic	
18		disparities in air pollutio exposure. Proceedings of th		
19		National Academy of Science 116(13), 6001-6006. (2019).	S,	
20	RR-18	Resume of Sara Grineski	755	
21	RR-19	Gee, G.C. and D.C. Payne	755	
22		Sturges. Environmental Heal Disparities: A Framework		
23		Integrating Psychosocial an Environmental Concepts.	d	
24		Environmental Health Perspectives. 112(17):		
25		1645-1653. (2004).		
		H & COASH, INC.		258-1440

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1		INDEX TO EXHIE	BITS (Cont.)	
2	NO.	DESCRIPTION	IDENTIFIED	ADMITTED
3	RR-20	Morello Frosch, et al. Understanding the Cumu		
4		Impacts of Inequalitie Environmental Health:	es in	
5		for Policy. Health Af 30(5): 879-887. (2011)	fairs.	
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7				
8				
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BE IT REMEMBERED that the above-entitled and
numbered matter came on regularly to be heard before
the Arizona Power Plant and Transmission Line Siting
Committee at Radisson Hotel Casa Grande, 777 North
Pinal Avenue, Casa Grande, Arizona, commencing at 9:02
a.m. on the 10th of February, 2022.
BEFORE: PAUL A. KATZ, Chairman
ZACHARY BRANUM, Arizona Corporation Commission (via videoconference) LEONARD DRAGO, Department of Environmental Quality JOHN RIGGINS, Arizona Department of Water Resources JAMES PALMER, Agriculture Interests MARY HAMWAY, Incorporated Cities and Towns RICK GRINNELL, Counties KARL GENTLES, General Public (via videoconference) MARGARET "TOBY" LITTLE, PE, General Public (via videoconference)
APPEARANCES:
For the Applicant:

16 For the Applicant:

17	JENNINGS,	STROUSS	& SALMON,	P.L.C.
	Mr. Albert	: Acken		

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1 APPEARANCES: (Cont.) 2 For the Sierra Club: 3 ROSE LAW GROUP, P.C. Mr. Court Rich Mr. Eric Hill (via videoconference) 4 7144 East Stetson Drive, Suite 300 Scottsdale, Arizona 85251 5 6 For Western Resource Advocates: 7 WESTERN RESOURCE ADVOCATES 8 Mr. Adam Stafford 1429 North 1st Street, Suite 100 9 Phoenix, Arizona 85004 10 For the Randolph Residents: 11 Ms. Dianne Post 1826 East Willetta Street 12 Phoenix, Arizona 85006 13 and 14 Ms. Autumn T. Johnson, pro hac vice 15 autumn@tierrastrategy.com (via videoconference) 16 17 For the Arizona Corporation Commission Staff: 18 Mr. Stephen J. Emedi Ms. Kathryn Ust Staff Attorneys, Legal Division 19 1200 West Washington Street 20 Phoenix, Arizona 85007 21 22 23 24 25 COASH & COASH, INC.

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1	CHMN. KATZ: It's my understanding that we
2	have Kevin Cavanaugh, a Pinal County Supervisor, that
3	should be available virtually this morning. He just
4	wants to make a public statement. He was ill on Monday
5	and Tuesday, and we couldn't accommodate him with the
б	tour yesterday.
7	I'll ask our tech folks, do we have
8	Mr. Cavanaugh or, Supervisor Cavanaugh now?
9	MR. RICH: Right behind you.
10	CHMN. KATZ: Oh, you're here in person?
11	Okay. I thought we were going to do you virtually.
12	How do we we don't need to get should
13	we just turn what microphone do you want the
14	gentleman to use? She'll show you.
15	MS. POLLIO: This one? Michele, do you want
16	me to grab it?
17	CHMN. KATZ: We're giving you some exercise
18	this morning.
19	MR. CAVANAUGH: Okay. That's good. I need
20	it.
21	Are we good?
22	CHMN. KATZ: Sure. And just make sure you
23	even though we've met, identify yourself for the court
24	record not the court record, but for the Committee
25	record.
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COASH & COASH, INC. www.coashandcoash.com 602-258-1440 Phoenix, AZ 1 MR. CAVANAUGH: Thank you. My name is Kevin 2 Cavanaugh. I'm Pinal County Supervisor for District 1. 3 I represent the -- a large area, including the 4 unincorporated town of Randolph. Randolph is a 5 historically significant area where families have, for 6 generations, established roots.

7 Randolph is a historically black community 8 where sharecroppers came for economic opportunity since 9 the 1920s. Randolph is a community unto itself. It 10 once had a market, a post office, stores, and a number 11 of churches.

12 Randolph has not been annexed by the City of 13 Coolidge, which is nearby, and I have not heard from 14 Randolph that there's a desire to be annexed. This 15 leaves Randolph with one local representative, myself, 16 a county supervisor, two state representatives, and a 17 state senator to represent their best interests, and 18 I'm here to do that.

19 The people of Randolph are concerned that 20 little by little, piece by piece, the place their 21 families have called home for generations is being 22 diminished by encroaching industry, pollution, blight, 23 leading to lower property values and fewer and fewer 24 residents.

25 I recognize the historical importance of COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

Randolph and initiated a plan to install fire hydrants 1 2 so fires can be fought, rather than watching buildings 3 burn to the ground, like the church about a year ago. And by installing fire hydrants, once these are 4 5 installed, I'm going to ask a volunteer fire department to assist in training and equipping the folks of 6 Randolph to fight their own fires. Using Community 7 8 Development Block Grants, we're going to install curbs 9 and sidewalks so that Randolph -- the property values and the water runoff has a place to go and make it more 10 11 like a small city.

12 But the residents have expressed to me a 13 concern over air quality, and I've asked our air 14 quality department to set up instruments to measure air 15 quality on the ground from various sources. There's an 16 emulsions plant, steel manufacturing, recycling, and 17 the SRP Power Plant nearby, and each business is held to emission standards, but the residents of Randolph 18 19 are concerned that the combined emissions and pollutant output from nearby sources present a health hazard. 20 21 And adding 16 turbine generation units, in their view, 22 will exacerbate the perceived problems.

23 Our air quality department briefed me on how 24 emissions from the turbine generators are measured, and that each stack falls within -- well within acceptable 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

616

prescribed levels. As Arizona moves to solar and wind, 1 2 it is necessary to have the on-demand power generation 3 as provided by the proposed turbines, but we must 4 assure the citizens that the air they breathe is safe. 5 And so that is my primary concern, that we -- that the Corporation Commission, SRP, the County, the State make 6 7 sure that emissions and the pollutants that are 8 released near Randolph do not propose a health 9 hazard -- present a health hazard to the citizens of 10 Randolph. 11 So that's all I have to say. Thank you. 12 CHMN. KATZ: Thank you very much for taking 13 the time to join us, and we will definitely consider 14 your concerns. 15 MR. CAVANAUGH: Thank you. 16 CHMN. KATZ: Thank you. 17 I think we're now in a situation -- I didn't know if there was any follow-up with that last thing --18 19 question I threw at Mr. Mcclellan. If not, I quess we're going to proceed with the cross-examination of 20 21 the third panel, one of whom, as yesterday, 22 Ms. Hallows, is by virtual, and the other four are 23 present here. 24 Do we have any of our Committee Members appearing virtually? I can't tell from that screen, 25 COASH & COASH, INC.

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but -- I don't know if Toby Little is present. I don't 1 2 know if Rick Grinnell is present. MEMBER BRANUM: Good morning, Chairman. 3 Member Branum is here. Thank you. 4 CHMN. KATZ: Thank you. I now see --5 6 MEMBER LITTLE: Good morning, Chairman and Toby Little is also here. 7 all. 8 CHMN. KATZ: And I'm seeing the back of a 9 chair that I think is Rick Grinnell's spot. So I think we'll just get started, and I'm sure he will join us. 10 11 Karl Gentles is not available today. He may 12 appear later virtually. 13 But we can begin with the cross-examination. 14 Yes, sir. 15 MR. ACKEN: Mr. Chairman, I had one cleanup 16 item for this panel before we move to cross. 17 CHMN. KATZ: That's fine. And then we'll 18 have cross going forward, hopefully, without 19 interruption. 20 MR. ACKEN: Thank you, Mr. Chairman. 21 CHRISTINA HALLOWS, ANNE RICKARD, KRISTIN WATT, KENDA 22 23 POLLIO, AND DEVIN PETRY, 24 called as witnesses on behalf of the applicant, having been previously affirmed en masse by the Chairman to 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

speak the truth and nothing but the truth, were further 1 2 examined and testified as follows: 3 4 CONTINUED DIRECT EXAMINATION 5 BY MR. ACKEN: б Q. Ms. Watt, yesterday you were asked about -- a question regarding the air quality permitting status of 7 8 the existing facility and the expansion, as to whether it was a major or minor source. Do you recall that 9 10 question? 11 Α. (MS. WATT) Yes, I do. 12 And do you have any clarifications to your Q. 13 answer? 14 (MS. WATT) Yes, I'd like to clarify, please. Α. 15 Excuse me. So I was asked yesterday whether the 16 existing Coolidge Generating Station was a minor source 17 or a major source and whether the expansion was a minor 18 source or a major source. 19 My response was that the existing Coolidge Generating Station is a minor source and the expansion 20 21 project is a minor source. It is true that the 22 existing Coolidge Generating Station is a minor source 23 under the Prevention of Significant Deterioration 24 program, but by that -- and by that I mean to say that the criteria pollutant emissions that I mentioned 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

619

1 yesterday are below the major source thresholds, 250 2 tons per year for the existing Coolidge Generating 3 Station.

4 However, because the area is now in nonattainment for particulate matter less than 10 5 microns, the area is -- or, the existing Coolidge 6 Generating Station becomes a major source for 7 8 particulate matter only, for PM10 only, under the 9 Nonattainment New Source Review.

10 So in this permit application, SRP is 11 proposing to, first, limit the particulate matter 12 emissions from the existing units at Coolidge 13 Generating Station to below 70 tons per year so that 14 the existing generating station stays a minor source. 15 With the expansion, we're also proposing to limit the 16 emissions from the expansion project to below major 17 source thresholds so that the project is also a minor 18 source.

19 When those two projects are combined, the 20 existing -- the Coolidge Generating Station will become 21 a major source, and then any future modifications or 22 projects that are done at that facility will be subject 23 to major source permitting and the significant 24 modification thresholds for that facility. MR. ACKEN: Thank you, Ms. Watt. No further 25

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2	CHMN. KATZ: Thank you.
3	MEMBER RIGGINS: Mr. Chair.
4	CHMN. KATZ: Yes, Mr. Riggins.
5	MEMBER RIGGINS: Quick question for Ms. Watt.
6	So I know we've discussed the PM10. Does
7	that permit also take into any consideration for PM2.5?
8	MS. WATT: It does. It's assumed that
9	PM10 the emissions from PM2.5 are the same as PM10,
10	yes.
11	MEMBER RIGGINS: Okay. So as far as the
12	like the National Ambient Standard Air Quality in the
13	graphs that we saw yesterday for the baseline for the
14	area, that all takes into consideration PM2.5 as well?
15	MS. WATT: No. I'm sorry. I should clarify
16	that. So the area is only in nonattainment for
17	particulate matter less than 10 microns with that
18	specific standard. There's a separate National Ambient
19	Air Quality Standard for PM2.5, and the area is in
20	attainment with that standard. And the emissions from
21	this project, based on the modeling assessment, do not
22	cause or contribute to a violation of the PM2.5
23	standard.
24	MEMBER RIGGINS: And nitrous oxide and carbon
25	emissions, is that considered 2.5 or is that I'm not
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an air quality expert either, so I hope I'm not 1 2 speaking out of school. But I just -- for the record, is that also considered 2.5 or is that PM10? 3 4 MS. WATT: Nitrogen oxides have -- nitrogen 5 dioxide has its own National Ambient Air Ouality Standard. Nitrogen oxides do -- nitrogen oxides and 6 volatile organic compounds combine in the atmosphere to 7 8 form ozone, is that where you're -- I'm not sure if --MEMBER RIGGINS: I believe so, yeah, and I 9 may have actually used the wrong chemical compound. 10 11 But yes, that answers. Thank you. 12 CHMN. KATZ: We can begin cross-examination. 13 Is Mr. Rich going to be the first one out of the chute? 14 MR. RICH: I think so, Mr. Chairman. Okay. 15 Whenever you're ready. 16 17 CROSS-EXAMINATION BY MR. RICH: 18 19 Good morning. Good morning, everyone on the Ο. 20 panel. Let me -- I'll try to go through you one at a 21 time and we'll try to be precise with who to ask the 22 questions to, but let me know if you feel like you are 23 certainly the wrong person. 24 So let me start with Ms. Hallows. Can you just refresh my recollection on what day you announced 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

to the public that this project was moving forward? 1 2 Α. (MS. HALLOWS) The first mailer that we 3 mailed out was on August 31st. The website was live on 4 August 24th, which was also the date of the SRP Power 5 Committee. That's interesting. So you started the б Q. 7 website and announced it to the public before your 8 Board had approved the project, is that correct? 9 (MS. HALLOWS) The Power Committee was on the Α. 24th and then the full Board, I believe, was on 10 11 September 13th. 12 Is that normal, for SRP to announce a project Ο. 13 before the Board approves it? 14 (MS. HALLOWS) It was approved through the Α. 15 Committee and then announced at that point. 16 Ο. And the Committee makes a recommendation to 17 the Board, isn't that correct? 18 Α. (MS. HALLOWS) Yes. 19 Okay. Is -- to your knowledge, is the Ο. proposal that's before the Committee as part of the 20 21 application the same project that was announced on the 22 website on August 24th? 23 Α. (MS. HALLOWS) Yes. 24 Have there been any changes to the proposal Ο. 25 since August 24th? COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

1 (MS. HALLOWS) I am unaware of any changes. Α. 2 Okay. And what -- you described a lot of the Ο. public outreach you did. What would you say is the 3 4 point of doing the public outreach? 5 (MS. HALLOWS) The point of doing the public Α. outreach is to make sure that the public is aware of 6 7 the project and knows how to participate in the 8 process. 9 Okay. And you received lots of comments, Ο. 10 correct? 11 Α. (MS. HALLOWS) We received comments, yes. 12 Okay. And is it fair to say that some of Ο. 13 those comments asked SRP to do certain things or do 14 things differently? 15 Α. (MS. HALLOWS) Yes. 16 Okay. And how many of those comments did SRP Ο. 17 implement? How many of them did you take and then do something about? 18 19 (MS. HALLOWS) Well, nothing has happened Α. 20 with the project yet. We're still going through the 21 hearing. So let me just refresh everybody's memory 22 that --23 And that's -- sorry to cut you off. Is the Ο. 24 answer -- did you take any of the comments and did you implement or make changes to the application as a 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

result of any of the comments that you received? 1 2 Α. (MS. HALLOWS) Oh, I don't believe so. Okay. Did you notify the residents or the 3 0. 4 families of the residents at the home for disabled 5 adults about the project? (MS. HALLOWS) Yes, I was in contact with the 6 Α. superintendent there. I think you're talking about the 7 8 Arizona Training? 9 0. I am, yes. 10 (MS. HALLOWS) Yes. Α. Yes. 11 Did you contact the residents or their 0. 12 families or their guardians? 13 Α. (MS. HALLOWS) I did not. 14 Were you in charge of meeting with public Ο. 15 officials, like Supervisor Cavanaugh who was just here? 16 Α. (MS. HALLOWS) I was not. 17 Okay. Well, and I guess just to be clear, Q. were you in any of the meetings with those public 18 19 officials? 20 Α. (MS. HALLOWS) I was not. 21 Ο. Do you know if SRP met with, for example, 22 Supervisor Cavanaugh? 23 Α. (MS. HALLOWS) I do know, yes. Pinal County 24 leadership, as well as Coolidge. 25 O. Do you know if, when meeting with those COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

elected officials and leaders, whether or not SRP 1 2 informed them that it did not do an RFP for this 3 project?

4 Α. (MS. HALLOWS) I don't know that. Do you know whether or not SRP informed those 5 Ο. community leaders that its consultant, E3, had found 6 7 that it could achieve the same goals with 731 megawatts 8 of battery storage instead of this project?

MR. ACKEN: Objection, that misstates the 9 testimony. 10

11 MR. RICH: That does not restate -- misstate 12 the testimony.

13 MR. ACKEN: It does not meet the same goals, 14 and that is not what Panel 2 testified to.

15 CHMN. KATZ: Well, I'm going to allow the 16 question to be asked. If the witness can answer it, 17 that's fine. If she doesn't understand it or can't 18 answer it, she'll let us know.

19 MS. HALLOWS: Just to be sure, can you repeat 20 your question, Mr. Rich?

BY MR. RICH: 21

22 Ο. Sure. Do you know whether or not SRP, when 23 meeting with public officials, informed them that SRP's consultant had told the company that it could achieve 24 the same goals through battery storage instead of the 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

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Coolidge Expansion Project? 1 2 Α. (MS. HALLOWS) I do not know. Okay. Let me go to Ms. Rickard, peek over 3 Ο. 4 the screen at you. You talked a lot about the giving, 5 and that's impressive. You mentioned 300 entities. I think -- and I told the group behind me that I wanted 6 7 to pull up Number 158, the slide, and ask you questions 8 around that. 9 Okay. And before -- I've got what I think is Page -- or, Slide 158 from SRP Exhibit 2. Someone 10 11 correct me if I'm wrong. Is that what you see on the 12 screen? 13 Α. (MS. RICKARD) Yes. 14 Okay. And there's a pie chart on this Ο. 15 Is this all of the money that SRP gives to, I screen. 16 guess, the public generally, or can you explain a 17 little bit more what this pie chart means? 18 Α. (MS. RICKARD) This represents our giving to 19 accredited nonprofits, 501(c)(3) organizations. Okay. And is there other giving that SRP 20 Ο. 21 does that is not represented or not shown on this pie 22 chart? 23 (MS. RICKARD) Can you quantify "giving," Α. 24 your definition of "giving"? 25 Well, I quess it would be not for use for the Ο. COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

corporate business of SRP as far as paying your 1 2 employees, paying for energy, building equipment, those 3 types of things. Are there other nonSRP entities, 4 unrelated to power generation, that SRP gives money to? 5 Α. (MS. RICKARD) There would be -- yes, there would be. I wouldn't have all the detail on that. 6 Okay. And what is the total dollar amount in 7 Ο. 8 this pie chart on Slide 158? How much does that 9 represent in the last fiscal year? 10 (MS. RICKARD) That would be approximately Α. 11 4.1 million. 12 Okay. So \$4.1 million is given by -- from Ο. 13 SRP to 501(c)(3) nonprofits? 14 Α. (MS. RICKARD) Yes. And that doesn't include any other form of 15 Ο. 16 not-for-profit entity? 17 Α. (MS. RICKARD) Correct. 18 Ο. Okay. Do you know what the annual operating 19 budget of SRP is? 20 (MS. RICKARD) I do not. Α. 21 Ο. I know in your testimony you said that SRP 22 likes to be transparent in their giving, is that 23 correct? 24 Α. (MS. RICKARD) Yes. 25 Is there a list of these entities on SRP's Ο. COASH & COASH, INC. 602-258-1440

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1 website?

2	Α.	(MS. RICKARD) Yes.
3	Q.	And the dollar amounts given to each?
4	Α.	(MS. RICKARD) I don't believe the dollar
5	amounts a	are listed; the organizations are.
6	Q.	Okay. What about the other entities that
7	I know yo	ou didn't have the specifics, but do you know
8	if there	's a list of those entities on SRP's website?
9	Α.	(MS. RICKARD) No.
10	Q.	You don't know or there is not one?
11	Α.	(MS. RICKARD) I don't think there is, no.
12	Q.	Okay. Do you know why there wouldn't be a
13	list of e	entities that SRP gives money to?
14	Α.	(MS. RICKARD) No, I don't.
15	Q.	And what type of organization is SRP? It's
16	not a for	-profit company, correct?
17	Α.	(MS. RICKARD) Correct.
18	Q.	What type of entity is it?
19	Α.	(MS. RICKARD) A not-for-profit.
20	Q.	Is it a governmental entity?
21	Α.	(MS. RICKARD) I don't have the specific
22	definitio	on of how we quantify our description.
23	Q.	Is it a political subdivision of the State of
24	Arizona?	
25		MR. ACKEN: Mr. Chairman, he's really asking
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a legal question that's probably best addressed by 1 2 Ms. Ramaley as to the legal status of SRP. CHMN. KATZ: That's fine. 3 4 Ms. Rickard, do you even know the exact 5 posture of SRP with respect to whether it's a 6 government or quasi-government entity or a private 7 entity? 8 MS. RICKARD: I would not. 9 BY MR. RICH: 10 Do you know where the money that you give out Ο. 11 to the public comes from? 12 Α. (MS. RICKARD) Yes. 13 Where does it come from? Ο. 14 Α. (MS. RICKARD) It's from our customer base. 15 Okay. So it's not shareholder profit or Q. 16 anything like that that you're distributing, correct? 17 Α. (MS. RICKARD) Correct. So much like a government distributes taxes 18 Ο. 19 that it collects, that's the money -- similar to the money that you're distributing, correct? 20 21 Α. (MS. RICKARD) Correct. 22 Ο. Do you know if anyone from SRP asked any 23 entity to which SRP gives money to write a letter of 24 support in this matter? 25 (MS. RICKARD) Not that I'm aware of. Α. COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

1 You don't know or you don't --Ο. 2 Α. (MS. RICKARD) I don't know. 3 Okay. Do you know if SRP gives money to the Ο. 4 Apache Junction area Chamber of Commerce? 5 Α. (MS. RICKARD) I don't know that -- that would probably come from our chamber or government 6 7 relations department, not necessarily mine. 8 So they wrote a letter of support in this Ο. 9 Do you know -- you don't know if SRP gives docket. 10 them money? 11 Α. (MS. RICKARD) I don't know. 12 What about the Chandler Chamber of Commerce, Ο. 13 do you know if SRP gives them money? 14 Α. (MS. RICKARD) I wouldn't have that detail, 15 no. 16 Ο. Or Valley Partnership? 17 Α. (MS. RICKARD) Also, don't know. What about the Coolidge Chamber of Commerce, 18 Ο. do you know whether or not SRP supports and gives money 19 to the Coolidge Chamber of Commerce? 20 21 Α. (MS. RICKARD) No. 22 Ο. And sorry. Just for the clarity, you don't 23 know or --24 (MS. RICKARD) I don't know. Α. Sorry. And, finally, the Arizona Chamber of Commerce 25 Ο. COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

and Industry, do you know whether or not SRP gives 1 2 money to that organization? (MS. RICKARD) I don't know. 3 Α. During your testimony, you talked about 4 Ο. giving -- or, somehow supporting Randolph so that they 5 get, "the funds they are entitled to." Do you remember 6 saying that? 7 8 Α. (MS. RICKARD) I do. 9 Ο. And what -- how much -- how many funds or what amount of funds are they entitled to? 10 11 Α. (MS. RICKARD) So we know -- because as an 12 unincorporated area, they are represented by Pinal 13 County organizations, nonprofits. I specifically was 14 mentioning the Pinal County United Way, to which we do 15 provide funds. They are entitled to those as well. 16 Q. So on what basis are they entitled to those 17 funds? 18 Α. (MS. RICKARD) Pinal County serves that area, 19 the residents in that area, as well as others. Okay. So when you said that Randolph is --20 Q. 21 that you want to make sure that they get the funds 22 they're entitled to, is there a specific dollar amount 23 that you're considering? 24 (MS. RICKARD) I don't have a specific dollar Α. 25 amount. We just want to make sure that we can help be COASH & COASH, INC. 602-258-1440

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1 that bridge to assist in that.

2	Q. And what are the I'm sorry. I just want
3	to be clear. So you don't have a proposed budget or a
4	spending amount that you're that you're earmarking
5	for or that you're earmarking for Randolph?
6	A. (MS. RICKARD) We do have a specific line
7	item for all of Pinal County nonprofits that we
8	support. Randolph is included in that.
9	Q. Okay. And you, I think, alluded to some sort
10	of list of potential projects or things that you're
11	doing. What is on that list?
12	A. (MS. RICKARD) There are several on the list.
13	What we initially had provided were assisting with
14	Randolph getting the designation of a historic
15	neighborhood. We talked about screening. We offered a
16	schedule of tree trim and alleyway cleanups and cleanup
17	days. That was our initial list.
18	Q. Do you have a financial value that's
19	associated with those accomplishing or helping with
20	those specific tasks?
21	A. (MS. RICKARD) We don't have a financial
22	dollar associated with the neighborhood at this point.
23	We do have estimates in for some of the items I
24	mentioned yesterday, which is the cleanup days and the
25	tree trimming, yes.
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What are your estimates of those costs? 1 Ο. 2 Α. (MS. RICKARD) They were -- I would have to 3 look at my notes again, but they were in the 4 neighborhood of about 10,000 a year. 5 Okay. And this -- do you know how much SRP Ο. is investing in this project? 6 (MS. RICKARD) I don't have the number on 7 Α. 8 that, but I heard in the testimony I think it was close 9 to a billion dollars. 10 Close to a billion, with a B, correct? Ο. 11 Α. (MS. RICKARD) I believe that's what I heard, 12 yes. 13 And do you happen to know what percent of a Ο. 14 billion \$10,000 is? 15 Α. (MS. RICKARD) No. 16 It's .001 percent. Does that sound about Ο. 17 right? 18 Α. (MS. RICKARD) Yes. 19 How long has SRP owned the current Coolidge 0. Generating Station? 20 (MS. RICKARD) Since 2019. 21 Α. 22 Ο. And since that time, how much money have you 23 directed towards the Town of Randolph? 24 Α. (MS. RICKARD) We have not yet specifically to Randolph. Again, we have been supporting the area 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

634

1 of Pinal County since 2013.

2	Q. Let's go to Mr. Petry. And, actually, let me
3	just ask. I know and this is just me doing my
4	lawyer thing here, but you've got a computer in front
5	of you. Have you been communicating with anyone else
6	during your testimony or getting any messages?
7	A. (MR. PETRY) No, sir.
8	Q. And I guess I should have asked the first
9	witness who's off screen.
10	Ms. Hallows, have you, during your testimony,
11	received any text messages, e-mails, or messages from
12	anyone related to this testimony?
13	A. (MS. HALLOWS) No.
14	Q. Okay. Thanks. Sorry. Just doing my job.
15	So, Mr. Petry, in your professional opinion,
16	is this gas-burning power plant in this location
17	consistent with the adjacent residential neighborhood
18	and the home for disabled adults?
19	A. (MR. PETRY) In my professional opinion, the
20	siting of the project at this location, in an area
21	planned for industrial development, is compatible with
22	the existing setting.
23	Q. Considering the taking into account the
24	neighborhood across the street and the home for
25	disabled adults?
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MR. ACKEN: Objection, misstates testimony. 1 2 The neighborhood is not across the street and the --3 what is it -- the Arizona Training Center is not 4 adjacent. I think it would be good to clarify what the actual record shows. 5 б CHMN. KATZ: Maybe rephrase the question. MR. RICH: Sure. 7 8 BY MR. RICH: So in your professional opinion, is this 9 Ο. plant compatible with an immediately nearby residential 10 11 neighborhood and a just-down-the-street home for disabled adults? 12 (MR. PETRY) Yes. And the Arizona Training 13 Α. 14 Program is located a little less than a half a mile away. As we've testified previously, the community of 15 16 Randolph is nearby, on the other side of an existing 17 railroad and high-voltage transmission facilities. And, yes, I do believe the project is compatible at 18 19 this location. 20 Q. In your opinion, are all gas-burning power 21 plants environmentally compatible with nearby residential communities? 22 23 (MR. PETRY) Not necessarily. There are Α. multiple factors that come into consideration. 24 And without knowing a specific location that you might be 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

referring to, I can't say yes. I can say that at this 1 2 location, the project would be compatible with the 3 existing setting.

4 Is it your testimony that it's the existence 0. 5 of the railroad and the high transmission lines in between the site that makes it compatible? 6

(MR. PETRY) That's an aspect of it, but not 7 Α. 8 entirely. It is the existing industrial infrastructure 9 that lends itself to this being a great site. Because of that existing transmission infrastructure, existing 10 11 pipeline infrastructure, and the existing Coolidge 12 Generating Station immediately adjacent to the project 13 location, those are the factors that make this a 14 compatible location.

15 So if a residential neighborhood and a nearby 0. home for disabled adults doesn't do it, what could be 16 17 in those location that would make this plant

incompatible with the nearby uses? 18

19 (MR. PETRY) I can't really speculate on what Α. 20 might or might not make something compatible or 21 incompatible at a given location through a hypothetical 22 situation. What I can say is, for this project, we 23 looked at the site, we looked at the existing 24 infrastructure and land uses, as well as the planned land uses, and have determined that this site is 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

1 compatible.

2	Q. So you have no opinion on what uses would be
3	incompatible with a gas-burning power plant?
4	A. (MR. PETRY) Without specifics, no, I can't
5	give any, again, specific input or opinion on what
6	might or might not be compatible, because every
7	situation is different. And we don't want to make
8	broad characterizations of what might or might not be
9	compatible. We look at each site individually to
10	determine, through multiple factors, what might or
11	might not be compatible.
12	Q. How many power plants have you evaluated in
13	your career?
14	A. (MR. PETRY) This would be the first
15	gas-fired power plant that I have evaluated in my
16	career; although, my company, SWCA, has worked on many
17	power plants and participated in many power plant
18	siting efforts across the country.
19	Q. Do you know if they've ever provided
20	testimony that the plant they were reviewing was
21	incompatible with surrounding land uses?
22	A. (MR. PETRY) I don't know.
23	Q. The I didn't have the benefit of going on
24	the tour yesterday, but I think I heard that the power
25	plant was not running during the tour, is that correct?
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(MR. PETRY) I believe that is correct. 1 Α. 2 Do you know if anyone from SRP communicated Ο. 3 with the plant to make sure that it wouldn't be running 4 during the tour? (MR. PETRY) No, I don't know. 5 Α. That could have happened? б Q. (MR. PETRY) Highly doubtful, but I can't 7 Α. 8 answer that question with certainty. 9 0. Have you been out there when the plant was running? 10 11 Α. (MR. PETRY) I believe so, yes. 12 Are you certain or are you just --Q. 13 (MR. PETRY) No, I'm not certain that it was Α. 14 running when I've been in proximity to it. I've been out there a handful of times and driven around the 15 16 project area, stopped near the plant, and I'm not 17 certain whether or not it was running during those 18 times. 19 So you can't be certain that the conclusions 0. 20 you reached are based on your experiences of the plant 21 running when you were there making your observations, 22 correct? 23 Α. (MR. PETRY) These are not my conclusions. 24 These are the conclusions of myself and my colleagues who have done studies. Those include studies of the 25 COASH & COASH, INC. 602-258-1440

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639

Phoenix, AZ

multiple environmental resources that were included in 1 2 the CEC application. And it was through those resource 3 professionals as part of my team that we came up with 4 these conclusions.

And these turbines, they're jet engines, 5 Ο. essentially, correct? 6

(MR. PETRY) That's my understanding, yes. 7 Α. 8 And yesterday your conclusion was that there Ο. 9 would be no noise impact from these jet engines within 10 Randolph, is that correct?

11 Α. (MR. PETRY) No. My conclusion was that the 12 noise impact within the project area and project 13 vicinity would be within a range that is considered 14 barely perceptible, between approximately .5 to 2.6 15 decibels. And particularly within the community of 16 Randolph, it's slightly less than that 2.6, again, at a 17 range that would be considered barely perceptible.

So when you add up the jet engines that are 18 Ο. part of this plant and the existing plant, you get 28 19 jet engines, right? 20

(MR. PETRY) I believe there would be 28 21 Α. 22 generators total; 12 from the existing plant and 16 23 from the expansion project.

24 And your testimony is that if all 28 of these Ο. jet engines are running across the railroad tracks from 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

Randolph, that they will be barely perceptible to the 1 2 people of Randolph?

(MR. PETRY) It would be the noise increase 3 Α. 4 that would be barely perceptible to the community of 5 Randolph as a function of the added generators, the 16 6 additional generators proposed as part of this project.

It's important to note that the existing 7 environment at and around the project facility, we take 8 9 account of the existing noise environment there. And so when we talk about the impacts, we talk about the 10 11 increase in noise associated with the project based on the existing environment. And that increase is that 12 13 range I described, that .5 to 2.6 decibels.

14 Does that increase -- when you talk about the Ο. 15 background noise, are you including the railroad noise?

(MR. PETRY) Railroad noise, farming noises, 16 Α. 17 the highways, some of the other existing industrial 18 facilities in proximity to the project, and the 19 community of Randolph as well, yes.

And you would agree with me that there's not 20 Q. 21 a train going by constantly, correct?

22 Α. (MR. PETRY) I would agree, yes.

23 So I want to make sure I understand the 0. 24 conclusion you reached. Is it that it would only be 2 decibels or 2.6 decibels on top of a passing train, 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

641

1	or was the train not part of that analysis?
2	A. (MR. PETRY) The train was part of the
3	analysis. As part of our noise analysis, we had
4	multiple short-term and long-term monitoring locations,
5	noise monitoring locations, at and around the project.
б	The long-term monitoring locations were in place for 48
7	hours and did capture train noise. As part of that
8	noise analysis, we understand the existing noise
9	environment. That captures trains and other uses in
10	proximity to the project there, yes.
11	Q. So if there what would be the impact if
12	there was not a train passing and these 28 jet engines
13	are firing, what is the noise impact in Randolph?
14	A. (MR. PETRY) I don't know that I could
15	quantify that because we, again, base our analysis on
16	the existing environment, not a hypothetical
17	environment where trains are not present.
18	Trains are present at this location and they
19	do make noise. Those of us staying at this hotel the
20	last couple of nights have heard them as well. So we
21	can't necessarily quantify, you know, what the
22	environment would be without trains present. What we
23	can do is understand the existing noise environment and
24	model what the project would look like based on its
25	components and what it would sound like based on its
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643

1 components, and that's what we've presented in this CEC 2 application. So would you agree with me that the majority 3 Ο. 4 of the time there are not trains passing Randolph, 5 correct? б Α. (MR. PETRY) Certainly. And during those times, if these 28 jet 7 Ο. 8 engines are running, your -- you don't know what the 9 impact on Randolph would be, correct? 10 (MR. PETRY) Will you please restate the Α. 11 question, Mr. Rich? I'm not sure I understood it. 12 So first we established that the majority of Ο. 13 the time there are not trains running, correct? 14 Α. (MR. PETRY) Correct. 15 And you do not know what the impact of these Q. 16 28 jet engines will be from a noise standpoint on 17 Randolph during those times when there are not trains passing, correct? 18 19 (MR. PETRY) We do know what the impact of Α. the project -- the proposed Coolidge Expansion Project 20 21 would be based on its components specifically. We did 22 model what those impacts would be to noise with regard 23 to the existing environment, which does include trains 24 intermittently passing through the area. Again, we can't specify exactly what that would look like without 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ
trains added into that modeling, because they're absolutely a part of the existing noise environment in that area. We do know specifically what the project itself would -- the levels of sound that the project itself would produce, and those are included in the CEC application.

Q. Couldn't you have modeled the ambient noise
when a train wasn't passing to determine what that
background would be without the train there?
A. (MR. PETRY) Yes. And that's part of the

11 short-term noise monitoring's purpose, is to understand 12 on a smaller scale what some of the existing noise 13 environment looks like. And that's part of the 14 modeling that we do.

And the point of having both long-term and short-term noise monitors is to understand, over the longer periods of time, what the -- you know, the noise environment might look like, but also during short periods of time, periods when trains may or may not be passing through. And that enters into the modeling that is done as part of the noise analysis.

Q. Okay. So how many decibels will be perceptible in Randolph if all 28 of the jet engines are firing and there's no train passing?

25 A. (MR. PETRY) I'm not sure that I can answer COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ 1 that question directly. I think you're asking what 2 would the -- I think you're asking what would the sound 3 from the existing plant and the Coolidge Expansion 4 Project, at what decibel level would that be within 5 Randolph?

б

Q. Yes, when a train is not passing.

Α. (MR. PETRY) When a train is not passing. 7 So 8 that's difficult to determine because of the existence 9 of the Coolidge Generating Station and because that is part, currently, of the existing noise environment. 10 11 When we model -- or, excuse me. When we monitor for noise in these locations, we're not able to separate 12 13 out what the different noise-generating sources might 14 We model and understand that there are some be. 15 activities going by. Sometimes you can see perhaps 16 some farming implements that go by and make some noise, 17 and you can understand that that noise associated with that farming implement or other industrial activities 18 19 in the area contributed to the noise.

But as far as making a detailed assessment of 20 21 how much noise is specifically coming from the existing Coolidge Generating Station, how much noise is coming 22 23 from, say, Western Emulsions or some of the other 24 facilities in the region, we can't separate or distinguish between what each of those noise sources 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

1 are.

What we can do, through our modeling, is determine how much noise the project will add, and that is that .5 to 2.6 decibel addition that we've discussed previously.

Q. That's only when trains are passing. So how
much will the Coolidge Expansion Project add to the
noise in the area when a train is not passing?

9 (MR. PETRY) See, I don't agree with that Α. statement. I don't believe that that's only when 10 11 trains are not passing. That's part of the modeling 12 that we do is to determine the average noise in the area. And that is, again, why we have both short- and 13 14 long-term monitoring locations, to understand, on a smaller scale and on a longer-term scale, what the 15 16 noise environment might look like.

And, again, that's demonstrated in our CEC application and -- excuse me -- that noise increase, again, is that range of barely perceptible associated with the project.

Q. Okay. So your testimony is that 16 jet engines that are part of the Coolidge Expansion Project, if those turn on 400 feet away-ish or whatever that is, a thousand feet from Randolph, the impact when a train is not passing will be barely perceptible? COASH & COASH, INC. www.coashandcoash.com OCOASH & COASH, AZ

1 That's your testimony? 2 Α. (MR. PETRY) Yes. Okay. We went through the visual -- you 3 Ο. 4 talked about visual impacts, correct? (MR. PETRY) Yes. 5 Α. б Q. None of the photos you showed were from 7 nighttime, correct? 8 Α. (MR. PETRY) Yes, that is correct. 9 Ο. Have you been out there at nighttime? (MR. PETRY) No, I have not. 10 Α. 11 Maybe we can get the Randolph neighbors, Ο. 12 Exhibit Number 2, on the screen and go to their last 13 photo. Sorry to surprise you. If we scroll to the 14 last photo. Okay. Can you identify what's on the 15 screen there? (MR. PETRY) Yes, I can. Excuse me. This is 16 Α. 17 a photo of the existing Coolidge Generating Station taken from, I believe, near the entrance of the site to 18 19 the north of the Coolidge Generating Station. It seems to be looking sort of in a southern/southwestern 20 direction. 21 22 Ο. Okay. And you'll agree with me that there 23 are a lot of lights on the Coolidge Generating Station? 24 (MR. PETRY) There are lights on the Coolidge Α. 25 Generating Station, yes.

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1 And will lights be similarly configured on Ο. 2 the new Coolidge Expansion Project? (MR. PETRY) Safety lighting will also be 3 Α. present on the Coolidge Expansion Project, yes. 4 If you haven't been out there at night, you 5 Ο. may not know the answer, but do you know whether or not 6 7 those lights are visible from miles away? 8 MEMBER BRANUM: Mr. Chairman. 9 CHMN. KATZ: Yes. 10 MEMBER BRANUM: This is Member Branum. T was 11 going to wait and hold my question, but I don't want to 12 forget it now that we're kind of shifting from the 13 noise issue. 14 So I was listening to the questioning from 15 Mr. Rich and Mr. Petry's responses, so I quess I'm 16 curious, because I kind of asked this question 17 yesterday evening about the noise impact. So if -what is the actual total decibel level of the 18 19 surrounding area? 20 So I think what I heard is that you've 21 quantified the impact of the expansion project to be, 22 at most, an additional 2.6 decibels. I guess what I'm 23 trying to understand is, you know, in the middle of the 24 night if the peaker were running full blast, what's

25 that sound like?

COASH & COASH, INC. www.coashandcoash.com 602-258-1440 Phoenix, AZ 1 So not just the additional 2.6, but what is 2 that sound level with a train, without a train? Have 3 you done that analysis? Do you know what people can 4 expect to hear in the middle of the night as they try 5 to sleep? I think that's what I'm trying to 6 understand. Thank you.

MR. PETRY: Certainly, Member Branum. 7 I can 8 direct you to the CEC application, Exhibit I, Page 16. 9 There's Table 12 included on that page, and that provides the estimated sound levels for the project. 10 11 It includes the predicted sound levels from the 12 project, as well as the measured background noise, and 13 the potential noise increase associated with the 14 project.

15 Specifically, we can identify some of the 16 monitoring locations within the Randolph community and 17 identify exactly what the measured background noise at 18 that location would be and what the corresponding 19 potential noise increase associated with the project 20 would be.

If we look within the community of Randolph currently, we can see that the existing background noise, existing measured background noise at 134 West Randolph Road is approximately 55.2 decibels and is consistent in other monitoring locations within the COASH & COASH, INC. www.coashandcoash.com OCOASH & COASH, AZ

1 community of Randolph. 2 We can also look to see that the predicted noise levels from the project at those locations are 3 less than the existing measured background noise. When 4 we add those noises proposed or expected from the 5 6 project with those noises that are currently part of the existing environment, we can look to the column on 7 8 the far right and see what that potential noise 9 increase would be. 10 Does that answer your question, Member 11 Branum? (Audio disturbance.) 12 13 CHMN. KATZ: You're cutting in and out. We 14 didn't get that. 15 MEMBER BRANUM: Oh, sorry. 16 CHMN. KATZ: Mr. Branum, we didn't get your 17 last comment. It was cutting in and out. 18 MEMBER BRANUM: Okay. I'll try to repeat. 19 CHMN. KATZ: You're fine now. Go ahead. 20 MEMBER BRANUM: Okay. Thank you. So I don't 21 have Exhibit I pulled up here on my screen. So if the 22 answer is there, I apologize. But does this track 23 throughout, you know, the 24-hour period? Is this the 24 background noise that's been measured, you know, at lunchtime, after work, in the middle of the night? 25 Τf COASH & COASH, INC. 602-258-1440

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you could just elaborate on that, that would be great.
 Thank you.

MR. PETRY: Certainly. And in order to 3 account for the potential noise impacts, what you can 4 5 do is look at the 24-hour period, and that's what these account for. In particular, if we look at the columns 6 that represent LDN, that represents the sound levels 7 8 both at day and night, with an additional 10 decibels 9 weighted for those sounds occurring at night. So it really accounts for the higher sensitivities associated 10 11 with noise receptors during the nighttime hours.

12 And that's where, again, if you look at Table 13 12 on Page 16 in Exhibit I, you can see, again, the 14 measured background noise within the project vicinity, 15 and also specifically within the community of Randolph, is at approximately 55, a little over 55 decibels 16 17 currently, and in some locations outside of Randolph at about 60 decibels. Those locations are particularly 18 near the southeastern portion of the project study area 19 where we had some monitoring locations. 20

And then looking over at the furthest column to the right within Table 12, that's where we see that potential noise increase. And if we look at the LDN under that potential noise increase, that's where we again see that range of .5 to the 2.6 decibels

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increase. And that decibel increase does represent 1 2 that additional weighting, 10-decibel weighting, for 3 sounds that are experienced during nighttime hours. 4 Does that answer your question, Member 5 Branum? MEMBER BRANUM: Yes, sir. Thank you. And б just to -- I quess one final clarification. So my 7 understanding would be, based on, I think, what you had 8 9 told me yesterday, that with this additional increase from the 55, this would be similar to a conversation, 10 11 right? Human conversation, I think you said, is at 60 decibels? 12 13 MR. PETRY: Yes, that is correct. 14 MEMBER BRANUM: Thank you. 15 MEMBER LITTLE: Mr. Chairman. 16 CHMN. KATZ: Yes, Ms. Little. 17 MEMBER LITTLE: Since Zach -- or, Member 18 Branum brought these questions to the forefront, I'll 19 ask mine also. 20 So am I correct in assuming that these 21 numbers are averages? So there are times when it will 22 be louder, there are times when it will be softer, but 23 these are -- you know, so when things start up, you 24 hear it, when they shut down, they hear it, and these are averages, is that correct? 25

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MR. PETRY: That is correct. Yes. 1 2 MEMBER LITTLE: Thank you. MR. PETRY: You're welcome. 3 CHMN. KATZ: Mr. Rich, you may continue. 4 MR. RICH: Well, I was going to move on to 5 6 the visual. Can we pull up that exhibit we were just 7 talking about? 8 CHMN. KATZ: The nighttime photograph? MR. RICH: Yes. 9 10 BY MR. RICH: Randolph Exhibit 2. So on the screen, again, 11 Ο. 12 is the last page of Randolph Exhibit 2. It's that 13 nighttime view, correct? 14 Α. (MR. PETRY) Yes. It's a view from north of 15 the project site. 16 And you testified that you have not been out 0. 17 there at night, correct? 18 Α. (MR. PETRY) Yes. Okay. And so when you gave your opinion that 19 Ο. there were no negative -- or, that this was compatible 20 21 with visual impacts, it was not based on your 22 observations at night, correct? 23 (MR. PETRY) Correct. It was based on our Α. 24 observations and visual resource assessment completed during the daytime. 25

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654

1 What I would say with regard to night 2 lighting that's at the facility, the Coolidge Expansion 3 Project as proposed would be compliant with the City of 4 Coolidge night lighting dark sky requirements, which 5 includes methods for shielding and filtration of the 6 lighting systems.

Q. And I think I asked you, and I'm not sure
8 that you answered, if you were aware of whether or not
9 the current plant is visible at night from miles away?
10 A. (MR. PETRY) I don't know if the current
11 plant is visible from miles away.

12 Q. When you were asked about -- or, you provided 13 your opinion on historic impacts, can you summarize 14 your opinion there?

A. (MR. PETRY) Yes. My opinion and the opinion of the archaeologist -- archaeological professionals that are part of my team is that the project itself -the project site is at a location where, through our cultural resources survey, we identified no cultural resources or archaeological resources on the site.

As far as our survey of previously surveyed and previously identified cultural or archaeological sites within one mile of the project, there were -excuse me -- there were a few locations where there were historic sites identified, in particular, the COASH & COASH, INC. www.coashandcoash.com

Union Pacific Railroad, an affiliated distribution 1 2 line, and some of the roadways within the project study 3 area as well that are considered eligible for 4 registration on the Arizona or National Register of 5 Historic Places.

And we determined, through that analysis, б 7 that the project would not directly affect any 8 archaeological or historic resources, and any indirect 9 effect associated with the project to those Register-eligible properties would be minor and would 10 11 not prevent them from gaining that registration or 12 listing on a National or Arizona Register of Historic 13 Places.

14 Okay. Sorry. That was -- I should have been Ο. 15 more specific. I appreciate you restating all of that. 16 I quess I wanted to focus on Randolph. You were asked 17 about -- I'm sorry. You were here when Supervisor Cavanaugh provided his public comment just a few 18 19 moments ago, correct?

Α. (MR. PETRY) Yes. 20

21 And he referred to Randolph, as others have, Ο. as historic, correct? 22

23 Α. (MR. PETRY) Yes.

24 And so, but it's your position that the Ο. Coolidge Expansion Project will not have an impact on 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

1 this historic location?

2	A. (MR. PETRY) It is my testimony and my
3	professional opinion that the Coolidge Expansion
4	Project would not prevent the community of Randolph
5	from being identified or listed as an historic
6	district, an historic town site, and again, would just
7	not prevent, you know, any eligibility for listing or
8	anything that would, again, prevent that ability to be
9	determined eligible for listing as an historic district
10	or town site.
11	Q. Why does that matter? This will have an
12	impact on Randolph, correct?
13	A. (MR. PETRY) As we have described through
14	prior testimony, there will be some impacts to
15	Randolph, some minor noise impacts, some visual
16	impacts. And as part of those indirect impacts, it's
17	important to note that those are the types of impacts
18	that can potentially affect an historic property's
19	eligibility for a listing on the Register of Historic
20	Places. And it is our assessment that those impacts
21	that we've previously described are at a level that
22	would not prevent Randolph from being identified or
23	eligible for listing on the National or Arizona
24	Register of Historic Places.
25	Q. You would agree with me that the standard

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under Arizona law does not include whether or not you 1 2 will impact the ability of a location to become 3 registered as historic, correct? 4 Α. (MR. PETRY) Will you please restate the question, Mr. Rich? 5 Let me refer to the -- you're familiar with 6 Q. ARS 360.06, correct? 7 8 Α. (MR. PETRY) Yes. Sorry. 40-360.06. And I'll read from that 9 Ο. briefly. Subsection (A) says, "The Committee may 10 11 approve or deny an application and may impose reasonable conditions on the issuance of a Certificate 12 13 of Environmental Compatibility, and in so doing shall 14 consider the following factors as a basis for its 15 action." 16 And the portion that references historic 17 says, "Existing scenic areas, historic sites, and structures or archeological sites at or in the vicinity 18 19 of the proposed site." 20 Are you familiar with that provision? 21 Α. (MR. PETRY) Yes, sir. 22 Ο. In fact, you offer testimony that you believe 23 that this project as a whole complies with that 24 statute, correct? 25 (MR. PETRY) Correct. Α. COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

And to the extent that it references historic 1 Ο. 2 sites, it doesn't say anything about impacting whether or not a historic site can achieve registration as a 3 4 historic site, correct? 5 Α. (MR. PETRY) Not specifically. б Q. Okay. So that's not necessarily relevant to 7 the analysis under 40-360.06, correct? 8 MR. ACKEN: Objection to the extent he's 9 asking him to make a legal conclusion as to relevance. 10 CHMN. KATZ: That's correct. 11 MR. RICH: Mr. Chairman, he renders an 12 opinion on this statute and what does and does not 13 comply with it, so I'm asking him to explain his 14 understanding. 15 CHMN. KATZ: I'll allow him to explain his 16 understanding. 17 MR. PETRY: So my understanding is that, while not explicitly listed, it is an important 18 19 consideration, because some of the impacts that could be received or expected to be received from an historic 20 21 -- or, to an historic property would be a prevention 22 of, you know, a given property from being identified 23 and added to the National or Arizona Register of 24 Historic Properties. Because when properties are added to the register, those registers, there are additional 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

659

protections that can be provided to them as well. 1 2 And Randolph, in particular, I think it's important for us to note that there is a rich history 3 4 It's an important part of Arizona's history, there. 5 and our determination is that the project would not impact Randolph's ability to be recognized as an 6 historic town site, district, et cetera. 7 8 And that, to me, is an important factor, 9 because it's been described to us that there is a

strong interest within the community of Randolph to be recognized as such. There's a, as I mentioned and others have mentioned, a strong history there, an important part of Arizona's history. And if the project or a project were to prevent a community, an historic area from being designated or recognized as such, to me that would be an impact.

And that's an important thing to note is that our assessment indicates that the project would not prevent that from happening and would not directly or in any meaningful way indirectly impact the historic status or the potential historic status of the community of Randolph.

Q. But it would result in 28 jet engines being located within a thousand feet of that historic community?

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MR. ACKEN: Objection, misstates the 1 2 evidence. There are already 12 turbines located. As well as distance, let's make sure we are precise on our 3 4 distance. CHMN. KATZ: The distance, from my 5 understanding, is more than 2,000 feet away. 6 7 Go ahead with your next question. 8 BY MR. RICH: 9 Ο. Do you know how close the closest jet engine turbine is to the -- to Randolph? 10 11 Α. (MR. PETRY) I would have to refer back to 12 prior testimony, but it is approximately, you know, 13 over, I think as Chairman Katz indicated, 2,000 feet 14 from Randolph. The turbines themselves are located on 15 the eastern portion of the project site, much further 16 away from the community of Randolph. 17 Q. Would you agree, back on the visual objective portion of this, that it's possible for a project to 18 19 have greater visual impacts at night than it does during the day? 20 21 (MR. PETRY) There is sometimes potential for Α. 22 that, yes. 23 And that would be because of the presence of Ο. 24 lights, for example? 25 Α. (MR. PETRY) Potentially, yes. There's COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

typically mitigation that can be applied, and as is 1 2 required in the city of Coolidge, to lessen those 3 impacts, in particular, the dark sky night lighting 4 requirements. And as I mentioned previously, Coolidge 5 does have requirements for shielding and filtration associated with lighting to minimize those impacts at 6 7 night. And those -- there are lights that will be 8 Ο. 9 located at the top of the -- what do we call the 10 Just the towers? I don't know. towers? 11 Α. (MR. PETRY) I refer to them as the towers. 12 Okay. And there will be lights at the top of Q. 13 those? 14 (MR. PETRY) There is a plan for lights at Α. 15 the top of those. 16 Ο. And how tall is that from the ground? 17 Α. (MR. PETRY) I believe those towers are approximately 85 feet. 18 19 All right. Let me ask -- Ms. Watt, I've got Ο. some questions for you. So what is the -- well, let me 20 21 ask you this way. You provided some additional 22 testimony on this this morning. So is SRP asking for 23 the ability to have emissions at the maximum amount it 24 could under the law? 25 Α. (BY MS. WATT) I'm not sure I understand your COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

1 question. Could you restate, please?

2 Q. So you've submitted an air emissions permit 3 to Pinal County, correct?

A. (BY MS. WATT) We submitted a permit revision5 application to Pinal County.

Q. Okay. And that's the permit that allows you
to emit whatever this plant emits when it burns gas,
8 correct?

9 A. (BY MS. WATT) It's an application to request 10 specific emission limits for this project.

11 Q. Okay. And that's the application for the 12 permit that will guide how much -- how great the 13 emissions can be from this project, correct?

14 A. (BY MS. WATT) Correct.

Q. Okay. And on that application, have you asked Pinal County to allow you to -- to allow SRP to emit from the Coolidge Expansion Project the maximum amount under law that you could request on that

19 application?

20 A. (BY MS. WATT) No.

21 Q. No? What is the maximum amount you could 22 have requested on that application?

A. (BY MS. WATT) In this permit application,
 SRP is requesting to restrict its emissions to below
 major source thresholds, which, again, are 250 tons for
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all criteria pollutants except for particulate matter, 1 2 which that threshold is 70 tons. SRP is requesting to 3 limit our emissions from this Coolidge Expansion 4 Project to those levels. Okay. I want to make sure I nail this down. 5 Ο. So your testimony was, because we're in a nonattainment 6 area, there are limits on how much emissions you can --7 8 you can request to be allowed to emit in your 9 application, correct? 10 (BY MS. WATT) For certain sources, yes. Α. 11 Well, for this source and the sources that Ο. 12 will be emitted from the Coolidge Expansion Project, there are limits in what you can ask for, correct? 13 14 (BY MS. WATT) We are requesting specific Α. 15 emission limits for this project. 16 Ο. That's not my question. 17 Α. (BY MS. WATT) I'm sorry. I don't understand 18 your question. If you could please ask again. 19 So under law, could you request any amount Ο. that you want in this location, or are there limits in 20 21 law, based on the nonattainment designation, that would 22 limit how much you could get? 23 MR. ACKEN: So since Mr. Rich acknowledges in 24 his question that he's asking a question of law, I will be happy to answer. The answer is no. 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

1 CHMN. KATZ: Well, again, I think what we're 2 trying to establish is whether or not they have requested to maximize the amount of pollutants they 3 4 could release under state or federal or local law. 5 MR. RICH: I think that's a much better way of asking it than I did. 6 7 Is that the answer? I'm sorry. What is the 8 answer to that question? 9 MS. WATT: I'm sorry. Can you restate your question, or Mr. Katz? 10 11 MR. RICH: Your Honor, Mr. Chairman. 12 CHMN. KATZ: I think what was being asked is 13 whether or not the application is requesting the right 14 to pollute, so to speak, as high as might be allowed 15 under federal, state, or local law. MS. WATT: No, this permit application is not 16 17 asking that. 18 BY MR. RICH: 19 What is the difference between what you're Ο. asking and what -- that amount that you could have 20 21 asked for, what is the difference between those two? 22 Α. (BY MS. WATT) I can't answer that question. 23 CHMN. KATZ: Let me just ask you a question, 24 though. Whatever limit you have requested as the maximum, is SRP expecting to be running on a full-time 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

basis at the maximum amount allowed? 1 2 MS. WATT: No. CHMN. KATZ: You may proceed, Mr. Rich. 3 4 BY MR. RICH: So yesterday -- what I'm trying to get at 5 Ο. is -- you had suggested that 70 tons was the limit that б you could seek or that could be sought in the area 7 8 because of the nonattainment category of Pinal County. 9 Can you explain what that 70 tons is and whether or not 10 it's some sort of limit? 11 CHMN. KATZ: Just for clarification, are we 12 talking about particulates? 13 MR. RICH: I guess I'd ask Ms. Watt to 14 explain what that 70-ton limit that she referred to --15 what it applied to. 16 MS. WATT: Yes. The major source threshold for particulate matter in Pinal County, because of the 17 PM10 nonattainment area, is 70 tons per year. 18 19 BY MR. RICH: 20 0. Okay. And so you said because of the major 21 source nonattainment -- I'm not using the right 22 lingo -- what does that mean? That limit, what is that 23 limit? 24 (BY MS. WATT) SRP is requesting a Α. 70-ton-per-year federally enforceable PM10 emission 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

limit in its air permit application for this project. 1 2 Q. Okay. And given the nonattainment situation 3 at the site, could you have requested 75 tons, or is 70 4 tons the limit? (BY MS. WATT) SRP -- I don't believe we 5 Α. 6 could have requested an emission limit higher than 70 tons per year. 7 8 Okay. So SRP requested, to your knowledge, Ο. 9 the highest emission limit that it could have under 10 law? 11 A. (BY MS. WATT) I wouldn't characterize it 12 that way. I would characterize that SRP is proposing 13 to restrict its emissions to below major source 14 thresholds. And in this case, for particulate matter 15 less than 10 microns, it's 70 tons per year. 16 So you're proposing to restrict your Ο. 17 emissions to levels above which it would have been illegal to emit, is that your testimony? 18 19 (BY MS. WATT) No, not illegal. Α. 20 Q. Okay. But you could not have gotten 21 permission to emit at higher than 70 tons -- sorry, we can -- is that correct? 22 23 (BY MS. WATT) I don't believe that's Α. 24 correct. Okay. Well, we just took a big step back and 25 Ο. COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

1 that's confusing. So I'm sorry. Could you -- let me 2 just try to clarify this for the record and then I 3 won't try to unclarify it.

I think you just testified that had you made an application for 75 tons, you don't believe that could be approved because 70 tons is the limit, correct?

A. (BY MS. WATT) 70 tons is the major source 9 threshold for this -- for permitting thresholds under 10 Pinal County regulations. I don't -- I can't speak to 11 any potential permitting possibilities that we could 12 have achieved or could have requested for this permit 13 application.

14 Q. Okay. Are you -- does your --

15 CHMN. KATZ: Mr. Palmer.

MEMBER PALMER: Can I ask a question to clarify it in my own mind? Are you saying that the 70 tons allows you to request a minor source threshold, and above that you would be requesting a major source threshold? I'm trying to understand.

MS. WATT: Sorry for the confusion. So this permit -- this project will emit emissions above minor permitting thresholds but below major source permitting thresholds.

25 MEMBER PALMER: Thank you. COASH & COASH, INC. www.coashandcoash.com 602-258-1440 Phoenix, AZ

1 MS. WATT: Which keeps it a minor source. 2 BY MR. RICH: 3 And is it correct that given the 0. 4 nonattainment designation in this area, you could not 5 seek a major source permit today, correct? (BY MS. WATT) No, I don't believe that's б Α. If this project were to exceed, we would have 7 correct. 8 to go through PSD permitting, which would require 9 potentially obtaining offsets to offset the PM10 emissions from the project. 10 11 Are you familiar with what's called a Health Ο. 12 Impact Assessment? 13 (BY MS. WATT) Α. No. 14 So SRP did not perform a Health Impact Ο. Assessment with regard to its emissions at this site? 15 16 Α. (BY MS. WATT) SRP performed -- or, conducted 17 an ambient air quality analysis. Are you referring to 18 a hazardous air pollutant analysis? 19 No, I'm just asking about whether or not SRP Ο. 20 performed a Health Impact Analysis. 21 Α. (BY MS. WATT) No, not that I'm aware of. 22 Ο. I'll read this to you. And if you need me to 23 pull up the exhibit, we can do that. But there was a 24 letter that SRP wrote in response to the questions from Commissioner Kennedy that's come up before. We have it 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

in Sierra Club Exhibit Number 2 on Page 12. SRP stated 1 2 that the air quality permit has emission limits that preclude the CEP from operating at high capacity 3 4 factors. And, again, we can pull it up, but does that sound familiar? Are you familiar with that quotation? 5 (BY MS. WATT) б Α. Yes.

When SRP told Commissioner Kennedy that there 7 0. 8 are limits on operating at high capacity factors, what 9 did it -- what capacity factors does SRP believe are 10 high capacity factors?

11 Α. (BY MS. WATT) I can't respond or can't speak 12 to what SRP believes are high capacity factors. I can 13 tell you that, again, the example illustrated in the 14 air permit application presents one operating scenario 15 in which the units operate a thousand hours per year, start up twice per day, and that translates to 16 17 approximately an 11 percent capacity factor.

At those -- in that particular example, the 18 19 units would -- in that particular example, the emissions from carbon monoxide would be to the limit, 20 21 to the level, to the major source threshold for carbon 22 monoxide, so that limits -- effectively limits the 23 operation of those units for that reason. I can't 24 answer to specific capacity factor.

25 Okay. So to your knowledge, SRP, when it Ο. COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

told Commissioner Kennedy that the air quality permit 1 2 would limit operations at, quote, "high capacity 3 factors," it wasn't -- there was not a specific 4 capacity factor that SRP had in mind associated with 5 that statement? 6 Α. (BY MS. WATT) That's correct. To my 7 understanding, yes. 8 In the example you just spoke of from the air Ο. 9 quality permit, you talked about operations two times per day, is that correct? 10 11 Α. (BY MS. WATT) It referenced -- the example 12 illustrates startup -- the units starting up twice per 13 day. 14 Q. And for how long do they run in each of those 15 examples? 16 Α. (BY MS. WATT) The example illustrated -indicates a thousand hours for a year, not at a time, 17 18 obviously. 19 Sure. So twice a day. Do you know how long 0. 20 the assumption was for each day for each of those 21 operations? 22 Α. (BY MS. WATT) I don't. 23 I'm not good enough at math to figure it out. Ο. 24 So do you know if it was evenly divided or it was presumed to run at different times? 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

(BY MS. WATT) I don't. 1 Α. 2 You were asked about the air quality in Pinal 0. 3 County relative to perhaps Maricopa County yesterday. 4 Do you recall that? (BY MS. WATT) Yes. 5 Α. Are you aware whether or not Pinal County has б <u>Q</u>. some of the worst air quality in the United States? 7 8 Α. (BY MS. WATT) I'm not sure I understand your 9 question. What do you -- can you describe "worst"? 10 Well, are you aware of whether or not air Ο. 11 quality sensors in Pinal County have recorded some of 12 the highest -- the highest readings for particulate 13 matter in the entire country? 14 (BY MS. WATT) No, I'm not aware of that. Α. 15 Give me just a minute, Mr. Chairman, and make Ο. 16 sure I'm organized. 17 Mr. Petry, I think I've got one more topic to cover with you real briefly. You provided testimony 18 19 with regard to water usage at the site, correct? Α. (MR. PETRY) Yes, I did. 20 21 Ο. Let me make sure I understand. The water 22 that SRP will be relying on will come from the ground 23 under the site, correct? (MR. PETRY) SRP will be relying on stored 24 Α. surface water underground. 25 COASH & COASH, INC.

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Yes. Okay. And so that's the same -- that's 1 Ο. 2 the same water that nearby farmers or nearby homes 3 would rely on for their water, correct? 4 (MR. PETRY) Potentially. Excuse me. Again, Α. 5 it's stored surface water. It's Central Arizona Project stored surface water that SRP will be using at 6 this location that is stored underground. And from 7 8 that sense, I quess, those nearby that have wells, 9 including farmers and residents, et cetera, would be 10 getting their water from underground as well. 11 Ο. And are you -- I assume you're aware that 12 Pinal County has water issues, I'll just say generally, 13 is that your understanding? 14 Α. (MR. PETRY) I am aware, yes. 15 And are you aware that ADWR has stopped Q. 16 issuing certificates of assured water supply for new 17 development in the Pinal County in the Pinal AMA? 18 Α. (MR. PETRY) I am aware, yes. 19 And if I can add to that, I think what the project can do through the use of those long-term 20 21 storage credits is actually help the situation within 22 the Pinal AMA. Through the use of those long-term 23 storage credits, a portion of that water that is stored must be left behind. Approximately 5 percent of that 24 water must be left behind in the aquifer. In addition, 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

1	at this location, the project would reduce water use at
2	that site. Historically, the agricultural uses on this
3	site over those approximately 100 acres, they were
4	allotted approximately 4 acre feet per acre at this
5	location, resulting in approximately 400 acre feet of
6	use at the project location. The project, as proposed,
7	would reduce that use on site and, again, would be
8	using that stored surface water.
9	Q. And SRP currently owns the site, correct?
10	A. (MR. PETRY) Yes.
11	Q. And no one is forcing them to farm it and use
12	that water today, correct?
13	A. (MR. PETRY) I don't believe anybody is
14	forcing them to farm the site.
15	MR. RICH: Just another minute.
16	Okay. I have no further questions. Thank
17	you.
18	CHMN. KATZ: Mr. Stafford. And we'll
19	probably go about another 15 minutes before we take our
20	first morning recess, but feel free to go forward.
21	MR. STAFFORD: Thank you, Chairman.
22	
23	CROSS-EXAMINATION
24	BY MR. STAFFORD:
25	Q. I believe my questions are probably best
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directed to Ms. Watt. Could you please direct your 1 2 attention to Page 107 of the application, SRP-1? 3 MR. ACKEN: Mr. Stafford, can you provide the 4 actual page number? Because I think you're referring 5 to like a PDF version. And so there is no Page 107 of 6 the application to which I'm aware. MR. STAFFORD: Oh, well, yes. Exhibit --7 8 Page 107 of Exhibit SRP-1. MR. ACKEN: No. There are actual separate 9 page numbers. So the PDF version will have 107, but 10 11 you won't be able to find 107 looking at the 12 application. But maybe at the bottom of the page 13 you're looking at does it have a page number? 14 MR. STAFFORD: It's Table 1, Page 1 of 7. 15 Hang on. MR. ACKEN: Yeah, maybe you can provide an 16 17 appendix number. MR. STAFFORD: It is Appendix B, emissions 18 19 calculations. 20 MS. WATT: Okay. 21 MR. STAFFORD: It's Page 5 of 7, excuse me, Table 5. 22 23 MS. WATT: I have that table. 24 MR. STAFFORD: Okay. Thank you. 25 CHMN. KATZ: Is there any way we can project COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

1 it, or is it not in the system? 2 MR. ACKEN: That's not the right page. It does look like we can project the application. Let me 3 give the tech team the right page. 4 And you are referring, Mr. Stafford, to the 5 6 CEC application, not the air quality application? 7 MR. STAFFORD: I believe this may be attached 8 to the air permit application. It's Page 107 of 386 9 for SRP-1. 10 MS. WATT: Yeah, it's part of the CEC. 11 MR. STAFFORD: I believe that is it up on the 12 screen there. 13 CHMN. KATZ: Okay. 14 BY MR. STAFFORD: 15 Now, this table tells us that each of the Ο. 16 units of the expansion project is expected to emit 17 34,187 tons of carbon dioxide per year, correct? 18 Α. (MS. WATT) Yes, that's what's shown in this 19 table. 20 Q. And that's, again, based on running a 21 thousand hours per year and including two startups and 22 shutdowns per day, correct? 23 (MS. WATT) Yes, that's correct. Α. 24 Okay. Then if you could scroll down two more Ο. pages to Page 109 of 386 of SRP-1. 25

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1 Α. (MS. WATT) Table 7? 2 Ο. Yes, Table 7. Thank you. And this tells us 3 that all 16 CTs are expected to emit 546,990 tons of 4 carbon dioxide per year, correct? (MS. WATT) Yes. 5 Α. Again, based -- and that's, again, based on б Q. 7 each unit running a thousand hours per year with two 8 startups and shutdowns per day, correct? (MS. WATT) Yes, that's correct. 9 Α. Okay. So if each unit were to run, say, 10 Ο. 11 2,000 hours a year and each had four startups and 12 shutdowns per day, then the amount of carbon dioxide 13 emissions would roughly double, wouldn't it? 14 Α. (MS. WATT) Could you repeat your question, 15 please? Okay. If each unit, each of the 16 CTs, ran 16 Ο. 2,000 hours a year and had four startups and shutdowns 17 18 per day, then the amount of carbon dioxide emissions would roughly double from the 546,000 on Table 7, 19 20 correct? 21 Α. (MS. WATT) Yes, that's correct. What's also 22 correct is that the emission limits in the permit 23 application would not allow the units to start four 24 times per day and run 2,000 hours per year. Okay. So the emission limits will prohibit 25 Ο. COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

that from happening, you're telling me? 1 2 Α. (MS. WATT) Yes, that's correct. If I could please direct your attention to 3 0. 4 Page 73 of Exhibit SRP-1. I believe this is the air 5 permit application. I'm looking at Table 4.6. 6 Α. (MS. WATT) Okay. Oh, I guess they don't see it. 7 8 Now, this table shows us the thresholds for a Ο. 9 major source, correct? 10 (MS. WATT) Yes, that's correct. Α. 11 Ο. And then the column -- that's the column to 12 the right, correct, the thresholds? 13 (MS. WATT) Yes, that's correct. Α. 14 And then the middle column, that's the 0. potential for the CEP's emissions, correct? 15 16 Α. (MS. WATT) It's the restricted potential to 17 emit for these units, yes. All right. So you'll notice that the PM10, 18 0. 19 NOx, volatile organic compounds, and carbon monoxide are all very close to the threshold, aren't they? 20 21 Α. (MS. WATT) Yes, they are. 22 Ο. If the plant exceeds the threshold after the 23 permit is issued, what happens? Can the County revoke 24 the air permit? (MS. WATT) What would happen, excuse me, if 25 Α. COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

the plant were to exceed these emission limits, it 1 2 would have to cease operation, for starters. It's not 3 allowed to emit past these emission limits. We would 4 then be subject to potential enforcement action by the 5 regulatory agency if the project were to exceed these 6 emission limits. SRP would not operate these units beyond the emission limits outlined in the permit. 7 8 Okay. And the enforcement agency is Pinal Ο. 9 County, right? 10 (MS. WATT) Yes, that's correct. Α. 11 Okay. So I understand, SRP will be Ο. 12 monitoring these emissions and will voluntarily stop 13 running the plant if it were to -- if running it were 14 to exceed them? 15 Α. (MS. WATT) Yes, absolutely. 16 If, say -- just pretend for a second that Ο. 17 didn't happen, and SRP operated the plant above these thresholds. You said they'd have to stop operating the 18 plant and be subject to enforcement. What are the 19 limits of that enforcement? 20 21 Α. (MS. WATT) It would depend on what the violation was. 22 23 The violation is they exceeded the emission Ο. 24 limit. You mean by how much they exceeded it? (MS. WATT) It could be how much, how long, 25 Α. COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

1 various factors.

2	Q. Okay. But does the does the county have
3	the ability to revoke the air permit?
4	A. Not that I'm aware of.
5	MR. STAFFORD: Thank you. Nothing further.
6	MEMBER LITTLE: Mr. Chairman.
7	CHMN. KATZ: Yes.
8	MEMBER LITTLE: Along those lines, and I'm
9	not sure who or if you can answer this question, but
10	those operating restrictions seem pretty severe to me.
11	And I know that SRP told us that they did look at other
12	locations in the state for installing these generators,
13	this generation, and I'm wondering if there were other
14	locations in the state that would have offered less
15	severe operating restrictions.
16	CHMN. KATZ: And this is Member Little, is
17	that correct?
18	MEMBER LITTLE: Yes.
19	MS. WATT: Member Little, if I could clarify
20	what you mean when you're referring to "less severe."
21	I'm not sure I'm understanding your question.
22	MEMBER LITTLE: A thousand 11 percent
23	capacity factor is pretty low.
24	MS. WATT: So is your question asking, if we
25	could locate this project in another area, if we would
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1 be able to obtain a higher capacity factor or operate 2 with higher --

MEMBER LITTLE: Right. Higher capacity 3 4 factor, more starts and stops.

MS. WATT: Not within Pinal County and not 5 6 within Maricopa County. There's potentially --

MEMBER LITTLE: Potentially other places in 7 8 the state?

9 MS. WATT: Potentially other places in the state; however, the only thing -- the only -- if we 10 11 were to request these major source emission threshold 12 restrictions for any other portion -- or, any other area within the state, the only thing that would change 13 14 would be the particulate matter emission limit in which we could emit these -- emit with these units, and that 15 16 would be 250 tons per year versus 70.

17 MEMBER LITTLE: Okay. Thank you.

18 CHMN. KATZ: Any time you're ready, Ms. Post. 19 MS. POST: I will direct my questions also one at a time to try to cut down on confusion. 20

21 CHMN. KATZ: Hold on just a second. 22 MR. ACKEN: I'm sorry, Ms. Post. I need to 23 clarify the record. There was a bunch of discussion 24 about the air quality permit. It actually -- my understanding, what I'm hearing now, is it's not been 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

included as an exhibit by SRP. We are happy to mark it 1 2 as an exhibit. SRP-5 would be the air permit 3 application, but we need to make sure that record is 4 tight. It's apparently not an attachment to SRP-1. CHMN. KATZ: And before Ms. Post begins, it 5 might be appropriate to take a recess, rather than 6 7 cutting you off in five minutes or so. So I'm showing 8 almost 25 minutes to 11:00, and let's be back here by 9 10:50, ready to go. We do stand in recess. 10 (Off the record from 10:32 a.m. to 11 10:49 a.m.) 12 CHMN. KATZ: We can go back on the record and 13 begin with Ms. Post's cross-examinations. 14 MS. POST: I would like to begin with 15 Christina Hallows. Is she going to be up on the 16 screen? 17 CHMN. KATZ: We can pull her up. I believe 18 she's present. There she is. 19 20 CROSS-EXAMINATION BY MS. POST: 21 22 Ο. Yesterday you testified about an open house 23 meeting and that most of the comments were in favor and 24 you talked about seven letters from officials and they were shown on the screen. Do you remember that? 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

1 Α. (MS. HALLOWS) I'm sorry. Comments from an 2 open house is what you're asking me about? 3 Yes. And you talked about that -- you said 0. 4 that most of the comments were in favor, and then we 5 looked at some letters that were on the screen from different officials yesterday. Do you remember that? 6 (MS. HALLOWS) No. I think that's two 7 Α. 8 separate items. The letters of support that I showed 9 in my presentation were just letters of support that we received throughout the process. Comments at the open 10 11 house, I don't believe that I said that they were in 12 favor of the project. 13 Okay. But those letters are included in SRP Ο. 14 Exhibit Number 3, is that correct? 15 (MS. HALLOWS) Yes. Α. 16 Okay. So I want to talk about the comments Ο. 17 at that open house. And we have them up on the screen 18 now and I'd like to have you read them. There's not 19 very many and they're pretty quick. So could you read the first comment there? 20 21 Α. (MS. HALLOWS) All I see on that one is 22 "truce." 23 Do you see the rest of it? 0. 24 (MS. HALLOWS) No, I don't see the rest of Α. 25 it. COASH & COASH, INC. 602-258-1440

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Okay. Can you scroll down or make it 1 Ο. smaller? 2 3 (MS. HALLOWS) Getting better. Α. 4 Ο. Nope. There you go. 5 (MS. HALLOWS) Yes, I can see that one now. Α. 6 It says, "Truce. Please plant trees in the 7 historically significant Town of Randolph." 8 Okay. And the next letter -- or, the next Ο. 9 comment at the open house? 10 (MS. HALLOWS) "Health concerns." Α. 11 Ο. Who is that comment from? 12 Α. (MS. HALLOWS) Constance Jacobson, I believe. 13 Jackson. Ο. 14 Α. (MS. HALLOWS) Jackson. Sorry. 15 Can you read where she's from? Q. 16 Α. (MS. HALLOWS) NAACP. 17 What city? Q. 18 Α. (MS. HALLOWS) Maricopa. 19 Okay. The next letter. Who is this letter Ο. from? 20 21 Α. (MS. HALLOWS) Dion Rushing. And where does he live? 22 Ο. 23 Α. (MS. HALLOWS) He is a resident of Randolph, 24 I believe. Q. Can you read what he wrote? 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

683

1	A. (MS. HALLOWS) Sure. "Why is SRP coming to
2	Randolph when they don't even serve the residents of
3	Randolph? Number 2, what are the benefits of having a
4	plant in Randolph for the residents of Randolph?"
5	Q. And the next letter, who is that from?
6	A. (MS. HALLOWS) This is from Felice Larsen.
7	Q. Do you know where she's from?
8	A. (MS. HALLOWS) I believe she lives in
9	Randolph also. I think she submitted a few comments.
10	Q. Can you read what she wrote?
11	A. (MS. HALLOWS) Sure, I will give it a try.
12	This handwriting I had difficulty with, I will admit.
13	"This project will add to the problem of global
14	warming. This project means SRP is a participant in
15	perpetuating industrial racism. This project is part
16	of encroaching industrial development to the
17	historically significant town of Randolph, Arizona.
18	This project goes against executive orders of the
19	President of the United States in combating structural
20	racism. SRP can no longer" something "plausible
21	denial."
22	Q. Claim.
23	A. (MS. HALLOWS) Oh, claim. Okay. "The new
24	facility is absolutely hideous and archaic."
25	Q. And the next comment, who is it from?

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A. (MS. HALLOWS) Also Felice Larsen.

Q. And can you read that?

1

2

(MS. HALLOWS) Sure. "If SRP follows through 3 Α. 4 with planting trees in Randolph, SRP could state they 5 are combating structural racism as per Biden's executive order to dismantle industrial racism, 6 7 March 2021." Thank you. "Randolph is a historically 8 significant African American town systemically harmed for decades." Whoops. Thank you. 9 10 "There is a book published about the lives of 11 the residents of Randolph, a once required read at

12 Cornell University. This book can be found at the 13 Smithsonian Institute and various universities. There 14 are individuals mentioned in the book living in 15 Randolph today. Randolph is an example of industrial 16 racism."

17 Q. And the next letter.

18 A. (MS. HALLOWS) This is from Dave Nulton.19 Looks like he's a resident in Coolidge.

20 Sorry. Were you about to say something? 21 O. No. Go ahead.

A. (MS. HALLOWS) Okay. His comment says, "One,
 fully support the expansion of the Coolidge Generating
 Station. Two, the site plan appears to be appropriate
 for industrial purposes. Three, no concerns regarding
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environmental issues. Four, public safety issues,

1

2 fire/police/security, have been addressed. And five, 3 reserve for additional comments. 4 And the last letter, who is it from? Ο. This is from Ron Jordan. 5 Α. (MS. HALLOWS) And where does he live? б Q. (MS. HALLOWS) In Randolph. 7 Α. 8 Could you read the letter, please? Ο. 9 Sure. "I'm the owner of acres Α. (MS. HALLOWS) of land." I'm not sure if that's a number right there 10 11 before it. 12 I think it's seven. Ο. 13 (MS. HALLOWS) Oh, okay. "Seven acres of Α. 14 land across from the railroad track from your plant. 15 Already we're exposed to light pollution from Stinger 16 and current plant you own across the track. We're 17 exposed to air quality problems from the asphalt plant 18 north of your plant, constant noise from the Stinger plant on the north side of Randolph, nothing but 19 traffic woes on Highway 87, drastic need for left lane 20 21 turns, potholes from heavy truck traffic" -- can we go 22 up a little bit -- "heavy truck traffic. Kleck Road 23 destroyed by heavy truck traffic, et cetera. The 24 10-year plan for tax distribution doesn't help the community of Randolph at all. The County of Pinal has 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

not done very much in the way of infrastructure, of 1 2 fire hydrants, street improvements, WiFi, Highway 87 3 improvement through Randolph, et cetera, yet the county 4 is to receive millions, everyone but the people that is 5 affected. I'm opposed to this project." 6 Sorry, I'm having -- I have screens in my 7 way. 8 Well, that's the last letter. So of these Ο. 9 letters, only one was in favor, is that correct? 10 (MS. HALLOWS) Yes. Α. 11 And that one didn't live in Randolph? Ο. 12 Α. (MS. HALLOWS) He just noted that he lives in 13 Coolidge. I'm not sure. 14 The rest all said they lived in Randolph --0. 15 except for Maricopa, they lived in Randolph or they 16 were residents or owned property there, is that 17 correct? 18 Α. (MS. HALLOWS) Correct. 19 Now, the letters from officials, were any of Ο. them writing in their individual capacity or in their 20 official capacity? 21 22 Α. (MS. HALLOWS) I believe their official 23 capacity. 24 And did any of them live in Coolidge -- in 0. Randolph? 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

1 Α. (MS. HALLOWS) I don't know. 2 Ο. Okay. Now, I want to look at -- or, turn to 3 SRP Exhibit Number 4, which is the spreadsheet of 4 contacts that were made in your public outreach 5 campaign. MR. ACKEN: And just to clarify, that is a 6 7 supplement. For the record, that is a supplement of comments after the CEC was filed. There's a full set 8 in the CEC itself. 9 10 BY MS. POST: 11 Ο. Do you have that in front of you? 12 Α. (MS. HALLOWS) No. 13 Okay. It's up on the screen here. Ο. 14 Α. (MS. HALLOWS) Yes, I've got it. 15 Okay. Now you have it. All right. Q. The 16 spreadsheet here shows the first call being made on 17 December 14, is that correct? (MS. HALLOWS) No. My first calls were in 18 Α. 19 Again, to what Mr. Acken said, this was a August. supplement to the full list that started at the 20 beginning of outreach. 21 22 Ο. Okay. Of this list --23 Α. (MS. HALLOWS) Okay. -- how many were outgoing e-mails? 24 0. 25 (MS. HALLOWS) Well, we would need to count Α. COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

688

here. Let's see. So far I see one, two, three, four, 1 2 five, six, seven on that page, if I counted correctly. 3 All right. Hold on. Stop right there. Eight, nine. 4 Okay. Scroll up. 10, 11, 12, 13, 14, 15, 16, 17, 18, 5 19. I think I'm at 19. I get 19 as well, so we agree. 6 Q. Α. (MS. HALLOWS) Great. 7 8 And how many of those e-mails were responded 0. 9 to? 10 (MS. HALLOWS) Most of these -- can we go Α. 11 down to the beginning of this one? Sorry. 12 Sorry. Maybe I wasn't clear. That's okay. 13 Can we go all the way down to the bottom, yes, so I can 14 see that page so I can refresh my memory. 15 So these outgoing e-mails were to share the 16 hearing details, so these were not replied to. 17 Q. Actually, two were replied to on December 18th and January 10th. Can you find those? 18 (MS. HALLOWS) December 18th. Stop right 19 Α. there. December 18th there was a text -- are you 20 21 asking about the text message on December 18th? 22 Ο. No. I believe it was an e-mail from Felice 23 Larsen. 24 (MS. HALLOWS) Maybe perhaps the 17th. I Α. know that Felice and I had a few e-mails back and 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

forth, you're right. 1 2 Right. And Felice is the same Felice that Ο. 3 expressed her opposition to the plant previously? 4 Α. (MS. HALLOWS) Correct. 5 Ο. Okay. How many of these were outgoing 6 telephone messages? 7 (MS. HALLOWS) All right. Can we go down to Α. 8 the bottom? Outgoing phone calls. One, two, three, 9 four, five. Scroll up, please. Stop. Six, seven, eight, nine, 10, 11, 12, 13, 14, 15. Scroll up. Up. 10 11 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29. 12 Shall we go with 29? 13 I got 27, but that's all right. We're close Ο. 14 enough. 15 Α. (MS. HALLOWS) Okay. 16 Ο. And how many of these calls were returned? 17 Α. (MS. HALLOWS) Can we go back down? 18 Do you want to know how many were returned or were successful? 19 20 Q. Where they called you back. Maybe I could 21 just tell you. I've again got two from Felice Larsen. 22 And you said you had several conversations with her? 23 (MS. HALLOWS) No, we never were able to Α. 24 connect over the phone, unfortunately, but we had a few e-mail exchanges. 25

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1 Ο. Okay. And Felice remains opposed to the 2 project? 3 (MS. HALLOWS) Yes. Α. 4 And one was a text from Jeff Jordan asking Ο. 5 you to please stop contacting him? б Α. (MS. HALLOWS) Yes. One was from Mary Turner when you announced 7 Ο. 8 the tour in January. And Mary said if she went on the 9 tour, would that mean she supported the plant, and you 10 assured her it did not mean that, correct? 11 Α. (MS. HALLOWS) Correct. 12 And then the last one was from Robert Hellman 0. 13 asking about whether any property had to be condemned, 14 correct? 15 Α. (MS. HALLOWS) Yes. Q. 16 None of these calls supported the plant, did 17 they? 18 Α. (MS. HALLOWS) Correct. And at least three of these people, Felice, 19 Ο. 20 Jeff, and Mary, were from Randolph? 21 Α. (MS. HALLOWS) Correct. 22 Ο. Now, you've already testified that the 23 decision to move forward with the expansion was 24 announced in August of 2021, correct? 25 (MS. HALLOWS) Correct. Α. COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

691

Q. And that the Board approved it in September?
 A. (MS. HALLOWS) Correct.

3 Q. The public meeting in Randolph was in4 October?

A. (MS. HALLOWS) Correct.

Q. So you testified you were letting them know
about the project and about how to participate in the
public process, is that correct?

9 A. (MS. HALLOWS) Correct.

5

Q. So you weren't asking them about their opinion on whether the plant should be built, but you were just notifying them that the decision had been made?

A. (MS. HALLOWS) And listened and had healthy discussions at that community event as well. In fact, that was where a lot of the discussion was around some of the needs of Randolph.

Q. Okay. But the plant itself had already beenapproved by the Board?

20 A. (MS. HALLOWS) Yes.

21 Q. What city do you live in?

A. Scottsdale.

Q. Now, you testified, different ones of you
 yesterday, regarding these "offers," and I'm putting
 that in quotes, made to the Randolph residents, street
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1 cleaning, tree trimming, et cetera. When were these 2 offers made -- first made? When were these offers 3 first made?

A. (MS. HALLOWS) These started as discussions
in the very beginning of finding out what the needs
were, and then when they were first offered probably
would have been right before this hearing.

Q. Before this hearing?

8

9 A. (MS. HALLOWS) Yes.

Q. Okay. You offered to -- "you," being SRP, offered also to assist with applying for the historic designation. Do you know when that suggestion or offer was made?

14 A. (MS. HALLOWS) That was made right before 15 this hearing as well.

16 Q. Okay. Now I'm going to move to Anne Rickard 17 with some questions.

In your presentation you went through Exhibit
Number 2 with your PowerPoints about the community
partnership charter; is that correct?

21 A. (MS. RICKARD) Yes.

Q. In that, on Page 155 of the slide show, of the 240-page slide show, the first point is to provide crucial funding to vital community organizations. And you testified about that, correct?

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1 Α. (MS. RICKARD) Correct. 2 But you also testified that you have not Ο. provided any funding to Randolph or the residents or 3 4 the community of Randolph. That's correct, right? Α. (MS. RICKARD) Not specifically directly to 5 Randolph residents, but what is true is the funding --6 part of the funding that we do provide is through Pinal 7 8 County organizations. Randolph residents are eligible 9 for those funds. 10 Correct. So they're eligible for funds that Ο. 11 anybody in Pinal County is eligible for? 12 Α. (MS. RICKARD) Yes. Yes. 13 So you have no written engagement plan with Ο. 14 Pinal County -- with Randolph? 15 Α. (MS. RICKARD) Can you clarify? Written by whom to whom? 16 17 You mentioned you were very transparent and Q. 18 that you had quarterly reports that were reported on -you know, given to the Board or whomever it is that 19 supervises you about your plans. But you do not have 20 21 such a written plan for Randolph at this moment, is 22 that correct? 23 (MS. RICKARD) We do not have a formal Α. 24 written plan. What city do you live in? 25 0. COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

(MS. RICKARD) Scottsdale. 1 Α. 2 Q. Okay. Now I'd like to move to Mr. Petry. Okay. First thing I want to talk about is 3 4 the noise issue. Now, you directed us this morning to 5 the Exhibit I and Page 16, is that correct? (MR. PETRY) Yes. б Α. And you had us look at that chart. Well, I'd 7 0. 8 like to back up. And hopefully the tech crew can put up, from that same Exhibit I, Page 2, I-2. Do we have 9 that coming up, or do you have it in front of you and 10 11 you could read from it? Α. (MR. PETRY) I do have it in front of me. 12 13 Okay. So on I-2, the second paragraph from Ο. 14 the bottom that starts with "Predicted 15 construction-generated noise levels, " could you read 16 that? 17 Α. (MR. PETRY) Certainly. "Predicted 18 construction-generated noise levels at nearby noise 19 sensitive areas were calculated using the Federal Highway Administration's roadway construction noise 20 21 model." 22 Would you like me to read --23 The rest of the paragraph, please. Ο. 24 (MR. PETRY) "Estimates of noise from the Α. construction of the project are based on a roster of 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

the maximum amount of construction equipment used on a given day. Estimated noise levels from construction activities at the closest residential receptor from the center of the construction site were estimated to be approximately 56.8 dBA Leq and 61.8 dBA Ldn.
Construction noise impacts are further discussed in the attached noise report, Exhibit I-1."

Q. Now, you testified yesterday more than once
9 that 60 was the conversational level, is that correct?
10 A. (MR. PETRY) Yes.

11 Q. All right. Now, I would also like you to 12 read from Page I-3, the third paragraph that starts 13 with "The analysis shows that."

14 Α. (MR. PETRY) "The analysis shows that the 15 sound levels emitted by the proposed project will be less than the 55 dBA Ldn at all evaluated noise 16 17 receptors with exception of the closest sensitive receptor. The projected Ldn value at the closest 18 19 sensitive receptor, residences south of the project, is estimated to be 59.7 dBA when no background noise is 20 21 included and 63.1 dBA when background noise is added, 22 which is above the recommended 24-hour average day and 23 night EPA recommended value of 59 dBA Ldn."

Q. So you have been testifying that the increase is small, but this actually says that at certain times, COASH & COASH, INC. www.coashandcoash.com 602-258-1440 Phoenix, AZ

with the construction and operation, that in the 1 2 residences south of the plant it will be above the 3 24-hour average day and night EPA recommended levels, 4 correct?

5 (MR. PETRY) Yes, and that refers to the Α. residences, those agriculturally affiliated residences 6 7 that we saw on the route tour located to the south and 8 slightly east of the project area.

9 Ο. And how many other houses are south of the project on Kleck Road? 10

11 Α. (MR. PETRY) Directly south of the project? 12 Correct. Q.

13 (MR. PETRY) None. Α.

14 Southwest of the project on Kleck Road? Q.

(MR. PETRY) Well, I know of at least two 15 Α. 16 that we've heard from during the course of this 17 hearing, and I think they're -- without looking at a map specifically, I think there are maybe five to six 18 further west of the railroad tracks and transmission 19 infrastructure on the north side of Kleck Road. 20

21 And this applies to both construction noise Ο. 22 and operation noise, correct?

23 (MR. PETRY) Can you clarify what you're Α. 24 referring to by "this"?

25 When the ambient background noise and the 0. COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

additional noise is added, it applies to both during 1 2 construction and during operation?

(MR. PETRY) So are you asking -- I want to 3 Α. make sure I answer the question accurately here. Are 4 you asking if we modeled construction noise on top of 5 the operation noise? 6

No, I'm not asking you what you modeled at 7 Ο. 8 all. I'm asking you about what's written here on this 9 page.

10 (MR. PETRY) Okay. I'm sorry. Might you ask Α. 11 that question one more time for me?

12 That the closest sensitive receptor is Ο. 13 estimated to be 59.7 when no background noise is 14 included and 63.1 when background noise is included, so 15 that's above the EPA average. And that's during both 16 construction time and operational time, is that 17 correct?

18 Α. (MR. PETRY) Yes, I believe that is correct. 19 I think it's also worth noting, if we may 20 step back --

21 Excuse me. I don't have a question in front Ο. 22 of you.

23 CHMN. KATZ: And you'll get a chance, if your 24 counsel chooses to, to have redirect.

25 But go ahead, Ms. Post.

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1 BY MS. POST:

2	Q. Now, when you talk about that these changes
3	are barely perceptible, the increase in noise is barely
4	perceptible, as one of the Committee Members asked,
5	these are all averages, correct?
6	A. (MR. PETRY) That is correct, yes.
7	Q. And "barely" means some people will still be
8	able to perceive it, is that correct?
9	A. (MR. PETRY) That is correct, yes.
10	Q. You also testified a couple of times
11	yesterday you said there will be no permanent noise
12	increase. But there will be a noise increase during
13	construction and during some forms of operation, would
14	that be correct?
15	A. (MR. PETRY) There will be no permanent
16	construction noise increase, but there will be a
17	permanent operational increase in noise that relates to
18	that .5 to 2.6 decibel increase that's noted as barely
19	perceptible.
20	Q. And there's no permanent construction noise
21	because construction is not permanent, right?
22	A. (MR. PETRY) Correct.
23	Q. But during the time of the construction,
24	which is approximately
25	Three years or two years?
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1 Α. (MR. PETRY) Three. 2 -- three years, there will be increased Q. 3 noise? 4 Α. (MR. PETRY) Yes. 5 What city do you live in? Ο. Phoenix. б Α. 7 You testified yesterday about sending 11 Ο. letters to the different tribes. Do you recall that? 8 9 (MR. PETRY) Yes. SRP sent 11 letters to the Α. tribal contacts with two -- with 11 tribes that have 10 11 identified affiliation --12 I just asked you if you remembered it. Q. 13 Α. (MR. PETRY) Yes, I do. 14 Thank you. Q. 15 Α. (MR. PETRY) You're welcome. 16 You said that you got responses from Hopi, Ο. 17 Pascua Yaqui, and White Mountain Apache, is that 18 correct? 19 Α. (MR. PETRY) Yes. 20 Q. You did not get any responses from any of the 21 others? 22 Α. (MR. PETRY) Not to my knowledge. 23 And the two closest tribes are Ak-Chin and 0. 24 Gila River, would that be correct? 25 (MR. PETRY) I believe so. I would have to Α. COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

1 check to answer that with certainty.

2	Q. You also testified about the historical
3	designation, and you have testified about that again
4	this morning. So we asked about that in a data
5	request, and the answer that we got gave a list of
б	resources that SRP looked at. I would like to read
7	those resources and ask you if these are things you
8	looked at, okay?
9	A. (MR. PETRY) Okay.
10	Q. Celebrating Black History Month; Race,
11	Diversity, and Ethnicity in Randolph; City of Coolidge
12	2014 Plan 2025; Cotton Jobs Gone, Black Migrants' Town
13	Limps On; Not All Okies are White; Community Profile,
14	Pinal County, Arizona; Pinal County Comprehensive Plan;
15	A First Look at Demographic Changes in Arizona; and A
16	Dying Institution. Are these things that you looked
17	at?
10	MP DETRY) I don't boliowo I lookod at all

(MR. PETRY) I don't believe I looked at all 18 Α. 19 of those things or that my team looked at all of those 20 things as part of our historical and archaeological resources review for the project. We did look at some 21 22 of those things, some of those publications or 23 articles, but I don't believe all of those were part of 24 SWCA's analysis of cultural and archaeological 25 resources.

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But when you looked at those things, none of 1 Ο. 2 that gave you a clue that Randolph might be a historic city or have cultural significance that needed to be 3 protected? 4

Α. (MR. PETRY) Oh, that's false. We know that 5 Randolph is an identified historic community, an 6 7 African American historic community with an important 8 presence, an important part of Arizona's history, which 9 is -- as is typical for cultural resources reviews for projects like this, we will survey the project area for 10 11 archaeological or historic resources. But then we'll 12 do a secondary search that extends out further to 13 identify any previously identified cultural or historic 14 resources.

15 And the community of Randolph itself has not 16 been the subject of such survey, and as such has not 17 been identified as an historic site, district, town: Site, et cetera. But we do know the history of 18 19 Randolph, absolutely.

20 One second. Now I want to move to Kenda Q. 21 Pollio. When we ask --

Excuse me. Wait. I have one more question 22 23 for you, Mr. Petry. Do you have in front of you 24 Appendix C to the original application, the CEC application, Appendix C? 25

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1 (MR. PETRY) Exhibit C? Α. 2 Ο. Yeah, and it's Appendix -- no, not Exhibit C. It's Exhibit 1, SRP Exhibit 1, Appendix C to the 3 4 application. 5 (MR. PETRY) I'm not sure I'm clear on what Α. you're referring to. I do have Exhibit 1 and what's 6 7 identified as Exhibit C within that application, Areas 8 of Biological Wealth. 9 Correct. Can you look at C-15? Ο. 10 (MR. PETRY) Certainly. Α. 11 MR. ACKEN: And for the record, that is Exhibit C to SRP Exhibit 1. 12 13 BY MS. POST: 14 Are you at Page 15? Q. 15 Α. (MR. PETRY) I am. And the third and fourth sentences down from 16 Ο. 17 the top talk about increased light pollution would impact bat activity patterns, is that correct? 18 19 (MR. PETRY) Yes, that is correct. I think Α. the impact would be potential drawing of bats to the 20 21 area because of insects that would be present around 22 lighting. 23 All right. So now I'm going to move to you, Ο. 24 Ms. Pollio. Did you listen to the list of articles that I just read saying that SRP had referenced these 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

in order to look at the historic designation of 1 2 Randolph? 3 (MS. POLLIO) Yes. Α. 4 And did you look at these or someone on your Ο. 5 team? (MS. POLLIO) Yes. 6 Α. 7 And what city do you live in? Ο. 8 Α. (MS. POLLIO) Encinitas. 9 California? Ο. 10 California, yes. Α. 11 MS. POST: I have no further questions. 12 CHMN. KATZ: Okay. Does the Commission have 13 any questions, Ms. Ust. Is it Ust or Ust? Let me 14 pronounce it correctly. 15 MS. UST: Ust. 16 CHMN. KATZ: Ust. Any questions? 17 MS. UST: Just a couple. I believe these are for Ms. Watt. 18 19 20 CROSS-EXAMINATION 21 BY MS. UST: 22 Ο. First off, when does SRP expect the Pinal 23 County Air Quality Control District to issue the 24 operating permit for CEP? 25 (MS. WATT) At this time, we ancipitate that Α. COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

the draft permit would be issued for public comment 1 2 sometime in the March or early April time frame. Okay. And if the operating permit is not 3 Ο. approved, how will this affect the project timeline? 4 Α. (MS. WATT) If the project -- if the permit 5 is not approved by Pinal County? 6 Yes. 7 Ο. 8 Α. (MS. WATT) Meaning if Pinal County does not issue the permit, is what you're asking? 9 10 Ο. Correct. 11 Α. (MS. WATT) This project -- excuse me. Ιf 12 Pinal County did not issue this permit, the project 13 would not be allowed to be constructed or operated. 14 And I guess one final question. If the Ο. 15 permit were not issued, is there an appeals process or 16 any other mechanism that SRP would take, or would it 17 have to apply for a new permit? (MS. WATT) I'm not entirely sure. 18 Α. What I 19 can say is if this permit were issued and appealed, then SRP would -- or, I guess it would -- if the permit 20 21 were issued by the Pinal County Air Quality Control 22 District and then appealed, it would work its way 23 through the appeals process in that -- under regulatory 24 guidelines for air permitting appeals. 25 MS. UST: Okay. No further questions. COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

1 CHMN. KATZ: Thank you. 2 Any redirect? 3 MR. ACKEN: Thank you, Mr. Chairman. Just a 4 few. 5 REDIRECT EXAMINATION 6 BY MR. ACKEN: 7 8 Ms. Pollio, you were asked your current Ο. 9 residence. Have you previously lived in Arizona? 10 (MS. POLLIO) Yes. Α. 11 And where did you live in Arizona? Ο. 12 Α. (MS. POLLIO) I lived in Tempe, Arizona, 13 close to Rural and Guadalupe. 14 And is that in close proximity to any 0. 15 existing power plants? (MS. POLLIO) Yes. It's about a mile from 16 Α. 17 Kyrene Generating Station. 18 0. And do you know whether the Kyrene Generating 19 Station was expanded by SRP? 20 (MS. POLLIO) Yes, it was. Α. 21 Mr. Petry, I want to go back to that line of Ο. 22 questions you got there at the end. Ms. Post -- I 23 think you had more to say. Ms. Post didn't want you to 24 address it with the Committee, but I would like you to. And this relates to Exhibit I, I believe, N2 or N3, 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

that closest receptor location. Do you recall that 1 2 line of inquiry?

3 (MR. PETRY) I do, yes. Α.

4 What did you want to share with the Ο. 5 Committee?

(MR. PETRY) What I wanted to share is that 6 Α. 7 the existing conditions at that location are already 8 above that 55 A-weighted decibel amount that was described previously. And, again, the project itself 9 10 would add to the noise environment within that range of 11 .5 to 2.6 decibels, barely perceptible. And at that 12 location in particular, that's where that 2.6 decibel 13 increase would be experienced. But I thought it 14 important to note that that location is already above that 55-decibel amount. 15

And that closest receptor location, I believe 16 Ο. 17 you testified that it was the agricultural, farming property that's to the south, southeast of the project, 18 19 is that correct?

Α. (MR. PETRY) That is correct. And I could 20 21 remind the Committee, when we were on the site tour, we 22 had one of our stops slightly north of that location, 23 and we looked south onto that location, and you could 24 see some of the residences there -- the residences there, as well as a lot of the farming implements and 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

affiliated farming structures that are part of that
 residential development as well.

Q. And what is the distance from that house to the new turbines associated with this project, approximately?

6 A. (MR. PETRY) I believe the distance from that 7 house to the new turbines is about a tenth of a mile.

8 Q. And do you recall what the distance from the 9 houses on Kleck Road within the community of Randolph 10 will be to the new turbines?

11 A. (MR. PETRY) From the new turbines, I don't 12 remember that distance specifically. I do know that, 13 again, the turbines are located on the far eastern side 14 of the project area and are much closer to those 15 agriculturally affiliated residents I described than 16 they are to the community of Randolph.

Q. So would you say that the residents along Kleck Road are equivalent to the closest receptor for noise impact analysis?

20 A. (MR. PETRY) The residences along Vail Road 21 would be the closest sensitive receptor, yes.

Q. But my question, I'm sorry, was on the KleckRoad residents, are they the closest receptor?

A. (MR. PETRY) No. No, they aren't.

25 Q. Thank you.

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1 Ms. Watt, I want to follow up with you on the 2 question regarding whether the 70-ton-per-year PM10 3 limit is the maximum limit that SRP could have for this 4 project. Could you address that question again, 5 please? (MS. WATT) Yes. So SRP is requesting to 6 Α. restrict emissions to below that 70-ton threshold in 7 8 this permitting action. If SRP were seeking to emit 9 beyond that 70-ton threshold, we would be required to 10 qo -- undergo nonattainment new source review 11 permitting, just a permitting program, and seek a 12 higher limit. 13 So you're not precluded -- you would not be Ο. 14 precluded from seeking higher permit emission limits 15 for PM10? 16 Α. (MS. WATT) That's correct. 17 You were asked a question about permit Q. revocation and the result of noncompliance. 18 Do you 19 recall that question? 20 (MS. WATT) Yes, I do. Α. 21 Do you have any clarifications to that Ο. 22 response? 23 Α. (MS. WATT) Yes. So if this -- if SRP were 24 to continue to exceed permit limits -- these limits, it's possible that the Pinal County Air Quality Control 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

District would revoke the permit; however, SRP would 1 2 cease operation in this instance if emission limits 3 were to be exceeded.

4 And to your knowledge, has SRP ever violated Ο. 5 a permit so much and to the extent that a permitting authority revoked the permit? 6

7 (MS. WATT) No, not in -- not in SRP's Α. 8 history, no.

9 Ms. Little raised a question regarding the Ο. capacity factor and concern about the limitation on the 10 11 emission given the emission limits. Can you discuss 12 that again? I think there's some misunderstanding about what that one example is, and I'd like you to see 13 14 if you can take another swing at explaining that example in the context of what SRP is requesting. 15

16 Α. (MS. WATT) Sure. So in its permit 17 application, and to illustrate the units' potential to emit, the -- one example is given, and the example we 18 19 talked about numerous times, where the units start twice per day, operate approximately a thousand hours, 20 21 which translates to about an 11 percent capacity 22 factor. But that's just one of many potential 23 operating scenarios in which these units could operate. 24 And so SRP is requesting these emission limits to allow these units to -- for SRP to use these 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

710

units to meet its reliability needs, all while 1 2 maintaining operational flexibility. So, for example, 3 if there were a lesser number of starts, it would allow for more potential operating hours and a higher 4 5 capacity factor, but all while remaining below the emission limits prescribed in the air permit. 6 7 And I understand you're in permitting, not Ο. 8 operations, but do you have a sense from SRP's 9 operational folks whether the emission limits that you are pursuing in this permit application will be 10 11 sufficient to give SRP the operational flexibility it 12 needs to meet the needs and objectives of this project? 13 (MS. WATT) Yes, that's true. Α. 14 Ms. Rickard, there was a question, I believe Ο. 15 it was directed to Mr. Petry, asking whether SRP 16 intentionally turned off the plants yesterday for the 17 plant tour. And he was not familiar, couldn't answer that question. Can you address that? 18 19 Α. (MS. RICKARD) Yes. The answer is: No, we did not. 20 21 Any idea why the plants weren't operating? Ο. (MS. RICKARD) It was a beautiful February 22 Α. 23 day. There was no need. 24 And it's your understanding -- again, you're Ο. not in operations, but you've heard from the prior 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

711

1 panelists that it's your understanding that's to be 2 expected?

3 A. (MS. RICKARD) To be expected.

Q. You were asked about -- from Ms. Post about a written engagement plan. Wouldn't that be something that you would consider developing as part of the community working group in consultation with the Randolph community?

9 A. (MS. RICKARD) Exactly. Precisely it is. 10 That is the purpose of a community working group.

11 We did hear from residents through our conversations that myself and Ms. Hallows and others 12 13 have had. That is our preliminary start to these 14 conversations and solutions for the community. We 15 would not want to be prescriptive in determining, here is the written plan. That is exactly the opposite of 16 how SRP operates. We're here to listen, to engage, 17 18 constantly and organically grow what the support looks 19 This is a long-term relationship we intend and like. are committed to have with the residents of Randolph. 20 21 Ο. Thank you. And one final question for you, 22 Ms. Rickard. There were questions directed to

23 Mr. Petry concerning the lighting at the facility. Do

24 you recall those questions?

25 A. (MS. RICKARD) I do.

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And Mr. Petry testified that the lighting 1 Ο. 2 complies with Coolidge's dark sky ordinance. Do you 3 recall that?

4 Α. (MS. RICKARD) Yes.

Notwithstanding compliance with that dark sky 5 Ο. ordinance, is SRP willing to meet with the community as 6 part of that community working group and evaluate 7 8 additional measures to mitigate effects from the lights 9 associated with the facility consistent with safety 10 considerations?

11 Α. (MS. RICKARD) We absolutely are. To repeat, 12 yes, we would maintain safety and follow any 13 regulations regarding that, but we absolutely have 14 flexibility to work with the residents of Randolph, 15 again, through the community working group, for that 16 mitigation.

17 MR. ACKEN: Thank you. No further questions for this panel. 18

19 CHMN. KATZ: Before we go on, I just had one -- oh, go ahead, Ms. Hamway. Yes, Member Hamway. 20 21 MEMBER HAMWAY: Ms. Rickard, you said that 22 Randolph was on a nonprofit list, did I hear that 23 correctly, a list of nonprofits? 24 MS. RICKARD: Pinal County United Way and

other organizations are on that list, of which Randolph 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

1 residents are eligible to receive.

2	MEMBER HAMWAY: Okay. So since they don't
3	have any legal structure, they're not an incorporated
4	anything, how would they receive funds?
5	MS. RICKARD: So that's where SRP plans to
б	come in and help bridge that gap of advising and
7	letting them know, here are funds that are available,
8	whether it's through United Way funding, through
9	Coolidge schools, there's several out there, that we
10	want to help be that bridge and through that community
11	working group identify what they may not necessarily be
12	aware of.
13	MEMBER HAMWAY: Okay. And one other quick
14	question for Mr. Petry. What kind of assurances or
15	advantages come with being considered a significantly

MR. PETRY: So with some of those historic designations you can get protections on what can and can't be done within the community. It may protect some of the identified historical architecture, some of the historic buildings that are identified through survey, and can limit what sorts of redevelopment or development can be done on those properties.

24 MEMBER HAMWAY: Would you see that would be 25 an advantage for them?

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historical designation?

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1 MR. PETRY: I think that's depending on the 2 perspective of the individuals within the community of Randolph. From my perspective, I think that would be 3 4 advantageous to the preservation of Randolph's history, 5 absolutely. I can't speak for each community member there, nor can I speak for the community as a whole. 6 But from my perspective, I think that would be 7 8 advantageous to the community, absolutely. 9 MEMBER HAMWAY: Is there any known leadership? Like I think we've talked about a quy who 10 11 considers himself the mayor of Randolph. Have we been 12 in contact with the perceived leadership of Randolph? 13 MS. RICKARD: We have. Ms. Hallows can also 14 speak to that relationship. 15 MS. HALLOWS: Yes, I can jump in. And that 16 was really one of the obstacles that we had when we 17 started our outreach, and we did get a list of people who were assumed to be the leadership. The gentleman 18 19 that you're referencing who is the unofficial mayor, I did attempt to reach out to him, but then through other 20 discussions learned that he was maybe dealing with a 21 22 private family matter. So I never actually got to make contact with him, unfortunately. 23

24 MEMBER HAMWAY: All right. Thank you. 25 CHMN. KATZ: Any other questions? COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

715
MEMBER LITTLE: Mr. Chairman. 1 2 CHMN. KATZ: Is that Member Little? MEMBER LITTLE: Yes, it is. 3 CHMN. KATZ: Go ahead, and then --4 MEMBER LITTLE: I have several questions that 5 are kind of consistent with some that have been asked 6 7 already. But it's my understanding that, for various 8 reasons, SRP does not have any kind of a firm or 9 binding commitment to Randolph. I have heard all of the good things that SRP is talking about doing in 10 11 working with the Randolph residents, but is there 12 anything in place that commits SRP to do that? 13 MS. HALLOWS: If I can just jump in. Again, 14 that was another obstacle, is trying to make sure that 15 the things that we are committing to do were things 16 that the community as a whole wanted and needed. And 17 so by putting together the working group, it was a more 18 formal way to get a pulse on the community and make 19 sure that we weren't doing things that were not widely wanted, I guess I should say. So you're right, we had 20 21 to lay the groundwork and build those relationships 22 right now, but you're right, there isn't anything 23 formal at this moment. You're right. 24 MEMBER LITTLE: So the working group that you refer to, is that in place? Are there members 25

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1 currently?

MS. HALLOWS: No. I would assume many of the members of the community that I have gotten the pleasure to have relationships with over these last six months would probably be interested. I definitely think that they would be great members. But no, there are no solidified members of the group yet.

8 MS. RICKARD: But to speak to, if I could 9 also add, speak to SRP's history and proven success in 10 having a working group established, we have proven that 11 we know it works. We intend to follow that process 12 here too.

MEMBER LITTLE: Thank you. And I'm going to ask, we have seen the written documentation for the formal comments that have been made by residents of Randolph. I'm wondering -- you know, quite often people will have opinions, but won't take the time to send an e-mail or write a commitment -- or, an opinion.

19 During the gathering that you had, the community gathering that you had, would those of you 20 21 who were present at that gathering tell me whether or 22 not you heard some -- any comments about people saying, 23 oh, yeah, when that generator plant starts up, I can 24 really hear it, or when it runs at night it bothers me? Anything having to do with the noise levels with 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

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1 respect to the existing plant that you just heard in 2 verbal comment? 3 MS. RICKARD: I personally did not hear 4 that -- those types of comments. My conversations were 5 directly related to ideas of how we can help this 6 community. MS. HALLOWS: And I also did not hear 7 8 concerns about noise in those conversations. 9 CHMN. KATZ: And that was Ms. Hallows? MS. HALLOWS: Yes. Sorry. 10 11 CHMN. KATZ: Thank you. 12 MEMBER LITTLE: And what about the lights at 13 night, similar question? 14 MS. RICKARD: I did not. MS. HALLOWS: The first time I heard about a 15 16 light concern was in one of the written comments that I 17 read to you today. 18 MEMBER LITTLE: Thank you. That's all I 19 have. 20 Thank you, Mr. Chairman. 21 MEMBER GENTLES: Mr. Chairman, this is Member 22 Gentles. 23 CHMN. KATZ: Yes, sir. I'll let you go, and then next will be John Riggins. But go ahead, 24 25 Mr. Gentles. COASH & COASH, INC. 602-258-1440

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1 MEMBER GENTLES: Oh, my apologies.

2 CHMN. KATZ: No, go ahead. Go ahead. It's 3 fine.

4 MEMBER GENTLES: I just had a couple of brief 5 questions. In terms of the unofficial leadership in the community, you said that you're having a difficult 6 time identifying them. Have you had an opportunity to 7 8 speak with the Pima County NAACP who was there and gave 9 public testimony on the first night? They had at least two representatives there. Has SRP reached out and 10 11 spoken to them about the Randolph community?

12 MS. HALLOWS: I have not.

13 MS. RICKARD: I have not.

MEMBER GENTLES: Okay. So in the public outreach you're looking -- because there are no formal structures, you have not really identified who would be part of these working groups at this point other than potentially the members of the community? I think that's what I heard you say.

20 MS. RICKARD: That's certainly where we're 21 starting. We are open to --

22 MEMBER GENTLES: Okay. Okay. Fantastic. 23 Yeah. So in cases like this, when there aren't any 24 formal structures, there are organizations that -- you 25 know, and I don't need to tell you guys this, you know COASH & COASH, INC. www.coashandcoash.com 602-258-1440 Phoenix, AZ

1 this -- the advocacy groups that are there to support 2 and help, and that would be a natural starting point to 3 start forming these groups. And, quite frankly, as you 4 really intensify your outreach relationships with 5 Randolph to really understand what they need, organizations like the Pima County NAACP and others 6 7 would be more than willing to sit down and help you 8 identify those. 9 So that's all I had, Mr. Chairman. MS. RICKARD: Thank you. We're absolutely 10 11 open and plan to do that. 12 CHMN. KATZ: Thank you, Ms. Rickard. 13 And Mr. Riggins. 14 MEMBER RIGGINS: Thank you, Mr. Chairman. 15 Mr. Petry, yesterday during the tour when we 16 were on the -- and I don't remember exactly what stop 17 it was, but it was on the eastern portion of the existing generating station, and I'd asked a question 18 19 about the groundwater wells that were located just to the north of where we were standing. Are those wells 20 21 going to be utilized for the recovery of the long-term 22 storage credits for the Central Arizona Project water? 23 MR. PETRY: Yes, those wells are wells that 24 are permitted for recovery of the long-term stored 25 water.

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1MEMBER RIGGINS:So the stored water is going2to be recovered?

3 MR. PETRY: Yes.

4 MEMBER RIGGINS: On site?

5 MR. PETRY: Yes.

MEMBER RIGGINS: Okay. And then I had 6 7 another question for Ms. Watt. Mr. Stafford had briefly asked about a Health Impact Analysis, if any 8 9 such analysis was conducted, and I believe the answer was no. My question is: Is there any sort of similar 10 11 -- I'm sorry -- any sort of similar comprehensive 12 health impact analysis, I guess, on par with what the 13 American Lung Association had stated and conducted? Is 14 there anything of that nature that is -- that is similar to what Mr. Stafford had been asking about? 15

16 MS. WATT: I would just point to the ambient 17 air quality assessment or the modeling that was done in 18 support of this permitting project. That is what is 19 conducted through the permitting process. And the EPA sets the National Ambient Air Quality Standards that 20 21 this assessment is compared against, and those 22 standards are set to be protective of public health and welfare and the environment. 23

MEMBER RIGGINS: Okay. Thank you.
 CHMN. KATZ: Any other Committee Member?
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(No response.)

2 CHMN. KATZ: There's one matter, then, that 3 I'd like to run by all of you to figure out exactly 4 what we want to do with this. I just need to pull 5 things back up.

Yesterday -- I'm just looking at my phone 6 7 because I have an e-mail. And we had a -- Tod Brewer, 8 the paralegal who makes all of this possible for us, 9 received a call from a Diane Brown, the executive 10 director of Arizona Public Interest Research Group 11 Education Fund, and she was looking at the procedural 12 order and says we could have public comment beginning 13 9:00 every morning.

And I had Tod tell her that the only way that we would have additional public comment, other than Monday 5:30 session, was if we had way too many people to cover in a reasonable amount of time on that occasion, and then we would invite further comments of those people who had responded on Monday.

20 And we did have only -- everybody that wanted to present that was either online or in person 21 22 presented, include the representative from the Phoenix 23 City Council. And we did have a call -- or, Tod had 24 contact from either Kevin Cavanaugh, the Pinal County Supervisor, or someone on his staff indicating that he 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

wanted to speak, but he ended up being too ill to do 1 2 that yesterday, but appeared here in person this 3 morning.

4 And because of that, Ms. Brown wrote to Tod, and I'll read to you what she said. I have to find it 5 6 again. Just give me a second. I'm just trying to locate the right communication from Tod. 7

8 Okay. She says, "Tod, I realize that you are 9 the go-between on this one and I appreciate your help. I did hear that Supervisor Cavanaugh was allowed to 10 11 provide public comment this morning. I fail to 12 understand why public comment would be allowed for one 13 individual and not others. Minimally, it seems another 14 opportunity would be allowed for those of us that have also asked to speak. Please" -- I can't read the next 15 word -- "if this will be arranged for either tomorrow 16 17 or Monday at 9:00 a.m."

And I have mixed feelings, because she made 18 19 no indication in writing or in person to speak on Monday or Tuesday, and the first contact was yesterday. 20 21 We could allow her to speak, but what I don't want to do is open up the door to 10, 15, 20, 30, or 40 people 22 23 to every day request because they've heard now that 24 Ms. Brown has been allowed to testify -- not testify, but to present a comment. I want to be fair, but I 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

don't know how it is she got interested in this whole project and why she didn't do what everyone else -like about 60 other people who were online and a number

4 of like 30 or 40 who were here.

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And my numbers may be inexact, but I just 5 wanted the input from the Committee first in terms of 6 7 whether you think we should allow her to present 8 something tomorrow morning. I don't think it will open 9 up the floodgates, but my general view is that people ought to appear when we set the time. And if there's 10 11 an overflow, we'll then schedule more time, either 12 morning or afternoon, on other days.

13 Mr. Riggins, did you have a comment? 14 MEMBER RIGGINS: Thank you, Mr. Chairman. Ι 15 was just going to say, I think in the past, more on an 16 informal basis, at the start of each day's proceedings 17 we've allowed, if anybody had showed up in person, to provide a comment. I think that's -- it was more on 18 19 just an informal basis, not really overflow from the first day's public comment. 20

MEMBER HAMWAY: Yeah, I'm of the opinion
 anybody who wants to speak should be able to speak.
 MEMBER RIGGINS: I second that.
 CHMN. KATZ: Any other comments?
 MEMBER LITTLE: This is Ms. Little. I am in
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agreement with that. I don't think that we should 1 2 allow people who have already spoken to speak again, 3 but anybody who hasn't spoken, particularly in a case 4 such as this where it is a difficult case, I think people should be allowed to speak. 5

CHMN. KATZ: Any comments from counsel? б MR. ACKEN: Mr. Chairman, I do think that 7 8 it's consistent with the past practice of the Committee 9 as set forth here today.

10 I would note that Ms. Brown is very familiar 11 with this project and the process and has already submitted written comments, and so -- and several folks 12 13 have done that. So I would just ask that it not be 14 duplicative of the written comments that she already submitted in the docket. 15

16 CHMN. KATZ: Any comment from any of our 17 other attorneys? Go ahead, Ms. Post.

MS. POST: I would simply say that this is an 18 issue that will affect all of Arizonians for the next 19 30 or 40 years, and I think they should be allowed to 20 21 voice their opinion, even though it might take some 22 time today. But it is 30, 40 years, so I think we should listen to them. 23

24 MEMBER GRINNELL: Mr. Chairman. 25 CHMN. KATZ: Yes, Mr. Grinnell.

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MEMBER GRINNELL: You know, I've been 1 2 listening to this discussion versus watching it. It's sort of listening to the radio versus watching TV, 3 4 whether sports or whatever. And having one person come 5 back -- but are we setting a precedent to begin to open the floodgates for people, at the last minute, to 6 decide they want to submit another verbal comment in 7 8 addition to a written comment outside of the time set 9 aside? That's number one.

But I want to get a little clarity on this from SRP, if I may. I realize that there's some cultural issues that were being brought up forward, but is your process in dealing with neighbors, whether they're economically stressed or not, any different in the process that you take in trying to communicate with neighbors?

17 MR. ACKEN: I think I would --

18 CHMN. KATZ: Go ahead.

MR. ACKEN: -- Member Grinnell, maybe direct 19 that to Ms. Rickard. Ms. Rickard -- I will note that, 20 21 as we mentioned earlier and you heard the testimony of 22 Ms. Pollio, we did provide supplemental testimony in 23 this case. So to that extent it's different. But I 24 think your question is asking is -- is a different question, and I think Ms. Rickard is the right person 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

1 to answer it.

2 MS. RICKARD: I think you're asking would our 3 approach be different depending on the economic 4 background of the neighborhood. Did I understand that 5 correctly?

6 MEMBER GRINNELL: Well, in this particular 7 case, we're dealing with a cultural sensitivity of the 8 neighborhood, but they're also economically stressed. 9 But is your process of addressing neighbors, regardless 10 of finances or cultural status, any different when 11 reaching out?

MS. RICKARD: So our approach is to be consistent in how we engage with neighbors, and that is either in our service territory or in areas where we have a presence such as this. We are consistent. It remains the same.

17 MEMBER GRINNELL: Thank you.

And to the lady that just brought up the issue, forgive me, I don't have your placard in front of me, you brought up the issue -- how is this going to affect decisions for the next 30 or 40 years? Can you elaborate a little bit on that? I'm a little bit confused why you made that statement.

24 CHMN. KATZ: That was a comment by Attorney25 Diane Post. Maybe she can comment.

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MEMBER GRINNELL: Ms. Post, I'm sorry, I
 forgot your name. Forgive me.

Because of the impact on climate 3 MS. POST: 4 change and the differences that it will make in the 5 health standards, in the health of the immediate community, these are factors that will last for a long 6 time, not just be over in a short time. So that's why 7 8 I'm saying, this decision will have ramifications for 9 their health and lives for the rest of their lives and their children's lives and their grandchildren's lives, 10 11 and it will have ramifications for all of Arizona in 12 the issue of climate change.

MEMBER GRINNELL: Okay. Thank you.
CHMN. KATZ: Thank you.

15 Anyway, back to the subject matter we were dealing with, which is to allow this comment. And I am 16 17 all in favor of being open, but -- and I probably will 18 end up allowing her to appear. I just do not like the 19 fact that she's been well aware of this, communicated with the Committee in writing, and should have been 20 21 aware of comments on the time frame that were outlined 22 in the procedural order, but she figured that she could 23 come in at any time.

24 So I don't want to start setting a precedent 25 where we end up getting 15, 20, or 30, or even 5 or 10 COASH & COASH, INC. www.coashandcoash.com 602-258-1440 Phoenix, AZ

728

people coming in at the last minute that could have 1

2 appeared initially. But anyway, I will --

Go ahead, Mr. Rich. 3

MR. RICH: Mr. Chairman, just a brief comment 4 5 And my recent history with this Committee has on that. been not as intense as my past history with the 6 Committee in the early 2000s, in 2010 to '15, in that 7 8 range, and it was, I think, sort of in line with what 9 Committee Member Riggins reflected. It was standard practice that every morning, if someone showed up, they 10 11 were allowed to give public comment, but there would be 12 a focused public comment event or more than one event 13 if it was a particularly controversial case.

14 And so I think -- I don't know Ms. Brown's 15 experience with the Committee personally, but she may 16 have just assumed that that's -- it would continue to 17 be the way that it had been. So I endorse allowing anyone who comes up to be able to speak. 18

CHMN. KATZ: Well, let me just -- before we 19 keep going around in circles, is there anybody that 20 21 opposes allowing her to come in at 9:00 tomorrow

22 morning?

23 MEMBER GRINNELL: Mr. Chairman.

24 CHMN. KATZ: Yes, sir.

25 MEMBER GRINNELL: If we do this, and then COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

somebody else comes in and wants to do this on Monday, 1 2 then Tuesday and Wednesday, is that going to open the 3 floodgates or are we going to say this is the last 4 I don't want to drag this out, and especially chance? 5 since people have already commented in writing and then come right back and want to talk about it. I mean, we 6 could be here for a month if we go on this process. 7

8 CHMN. KATZ: Well, I might get her on the 9 phone in the morning, or online, and basically ask her 10 questions as to, she was well aware of the process, has 11 submitted written comments, why didn't she appear on 12 Monday or advise us that she had some kind of conflict 13 and request additional time. I'll probably ask her 14 that.

15 But I'm inclined to allow it, and I hope it doesn't open the floodgates. And if it ends up opening 16 17 the floodgates in this proceeding, I think we might tailor the procedural order a little bit to indicate 18 19 that we will only allow additional comments if there's some reason why they weren't able to appear at the 20 21 initial time frame or we were unable to accommodate 22 them because of the volume of people that had asked to 23 testify.

24 MEMBER HAMWAY: Mr. Chairman.

25 CHMN. KATZ: Yes.

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MEMBER HAMWAY: I think if it opens the floodgates, that's a good thing, because that brings more people, they're getting more involved. And it's been my experience, serving in a municipal capacity for a number of years, that these projects do open and make more people aware.

7 Now, if they've already submitted written and 8 they've already spoken, I'm not sure I would allow it, 9 but certainly I'm not afraid of the floodgates opening 10 up. And I think if that causes us to take more time, 11 then that's what happens. And I'm all in favor of 12 letting new people come forward and speak their piece.

13 CHMN. KATZ: That's fine. We'll resolve what 14 we do in the future at another date. I will allow Tod 15 to let her know that she needs to be on the Zoom link 16 by 9:00 tomorrow morning, and she will then be allowed 17 to comment either at 9:00 or shortly thereafter.

Do we want to keep going with Ms. Post's witness for 15 or 20 minutes or do we want to take a break until about 1:00 or 1:15?

MS. POST: I've concluded.
 CHMN. KATZ: I indicated -- do you have
 anything further that you're going to present,

24 Mr. Acken?

25

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1 BY MR. ACKEN:

2	Q. The timing may have passed, but I had one
3	follow-up on Ms. Little's Member Little's question.
4	She had asked about whether there had been something
5	formal submitted to the community of Randolph, and I
б	don't think we answered it. So I'm going to ask
7	Ms. Rickard and Ms. Hallows to address whether a formal
8	proposal had been made to the Randolph community.
9	A. (MS. RICKARD) So my understanding is that
10	there was a written condition. It's certainly not, as
11	I mentioned before, the solution the end-all
12	solution. But there were several items listed that we
13	would be ready to conduct now, and I'll repeat them
14	again. Assist the community with obtaining the
15	designation of a historic neighborhood, installing
16	visual screening measures between the community and the
17	Coolidge Expansion Product, providing the periodic tree
18	trimming service for common areas and alleyways,
19	identifying a schedule of cleanup days, and arranging
20	and paying for dumpster dropoff and pickup again,
21	these are all what we heard directly from residents
22	and ordering and installing "no dumping" signs to place
23	in empty lots.
24	Q. And why haven't you moved forward with that?

25 A. (MS. RICKARD) My understanding is these were COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

1 deemed unacceptable at this point. 2 Ο. And Ms. Hallows, do you know whether you were 3 discouraged or prohibited from speaking further with 4 Randolph intervenors? 5 (MS. HALLOWS) Yes. I was asked by one Α. 6 specifically to not reach out any longer, and then it 7 was the understanding to not reach out to the 8 intervenors during this process. 9 0. And that was at the request of counsel for Randolph, correct? 10 11 (MS. HALLOWS) I believe so, yes. Α. 12 MR. ACKEN: Okay. Thank you. 13 MEMBER LITTLE: May I ask -- this is Member 14 Little. 15 CHMN. KATZ: Yes. 16 MEMBER LITTLE: You say that those conditions 17 were considered to be unacceptable. Unacceptable by whom? 18 19 MS. RICKARD: I believe legal representation of the residents. 20 21 MEMBER LITTLE: Thank you. 22 CHMN. KATZ: And, again, we'll get into 23 discussions later. But when we do review the CEC, and 24 I'm not projecting whether it will be granted or denied, but for those of you who aren't familiar with 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

the process, we usually go through the terms before we 1 2 vote on whether or not a CEC will be issued. If one 3 were to be issued, we want to get the terms and 4 conditions laid out and approved just in the event it 5 should pass. And if it doesn't, it doesn't. So we may want to consider some of those conditions that you just 6 discussed as something to include in the CEC. I'm not 7 8 saying we will. I have to hear from the attorneys for 9 all parties before we would consider doing any of that. 10 So you did talk to me, Ms. Post, in advance 11 of this hearing indicating that you had some witnesses 12 available if we finished before lunch, but I don't know 13 if it makes sense to start now. We'll maybe break now, 14 it's noon, pick back up at about 1:00 or a few minutes past. Anything further we need to discuss before then? 15 16 (No response.) 17 CHMN. KATZ: I thank everybody for your patience and your consideration, and we will resume at 18 19 1:00. (Off the record from 12:00 to 1:08 p.m.) 20 21 CHMN. KATZ: I think we're ready to call our 22 next witness. And I'd ask Ms. Post to perhaps 23 introduce us to the woman that will be joining us 24 shortly. MS. POST: Yes. Our first witness in our 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

direct case for Randolph residents is Sara Elizabeth 1 2 Grineski, she's a professor at the University of Utah, 3 and she will explain what she's going to talk about 4 regarding her environmental and sustainability studies 5 program.

And I would like first to ask to admit her 6 exhibits, which are 18, 19, and 20. 7

8 MR. ACKEN: Consistent with my objection when 9 Mr. Rich sought to admit exhibits before they were 10 actually discussed, I think it's premature to admit 11 exhibits until the -- and I think the process that 12 Chairman Katz said is that we're going to wait until 13 the evidentiary proceeding is concluded, or else I 14 would have moved mine already.

CHMN. KATZ: Well, we can do -- what we'll do 15 16 is you can use any of your exhibits. If there's any 17 objection because they're way out of line, we'll hear from the other lawyers. And then we will likely admit 18 19 almost everything that is used or discussed with a witness at the end of the proceedings. 20

21 MS. POST: Chairman Katz, I thought you said we should move them at the end of each witness. 22

23 CHMN. KATZ: I said you could do that.

24 MS. POST: Oh, okay.

CHMN. KATZ: You can do that. 25

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I would also ask, how does this witness spell 1 2 the last name? If you could tell us, please. MS. POST: G-R-I-N-E-S-K-I. 3 CHMN. KATZ: Grineski. 4 And do you prefer an oath or an affirmation? 5 Your lawyer probably told me, but I am old and senile, 6 7 so I will ask you which you would prefer. 8 MS. GRINESKI: I'll do the affirmation. CHMN. KATZ: Sure. I'd just ask you to raise 9 your right hand, if you would. 10 11 (Sara Elizabeth Grineski was duly affirmed by 12 the Chairman.) 13 CHMN. KATZ: Thank you very much. And you 14 may begin questioning this witness. 15 16 SARA ELIZABETH GRINESKI, 17 called as witnesses on behalf of the Randolph 18 Residents, having been previously affirmed by the 19 Chairman to speak the truth and nothing but the truth, was examined and testified as follows: 20 21 22 DIRECT EXAMINATION 23 BY MS. POST: 24 Please state your name and business address. Ο. My name is Sara Elizabeth Grineski, and my 25 Α. COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

1 business address is 380 1500 East, Salt Lake City, Utah
2 84112.

3 Q. Can you give us a summary of your education 4 and experience?

A. I am currently a professor of sociology and environmental and sustainability studies at the University of Utah. I have a Ph.D. in sociology with an emphasis in geography.

9 Q. And what's been your experience up to this 10 date?

11 A. Yes. I have conducted environmental justice 12 and environmental health research since I became a 13 graduate student back in 2003 -- in 2001. Excuse me. 14 And so I've been conducting research in these areas 15 since then.

Q. Did you ever do any studies in Arizona? A. Yes. I went to graduate school at Arizona State University. And so I began my research career working in Arizona, and then after that went to the University of Texas at El Paso, I did some work there, and now I'm here in Utah.

Q. And have you ever received any grants foryour research and work?

A. Yes. My research is supported currently by the National Science Foundation and the National COASH & COASH, INC. 602-258-1440

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1 Institutes of Environmental Health Sciences, I have 2 active grants from both of those federal agencies 3 currently, and in the past I've had previous NIH and 4 NSF grants as well. What is the purpose of your testimony? 5 Ο. I have expertise in environmental justice and б Α. 7 health disparities, focusing on community of color --8 communities of color and also in relation to particulate matter. So I'm going to talk about 9 10 disproportionate health effects of pollutants, 11 specifically those emitted by natural gas generating 12 facilities, and how those affect black Americans, as 13 well as the specifics of the predicted pollutant 14 emissions here within the CEC application and their 15 health. And that's what I want to turn to. What key 16 Ο. 17 pollutants from the natural gas generation are applicable in this particular case? 18 19 Yes. And in this case, the application Α. corresponds with the published literature. 20 Kev 21 pollutants that result from natural gas electricity 22 generation are nitrogen oxides, or NOx, which includes 23 nitrogen dioxide, commonly knowns as NO2, as well as 24 nitrous oxide, or NO, and then particulate matter, both PM2.5, which is fine particulates, and PM10, which is 25 COASH & COASH, INC. 602-258-1440

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1 course particulates. And when we look into the 2 literature on natural gas generating facilities, those 3 are the pollutants that tend to be released. And then 4 when we look here to the application, we see in Table 7 5 that again those are the pollutants of focus, NO2, 6 PM2.5, and PM10.

7 And when I look at Table 7 of the 8 application, titled NAAQS Analysis Results, it lays 9 out, you know, how much they think the facility will 10 produce if it expands, what's the background 11 concentrations of the current emissions from this 12 facility, as well as a welding facility nearby, and 13 then we combine the total concentration --

14 CHMN. KATZ: Hold on. I just don't know if 15 we can adjust the volume a little bit and also ask the 16 witness to maybe slow down just a tad because our court 17 reporter needs to get everything down. But we're going 18 to try to adjust your volume.

19 You can go ahead.

20 MR. ACKEN: Can we get a clarification on 21 Table 7 to which application? Because I'm not

22 following.

MS. GRINESKI: Yes. Let me just pull it up so I tell you the right thing here. The application for a Certificate of Environmental Compatibility,

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1 Coolidge Expansion Project. I have a 386-page PDF. Is 2 that helpful? 3 MS. POST: It's your SRP Exhibit 1, 4 basically. 5 MR. ACKEN: Well --CHMN. KATZ: Are we talking about the SRP 6 7 application for CEC 197? Professor, is that correct? 8 MS. GRINESKI: No, I just -- I have the 9 document open here, so I can just -- I'm looking for if 10 it has a number. 11 MS. POST: It's on the first page. 12 MS. GRINESKI: Okay. I'm looking at the 13 title. In the upper corner there's a -- there's a bar 14 code, and then below that there's an L-00000B-21-0393-00197. 15 16 THE COURT REPORTER: Can we ask her to slow 17 down and then maybe get closer to the microphone. 18 CHMN. KATZ: Yeah. I just need you, 19 Professor, to slow down. 20 MS. POST: Slow down. 21 CHMN. KATZ: Just relax and pretend we're 22 having a nice casual conversation. 23 MS. GRINESKI: I'm just not sure which 24 number you're looking for, I guess. MS. POST: That was the number for this 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

1 application that you just gave, that you said was below 2 the bar code. That is the number for this application. MS. GRINESKI: Right. So the number directly 3 4 below the bar code is 0000205474. MS. POST: Dash. 5 MEMBER DRAGO: Excuse me. Can we get a page 6 7 I think that might help. number? 8 MS. POST: Table 7. What page number is that 9 Table 7 on? 10 MEMBER HAMWAY: What exhibit is Table 7 in? 11 CHMN. KATZ: We can probably pull it up. Is it in Exhibit 1? 12 13 MR. ACKEN: I can't find it, so... 14 MEMBER HAMWAY: There's no Exhibit 1. 15 MEMBER LITTLE: This is Toby Little. I think she may be on Page 9 of Exhibit 1, Table 7, NAAQS 16 17 Analysis Results. Is that the right one? 18 MS. POST: Elizabeth, is that the right one? 19 MS. GRINESKI: I got muted there 20 accidentally. Yeah, I'm trying to -- I just pasted it 21 into my own notes, so I'm trying to correspond with the 22 big PDF. But yes, that's the name of the table. 23 MEMBER LITTLE: Okay. It's on Page 9 of 24 Exhibit B of the actual CEC application. I'm not sure what PDF page it is. 25

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1 MS. GRINESKI: Thank you. 2 CHMN. KATZ: And I don't know if we want to 3 pull it up on one of our screens. The ninth page is --4 application for Certificate of Environmental 5 Compatibility, is that what we're looking at? It's Page 9 of Exhibit --6 7 MS. POST: Yeah. MR. ACKEN: The first Page 9 of Exhibit B. 8 9 CHMN. KATZ: Yes. 10 MS. POST: Okay. Are we all on the same page 11 We've got the Table 7? now? 12 MS. GRINESKI: All right. So --13 MS. POST: Wait. Wait. Wait. Wait. 14 So can we go ahead? 15 CHMN. KATZ: We can go ahead. I just didn't 16 know if we could pull up the exhibit on one of the 17 screens. 18 BY MS. POST: 19 Okay. Elizabeth, go ahead. Ο. So the table is a really important piece of 20 Α. 21 information since it lays out for us these pollutants 22 of concern, what the modeling shows in terms of how 23 those emissions would increase, that's the modeled 24 concentration column, then the background concentration column, which is the current level of those emissions 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

in the area, and then the total if we were to add the
 expansion with the current, it gives us the total.

And then it also gives us the standard, which 3 4 is the United States National Air Quality Standard. 5 And I noticed that the annual standard for PM10 and the annual standard for PM2.5 are actually transposed, 6 7 because 100 is the PM10 annual standard, not the PM2.5 8 annual standard. So I can look at the table and I'm 9 going to assume the rest of the numbers are correct, but I'm not a hundred percent sure because those two 10 11 are reversed. And I can tell, since I know what those 12 are. But I -- so I guess I just wanted to point that 13 out, because I'm going to be talking about these 14 numbers.

I also noticed that it lists the 1-hour NO2 standard as 188, and my review of the EPA web page lists that standard as 100. They say, on January 22nd, 2010, EPA strengthened the health-based National Ambient Air Quality Standard, or NAAQS, for NO2. EPA set a 1-hour NO2 standard at a level of a hundred parts per billion.

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22 Q. Hang on.
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23 CHMN. KATZ: Hold on. I think that if we're 24 trying to pull up the table, I'm looking at it on Page 25 -- it says, "Emissions, technical memorandum." Just COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

bear with us for a minute. 1 2 MS. POST: Okay. I believe the chart is up 3 on the screen now. CHMN. KATZ: Okay. 4 MS. GRINESKI: Can I see it, just to make 5 6 sure I'm talking about the same thing that you see? 7 Yes, that's what I'm talking about, I 8 believe. Okay. Great. CHMN. KATZ: Just wanted to make sure we were 9 all on the same page so nobody gets confused. 10 11 MS. GRINESKI: No, we don't want to be 12 talking past each other for sure. 13 So I don't know -- when I look at the EPA 14 standard it says a hundred, not 188 there, for the 15 1-hour NO2. BY MS. POST: 16 17 Q. So if these numbers that you said are transposed, and if this EPA number is, in fact, a 18 19 hundred, that would change a lot of other things in the chart, would it not? 20 Yes, because it shows that for NO2 the total 21 Α. 22 concentration that they are predicting would be 130, 23 which would be exceeding the NAAQS locally of a 24 hundred. 25 0. SRP personnel have testified that these

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745

1 levels are in accordance with national guidelines. Is
2 that accurate?

A. I don't know if things are transposed and the table just has errors in it, but based on my knowledge of the NO2 1-hour NAAQS, it is a hundred, and it says here 188.

Q. Okay. On to the next question. SRP
personnel have testified that these levels that they
have testified to in the hearing are in accordance with
national guidelines. Is that accurate?

A. 12 is the national -- the NAAQS for PM2.5 for the annual standard. It's listed here under PM10, but 13 12 is the correct standard for PM2.5, not for PM10. So 14 12 is the correct number, but it's in the wrong row. 15 Am I answering the question?

Q. Are these guidelines -- are these numbers in accordance with the WHO guidelines for air quality, for pollutants?

19 No. The NAAOS, which is what we call Α. No. the U.S. standards, are not -- they're at different 20 21 levels than the World Health Organization. And the 22 World Health Organization recently revised their 23 quidelines in 2021. Their previous quidelines were 24 from 2005. And they took into account, you know, the several -- I guess nearly two decades of research on 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

the health effects of air pollution and they updated 1 2 their standards to be in line with recent research. So, for example, the World Health 3 4 Organization new 2021 air quality guideline for annual 5 PM2.5 is 5 micrograms per cubic meter, whereas the NAAQS are 12 micrograms per cubic meter. And we can 6 7 see in the table that the total for PM2.5 is 8.97, so 8 that --9 MEMBER DRAGO: Mr. Chairman. 10 CHMN. KATZ: Yes. Hold on just a second. 11 MEMBER DRAGO: She's going way too fast. 12 MS. POST: Okay. Slow down, please. Slow 13 down more. 14 MS. GRINESKI: Okay. I'll slow down more. 15 CHMN. KATZ: We have plenty of time, so just relax and talk at a normal conversational level. 16 17 MS. GRINESKI: This is my normal pace, but I will most definitely slow down. I'm sorry. 18 19 CHMN. KATZ: It's okay. MS. GRINESKI: So the World Health -- should 20 21 I repeat what I just said? BY MS. POST: 22 23 No, I don't think so. But you were saying Ο. 24 the World Health is 5, the NAAQS is 12, and this panel -- or, this chart is 8, correct? 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

A. 8.97.

And for PM10 the annual standard from the World Health Organization's Air Quality Guidelines is 15, and Table 7 shows us the total being 19.2. So the expansion would put the area above the World Health Organization Air Quality Guidelines which were just released in 2021.

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8 It appears from the background column that 9 the World Health Organization PM2.5 standard already is 10 exceeded, the 7.19 versus the standard of 5. So the 11 expansion would lead further -- to further exceedances 12 of the World Health Organization Air Quality 13 Guidelines.

Now, the U.S. is governed by the NAAQS, right, but the World Health Organization is another set of guidelines, and they have recently released these new values which are in direct response to emerging information from the academic literature.

19 Q. Thank you. What health ailments are 20 associated with these pollutants and how are African 21 Americans affected by these health ailments?

A. So I think COVID-19 has exposed some of this
 in very stark form in recent -- in the last two years,
 but there's a host of evidence that show that black
 Americans suffer disproportionately from a host of
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747

health conditions. And many of these health conditions 1 2 are connected to environmental sources of air pollution, including those associated with natural 3 4 gas-fired power plants.

So in terms of a few specific examples, we 5 can certainly think about asthma. For a lot of us, if 6 we think about air pollution and health, we think about 7 8 asthma. And certainly there has been evidence 9 accumulating for decades that nitrogen dioxide and fine 10 particulate matter can cause exacerbations of 11 preexisting asthma. It's very well established. And 12 the literature is emerging that suggests that these air 13 pollutants may contribute to new onset asthma, which 14 would be the development of asthma at a specific point 15 in time. So the pollutants can trigger asthma attacks in persons who already have asthma, that's very well 16 17 established, and then there's emerging evidence that 18 these pollutants may cause someone to develop asthma. 19 From a mechanistic perspective, the air pollutants cause injury to the airways, lead to inflammation, a 20 21 remodeling of the airways, and increased sensitization 22 in future exposures.

23 Doesn't asthma affect everyone? Ο. Asthma affects -- I mean, certainly any 24 Α. person could develop asthma. African Americans are 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

disproportionately affected by asthma. The most recent 1 2 statistics from the Centers for Disease Control report 3 that nonhispanic African Americans were 40 percent more 4 likely to have asthma than nonhispanic white Americans. 5 In 2019, which is the most recent data available, nonhispanic black Americans were three times more 6 7 likely to die from asthma than the nonhispanic white 8 population. And nonhispanic black children, for 9 example, are five times more likely to be admitted to the hospital for asthma. 10 11 Ο. Slow down again. 12 MEMBER GRINNELL: No, I'm just -- actually, 13 I'm listening to a very boring -- I'm on a statewide 14 Committee and some of this stuff is just arduous. But 15 anyway, go ahead. BY MS. POST: 16 17 Is air pollution linked to any other health Q. issues? 18 19 MEMBER GENTLES: Perhaps someone can put 20 Mr. Grinnell on mute, please. Can the control put Mr. Grinnell on mute? 21 22 CHMN. KATZ: Again, Mr. Grinnell, let's 23 allow this testimony to go forward. Everybody on 24 the Committee will have a chance to question this 25 witness. COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

1 BY MS. POST:

2 Ο. Okay. Back to my next question. Is air 3 pollution linked to any other health issues? 4 Α. Yes. It has also been linked to the prevalence of heart disease. And there's evidence in 5 the environmental epidemiological literature that 6 exposure to particulate matter, as well as NO2, which 7 8 are key pollutants of concern in this case, are linked 9 to heart disease and cardiovascular disease, increased 10 mortality from those things, and it's well established 11 as well as that African American have higher rates of heart disease than white Americans. 12

We also see similar patterns with birth risks, preterm birth, lower birth weight being associated with fine particulates, or PM2.5, as well as nitrogen dioxide, and then the association with those things also being more common in an African American population.

19 We see similar patterns with respect to There is emerging literature that COVID, both 20 COVID. in terms of the likelihood that one might become 21 22 infected, as well as the severeness, is affected by 23 exposure to air pollutants, including PM2.5 and NO2. 24 And I think most of us are aware, COVID-19 has revealed very stark health disparities in the 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

United States, with African Americans especially being 1 2 disproportionately affected by COVID-19. In New York City, for example, during that period in 2020 when they 3 were hardest hit place in the United States, the 4 5 age-adjusted COVID death rates were two times that of whites for African Americans. So it was 220 per 6 hundred thousand for African Americans and 110 per 7 8 hundred thousand for whites.

9 So the point of this is to illustrate that there are relationships between air pollution and 10 11 health outcomes, and that these health outcomes 12 disproportionately affect minority communities and 13 African Americans in particular. And while it's not a 14 simple relationship, this is very complicated in terms of how these things are related, they're certainly 15 linked. And so if we think about increasing pollution, 16 17 we are going to have these disproportionate health effects. 18

19 And the other thing I would like to say regarding this question is that, with respect to 20 mortality as well, since, you know, these air 21 22 pollutants are also associated with mortality, with 23 excess mortality, is that -- so meta-analyses of the 24 literature -- so when researches analyze other researchers' studies, they're finding that exposures 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ
to, for example, PM2.5 below the NAAOS, right, so at 1 2 levels that are below those standards, they see the 3 same effect on the relative risk of mortality or 4 possibly a larger effect, suggesting that these 5 pollutants are quite dangerous even at low levels of exposure or if we see a small increase in exposure. 6 So it's not as if you have to be exposed to the most of 7 8 these pollutants to have a health effect. The health effects are present at low levels, and even at levels 9 10 below the NAAQS, which is why the World Health 11 Organization dropped their standards.

12 Does stress have any impact on the health Ο. 13 impact or the health relationship?

14 Α. Yes. And as we think about research that's 15 trying to dig into relationships between environmental 16 exposures and then these health disparities, stress is 17 a key mechanism that researchers are looking at and finding important things. So one of the things to note 18 19 is that stress can actually increase your susceptibility to the same dose of a pollutant 20

exposure. 21

22 So, for example, if you're stressed out, the 23 same amount of PM2.5 can cause a greater health effect 24 than if you're not stressed out. And stress increases susceptibility because we tend to absorb the toxins at 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

a greater rate when we're breathing more quickly and
sweating and like feeling those physical manifestations
of stress. Stress also compromises our immune system,
right. Stress can cause us to become sick, which makes
our bodies less able to cope with environmental toxins
and air pollution. So the stress can actually make the
pollutant exposure more damaging.

8 And we know that noise pollution can cause 9 stress, light pollution can cause stress, living under 10 economic stress, right, having a hard time making ends 11 meet can cause stress, experiencing racism can cause 12 stress. And so stress is sort of a key player in this 13 equation.

Q. You've mentioned that there are many complex factors. Do we look at just one factor or must we look at the cumulative factors?

17 Α. Well, if we want to understand health disparities, then we have to look at a variety of 18 19 factors, you know, access to health care, socioeconomic resources, indoor environmental conditions, outdoor 20 environmental conditions like air pollution. So to 21 22 really understand the health of a population in a 23 holistic way, we need to consider all of these factors. 24 How does stress or does stress particularly Ο. affect African Americans? 25

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1 There's certainly literature on the Α. Yes. 2 stress experienced by African Americans. These direct 3 effects of stress, you know, they could be due to discrimination, racism, social exclusion, financial 4 5 struggles. Living in disadvantaged neighborhoods or communities can cause stress. And so we all experience б stress, but African Americans experience 7 8 disproportionate stress due to some of the challenges 9 of a black identity in the United States at this time. 10 Is there anything I have not asked you that Ο. 11 you would like to add to your testimony? 12 Α. No. Thank you. 13 Could you please summarize your conclusions Ο. 14 and recommendations? 15 I recommend that the expansion not be Α. Yes. granted due to concerns about the increase in air 16 17 pollution in an already exposed and vulnerable community. We know from the literature at the 18 19 national, as well as, you know, regional and local studies, that black Americans suffer disproportionately 20 from health conditions that are associated with the air 21 22 pollutants generated by natural gas-fired power plants. 23 While they're not the only cause of the health disparities, they are a preventable source of increased 24 25 health risk.

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1 Ο. Are you sponsoring any exhibits? 2 Α. I think -- I have included my CV as an 3 exhibit, as well as a couple academic articles that are 4 connected to my testimony. MS. POST: Those would be 18, 19, and 20, and 5 I would just move again for their admission either now 6 7 or when you decide to do it. 8 MEMBER LITTLE: May I ask a clarifying 9 question? 10 CHMN. KATZ: Is that Ms. Little? 11 MEMBER LITTLE: Yes, it is. 12 CHMN. KATZ: Yes, you may. 13 MEMBER LITTLE: Could you just give us the 14 numbers -- I was trying to write them down, and I got 15 confused -- the standards, the U.S. standard and the World Health Organization standard, for Table 7? Just 16 17 maybe give me the columns so I can write them down. MS. GRINESKI: So the -- let's see. 18 Where 19 would it be easiest to start? In the third row where it says a hundred under the -- one, two three, four --20 21 under the sixth column, the third row, it says 100. 22 That's actually the PM10 annual standard, not the PM2.5 23 annual standard. And then two cells down there's the 24 12. That's the PM2.5 annual standard, and it's listed under the PM10 section. 25

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1 MEMBER LITTLE: Okay. And it was your 2 understanding that the 188 for NO2 should be 100, 3 correct? 4 MS. GRINESKI: Yes. 5 MEMBER LITTLE: And how about the World Health Organization standards? 6 MS. GRINESKI: Yes. The World Health 7 8 Organization 2021 Air Ouality Guideline for the annual PM2.5 is 5 and the annual PM10 standard for the World 9 Health Organization is 15. And those numbers aren't in 10 11 the table since they aren't the U.S. 12 regulatory standards. Those were just in my testimony. 13 MEMBER LITTLE: Thank you. 14 MS. POST: Pass the witness for cross. 15 CHMN. KATZ: Again, I will have you review all the exhibits. I will likely admit 18, 19, and 20 16 17 from the Randolph community. 18 MR. ACKEN: Thank you, Mr. Chairman. 19 20 CROSS-EXAMINATION BY MR. ACKEN: 21 And good afternoon, Professor. Is it 22 Ο. 23 Grineski? Am I pronouncing that correctly? 24 Α. Grineski. 25 Ο. Grineski. I'm sorry. I'm Bert Acken, COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

counsel for Salt River Project. Can you hear me okay?
 A. I can, yes. Thank you.

Q. I want to look at Table 7. And you did identify an error in the table, but let's see if we can clarify that error. Would you agree that the NOx 1-hour standard is 188 micrograms per cubic meter -or, the NO2? Excuse me.

8 A. Yeah, what I saw in the EPA page was that it 9 was a hundred parts per billion.

Q. I'm asking you about the 1-hour standard.
 I'm going to ask you about the annual standard next.

12 A. Right. And you're talking about for NO213 specifically?

Q. Correct. We're going to go one by one. SoNO2, the 1-hour standard and the annual standard.

A. Yeah, the NO2 -- the only thing in the table is the 1-hour standard, and it's listed as 188 micrograms per cubic meter. And what I see at the EPA is that it's a hundred parts per billion.

20 Q. No. I'm not asking my question very well, 21 apparently. Are you familiar with what the NO2

22 1-hour standard is?

23 CHMN. KATZ: Is anybody talking in the 24 background? I don't know why we're getting that 25 feedback.

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1 MS. GRINESKI: I can't hear the full 2 question. It's kind of fading in and out. 3 BY MR. ACKEN: 4 Are you familiar with what the 1-hour NO2 0. 5 standard is? Not the annual standard. The 1-hour standard for NO2. 6 The 1-hour standard is the one in the table. 7 Α. 8 Yes, I'm familiar with it. 9 And is the 1-hour standard for NO2 188 Ο. micrograms per cubic meter? 10 11 Α. It's 100 parts per billion. 12 Okay. So you believe that is the NO2 1-hour Ο. 13 standard. And what do you understand is the NO2 14 annual standard? 15 You know, I didn't write down the Α. 16 annual standard in my notes since it wasn't in Table 7. 17 Ο. Okay. So you aren't personally familiar with what the NAAQS standard is, the annual NO2 standard? 18 19 No, not off the top of my head. Α. So let's talk about PM2.5 and PM10. Are you 20 Q. familiar with the PM2.5 24-hour standard? 21 22 Α. PM2.5 24-hour standard, yes. 23 Ο. And what is that? 24 12. Α. 25 CHMN. KATZ: And again, that's parts per COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

1 million? 2 MS. GRINESKI: That's the cubic meters, micrograms per cubic meter. 3 4 CHMN. KATZ: It's particulate matter. Excuse 5 me. 6 MEMBER PALMER: Parts per billion. BY MR. ACKEN: 7 8 Okay. And the annual standard for PM2.5? Ο. 9 Okay. So the annual standard for PM2.5 is Α. 10 12. 11 Okay. So follow me, and it's very difficult 0. 12 to do virtually, but let's -- work with me and assume 13 that the line showing the PM2.5 -- the break between 14 PM2.5 and PM10 is incorrect, and that line should really be drawn after the -- it should be the 15 24-hour standard is 35 and the PM2.5 annual standard is 16 17 12. You would agree with that? 18 Α. Yes. 19 And the PM10 24-hour standard is 150? Ο. 20 Α. Yes. 21 And let's try again with the NOx, because Ο. 22 maybe you and I were using different units. There is 23 both a 1-hour -- well, are you aware whether there's 24 both a 1-hour and annual standard for NOx? 25 Α. Yes.

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0. And what is your understanding as to 1 2 those standards? The 1-hour standard is 100 parts per billion. 3 Α. 4 And does that equate to 188 micrograms per Ο. 5 cubic meter? I don't know. I wasn't familiar with NOx б Α. being assessed in micrograms per cubic meter. 7 8 Okay. So you can't -- you can't speak to the Ο. 9 NOx portion of that table? 10 No, just that I was wondering -- because of Α. 11 the transposition of the annual for PM2.5 and PM10, I 12 started wondering if that NO2 row was incorrect as 13 well, I mean, it was supposed to be the hundred that 14 was below. I just wasn't sure, due to that other 15 error, what that was supposed to be. 16 So you're assuming there's a transposition in Ο. 17 one column, is that correct, in your analysis? In my reflection on the numbers, I actually 18 Α. assumed that your numbers were all correct, just that 19 your 100 and 12 were in the wrong spots. 20 21 Q. Okay. 22 MS. POST: Excuse me. Bert, you said 23 1-hour standard. Did you mean 24-hour standard? 24 MR. ACKEN: It shows the 1-hour for NOx -for NO2, but thank you. 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com

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BY MR. ACKEN: Did you get a chance to review the air Ο. quality permit application in this -- that SRP has submitted in this to the Pinal County Air Quality District? I guess -- I don't know if that is the Α. document I reviewed. Ο. You don't recall having reviewed it? I reviewed a document. Here, let me just Α. tell you. I guess I'm not familiar with the name. The Certificate of Environmental Compatibility for the Coolidge Expansion Project. Correct. And that's what we're here for Ο. today. But are you aware that there's also an air quality permit application that SRP has to submit for this project? Yes, I'm aware of it, but no, I have not Α. reviewed it. Okay. Are you familiar with air quality Ο. dispersion modeling done in support of an air quality permitting process? Α. I'm aware of air quality dispersion modeling just due to my familiarity with the air quality

24 literature, but it's not something I conduct myself.

25 Q. Do you understand that the modeling assumes, COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ 1 as Ms. Watt testified, worst-case maximum emissions
2 from the future facility?

3 A. Yes.

Q. And do you understand that EPA establishes
the NAAQS to be protective of human health and the
environment with an adequate margin of safety?

A. My understanding of the literature is that those standards are not doing that at this point in time given the voluminous literature on the health effects, especially of PM2.5, at levels much lower than the NAAQS standard.

12 Q. I think that was not my question. But you 13 understand that's how EPA establishes them, is that 14 correct?

A. Yes, I understand that is -- the idea is that is what those standards do. I don't think there's evidence in the literature that those are health protective.

Q. And do you understand that EPA periodicallyreviews those standards?

21 A. Yes, I'm familiar with the data that shows 22 all the different years when those standards are 23 reevaluated.

Q. Are you aware that -- I think you refer to World Health Organization guidelines, as you call them. COASH & COASH, INC. www.coashandcoash.com 1 Are you familiar with what the World Health

2 Organization says about air quality generally?

A. Do you want me to tell you what that is or... CHMN. KATZ: He was just asking if you were familiar with it, and then he may ask you what it is. BY MR. ACKEN:

7 Q. Are you familiar with it?

8 A. What the World Health Organization says about 9 air quality guidelines? Yes.

Q. Are you familiar that the World Health Organization, in 2019, said 99 percent of the world population was living in places where the WHO's air quality guidelines were not being met?

14 Α. Yes. At the new standard there are very few places that meet the standard, but that does not mean 15 that the standard itself is not health protective. 16 Т 17 mean, the effects of air pollution on our health -- I mean, the evidence for the ways in which it's affecting 18 19 us and affecting our life span and our health is growing. And so, yes, there are very few places in 20 compliance with the new 2021 World Health 21 Organization standards, that is true. 22

Q. And very few would be less than 1 percent?
A. You know, that's a study I don't have off the
top of my head, but I have read that there are -- I do
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know that there are very few places. I can't tell you
 the exact percentage.

Q. I want to ask you about the two studies that you included and have been marked as Randolph Exhibits 19 and 20. Do either one of those studies address natural gas emissions associated with an expansion project?

8 Α. No. Those two studies specifically provide 9 sort of background information about how air pollution 10 exposures and minority health disparities are 11 connected. They focus on air pollutants in general, 12 although they do touch on the pollutants mentioned 13 here. But neither study is explicitly focused on 14 natural gas, no.

Q. And do either one of those studies address
air quality in Pinal County and Randolph specifically?
A. No.

Q. You testified about the stressors that individuals can face and how that affects their health, is that correct?

21 A. Yes.

Q. And would you agree that there are a
number of ways to reduce stressors for an individual?
A. Yes.

Q. And would you agree that improving the COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ 1 quality of life for -- in a community would be one way 2 to reduce stressors?

A. I'm just going to restate. Would improving
4 the quality of life in a community --

Q. Let me give you an example so it's not so vague. What about installing screens to screen off industrial uses from a residential area, would that potentially reduce stress?

9 A. If the stress is caused by the visibility of 10 the plant, it could. If the stress was caused by the 11 noise or the odor, then it would not.

Q. Okay. So if there were mitigation measures to address noise and odors with whatever that stressor may be, that could be an effective tool to reduce that stress?

Yes. Although, I think what I was meaning 16 Α. 17 when I was speaking about stress, while it connects and I did mention environmental stress, the idea is that 18 19 the stress that people experience in their daily lives that might have absolutely nothing to do with their 20 proximity to an industrial facility is going to make 21 that individual more vulnerable to the health effects 22 23 of the pollution. So while we could do whatever we can 24 to reduce the stress from the environmental facility, it's not going to solve that fundamental issue that 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

stress makes us more vulnerable to the health effects 1 2 of air pollution. So the same dose of pollutant can 3 give us a bigger health effect when our bodies are 4 under stress. And so -- but reducing stress is a benefit? 5 Ο. Reducing stress would -- in this specific 6 Α. case would not make us extra sensitive to the effects 7 8 of air pollution on health. 9 MR. ACKEN: All right. Nothing further. Thank you. 10 11 CHMN. KATZ: We have several -- a couple more 12 parties, so please bear with us. 13 Mr. Rich, do you have any questions of this 14 witness? 15 MR. RICH: I do not have any questions. 16 Thank you. 17 CHMN. KATZ: Mr. Stafford. 18 MR. STAFFORD: No questions, Mr. Chair. 19 Thank you. 20 CHMN. KATZ: And Ms. Ust. 21 MS. UST: Nothing from Staff. Thank you. 22 CHMN. KATZ: Ms. Post, do you have any 23 follow-up redirect examination? 24 MS. POST: No. 25 CHMN. KATZ: Thank you very much, Professor, COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

1 for being with us.

2	MEMBER HAMWAY: I'd like a question.
3	CHMN. KATZ: Oh, sure. I apologize to the
4	Committee. And Ms. Hamway, if you have any questions
5	and any other Members of the Committee have any
6	questions, you'll be free to ask them.
7	MEMBER HAMWAY: Yes, this is probably
8	directed to Ms. Post. But in your conversation with
9	the residents of Randolph, have any specific health
10	issues come to the forefront? I mean, have you done
11	any research on saying, X number of people suffer from
12	X ailments?
13	MS. POST: The two resident residents who
14	are going to testify tomorrow will speak to that.
15	MEMBER HAMWAY: Okay. And then one other
16	question for Ms. Grineski. We were out at the site
17	yesterday, and I will admit the air quality, it was
18	hazy, but it was dust. It was from all the
19	agriculture. It was from the lack of paved roads. It
20	was a lack of vegetation. And so do you separate out
21	that kind of I mean, I know that's a particulate
22	matter, but I'm just talking about dust. So how do you
23	how does that fit into all of this?
24	MS. GRINESKI: Sure. And having lived in
25	Arizona myself, I totally understand the dust issue
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with the desert and the heat. And, I mean, for me, as 1 2 I think about your question, the answer for me is that, yes, those things all contribute to particulate matter 3 4 as well. Some of those things are harder to control, 5 especially, you know, when the desert crust is just blowing around. So if we can make a purposive choice 6 not to add additional particulate matter to the air, we 7 8 would make that choice from a health protective standpoint. So it's one more thing, the 9 expansion is one more thing. So if we can control 10 11 that, we're doing something to address those potential health risks. 12 MEMBER HAMWAY: But don't you think paving 13 14 the roads would go a long way for those residents in Randolph? It would cut down on the dust immensely. 15 MS. GRINESKI: Yeah, road paving is certainly 16 17 one way to reduce -- reduce the dust generated from 18 unpaved roads. 19 MEMBER HAMWAY: Thank you. CHMN. KATZ: Any other Committee Members have 20 21 any questions? Mr. Riggins. MEMBER RIGGINS: Mr. Chairman. 22 23 CHMN. KATZ: Go ahead. 24 MEMBER RIGGINS: Real quick, not so much a 25 question. Just thank you to Dr. Grineski for your COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

testimony and for your insight and review of the CEC. 1 2 It was very helpful. I think it was -- I had touched 3 on it earlier about a Health Impact Analysis. I think 4 this is exactly what I was looking for, and I think what was expressed by many of the members of the public 5 6 who spoke on Monday, what they were looking for as far as a comprehensive health impact not only to their 7 8 community, but surrounding communities as well. So I 9 just wanted to thank you for your testimony. 10 CHMN. KATZ: Any questions, comments from any 11 of our Committee? MEMBER GRINNELL: Mr. Chairman. 12 13 CHMN. KATZ: Yes, sir. 14 MEMBER GRINNELL: I realize this is probably 15 outside your purview, but do you have any medical 16 information prior to the original plant, current plant, 17 and now to, I guess, make the -- your concerns regarding this community, where this would be so much 18 19 more significant impact, negative impact to their health? 20 MS. GRINESKI: Yes, that would be important 21 22 to know. I don't have access to those health data, so 23 I can't speak to that question directly. I will say, 24 though, that it's worth noting that it can be very difficult to assess how an environmental polluter 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

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affects the health in a small community because with 1 2 statistical significance, which is usually the way in 3 which we assess effects, it can be tricky. So health studies in small communities are very challenging. 4 5 They're still worth conducting, and people certainly do those and it's important information, but I do think in 6 this case like referencing larger-scale studies is 7 8 important just to sort of connect into broader 9 population level patterns.

10 MEMBER GRINNELL: Yeah, but you're talking 11 about a much broader population versus this isolated --12 you know, the health and concern of the citizens is 13 absolutely paramount, but I'm just trying to see if 14 there was any quantifiable information that you were able to review that allowed you to import this general 15 16 overall opinion and are you able to do that without 17 having appropriate medical information?

MS. GRINESKI: I do not have access tomedical records from the residents, no.

20 MEMBER GRINNELL: Fair enough. Thank you. 21 CHMN. KATZ: Anyone else? Ms. Post, do you 22 have anything further?

23 MS. POST: Yes.

24 ///

25 ///

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REDIRECT EXAMINATION

2 BY MS. POST:

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3 Sara, when you have a study based on a large 0. 4 number of people, is it then fair to extrapolate that 5 information to a smaller number of people? Yes. And I think that's why -- I mean, the б Α. literature on these topics, for example, PM2.5 and 7 8 health, I mean, people have been doing these studies 9 for decades. And the study that I referenced earlier where they do this meta-analysis -- so they take 10 11 studies that are done in different places on different 12 populations and they statistically analyze the results. 13 And they come up with these parameters that they 14 believe are very generalizable across a place because 15 they analyze so many settings at once. And they find 16 that there's so much convergence around these findings 17 that, for example, we really start to understand that pollutants at these levels cause these health effects. 18 19 So I most definitely believe that studies like that would be likely reflective of the experiences 20 21 of people in this community, but of course I can't 22 prove that. But that is definitely the way research 23 works, where we do these studies, we make 24 generalizations, and that's how NAAQS are determined, how World Health Organization standards are determined, 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

771

1 et cetera.

2	CHMN. KATZ: May the witness be excused?
3	MS. POST: She may.
4	CHMN. KATZ: Thank you very much, Professor.
5	Have a great rest of the day.
6	MS. GRINESKI: Thank you.
7	MS. POST: Do you want to go straight to the
8	next witness or take a break now?
9	CHMN. KATZ: I think we can go straight to
10	the next witness. We can go for at least another half
11	an hour up to even an hour. It's about 2:00, and we
12	started at about, I think, just a little bit past 1:00.
13	MS. POST: Okay. Our next witness is Tim
14	Collins, and I believe he wants to be affirmed.
15	CHMN. KATZ: Okay. Just give me a second.
16	Good afternoon, Mr. Collins.
17	MR. COLLINS: Good afternoon.
18	CHMN. KATZ: And if you wish an affirmation,
19	that's fine with me. I just ask you to raise your
20	right hand, if you would, please.
21	(Timothy William Collins was duly affirmed by
22	the Chairman.)
23	CHMN. KATZ: Thank you very much.
24	Ms. Post, you may begin.
25	///

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1	TIMOTHY WILLIAM COLLINS,
2	called as a witness on behalf of the Randolph
3	Residents, having been previously affirmed by the
4	Chairman to speak the truth and nothing but the truth,
5	was examined and testified as follows:
6	
7	DIRECT EXAMINATION
8	BY MS. POST:
9	Q. Please state your name and business address.
10	A. My name is Timothy William Collins. My
11	business address is 260 South Campus Drive, Room 4625,
12	Salt Lake City, Utah 84112.
13	Q. By whom are you employed and in what
14	capacity?
15	A. I'm employed by the University of Utah and
16	I'm a professor of geography and environmental and
17	sustainability studies and I also co-direct the Center
18	for Natural and Technological Hazards at the University
19	of Utah.
20	Q. Can you give us a summary of your
21	professional education and experience?
22	A. Yeah. I received my Ph.D. from Arizona State
23	University in 2005. I conduct research in the areas of
24	environmental justice, vulnerability to hazards and
25	disasters, and I also do some work on environmental
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1 health and health disparities. And I've been a

2 professor since 2006. I'm currently at the University 3 of Utah.

4 What is the purpose of your testimony? Ο. So I'm going to provide -- based on my 5 Α. expertise, I'm going to provide an overview of this 6 area called environmental justice, and I'll also 7 8 provide a little focus on this topic of environmental 9 I'll then review patterns of disparate racism. 10 exposures to pollution for black Americans, it's a very 11 general overview, in the United States context. And 12 then I'll focus specifically on disparities in exposure 13 to the pollutants of concern in this case at the United 14 States level.

15 Q. What is the definition of environmental 16 justice?

17 Α. I refer to the United States Environment Protection Agency for this definition. And it's, 18 19 "Environmental justice is the fair treatment and meaningful involvement of all people, regardless of 20 21 race, color, national origin, or income, with respect 22 to the development, implementation, and enforcement of 23 environmental laws, regulations, and policies. This 24 goal will be achieved when everyone enjoys the same degree of protection from environmental and health 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

hazards and equal access to the decision making process 1 2 to have a healthy environment in which to live, learn, 3 and work."

4 Is environmental justice only an academic 0. 5 exercise?

No. And actually, you know, it's б Α. interesting -- it's an interesting field. 7 This 8 actually originated as a social movement. And so many 9 people who are scholars and study the environmental justice movement trace the advent of that movement to 10 11 1982 in Warren County, North Carolina in which a 12 predominantly black community was targeted to host a 13 landfill containing polychlorinated biphenyls, highly 14 toxic soil, which had been illegally dumped across roads in North Carolina. 15

16 And so residents of Warren County mobilized 17 and they protested the siting of the landfill. They had support from key political and religious figures, 18 19 including civil rights activists, and they put up a lot of resistance, nonviolent resistance. Ultimately, the 20 21 landfill was placed in Warren County. But I think all 22 of these events contributed to the recognition more 23 broadly that racism in the United States isn't only 24 something that manifests in terms of access to jobs or housing, that it also can affect the environments in 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

which different groups of people live in unequal ways. 1 2 And so, yeah, that's really -- a lot of people trace 3 the advent of the movement to that.

4 It is also an interdisciplinary area of research in which people, many of whom are in 5 universities, basically objectively assess claims of 6 activists. And in many cases, a lot of the work over 7 8 the years has -- you know, while there have been some 9 studies that have invalidated the claims of activists, many studies have sort of backed up some of the claims 10 11 of disproportionate exposure to pollution among 12 racial-ethnic minority communities in the United 13 States.

14 Then how is -- and you've sort of answered Ο. this. How is environmental justice related to 15 environmental racism? 16

17 Well, as you know -- like I mentioned, the Α. advent of the movement really traces to a case in which 18 19 there were strong perceptions of race playing a role in the location of a toxic landfill. And Robert Bullard 20 21 is a pioneer in the field of environmental justice 22 research, and he actually defined this idea of 23 environmental racism as any policy, practice, or 24 directive that differentially affects or disadvantages, whether that's intended or unintended, individuals, 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

1 groups, or communities based on race.

2	And so the way I tend to view it is that
3	environmental justice is more of an ideal where we seek
4	equal protection. Environmental injustice occurs when
5	particular groups of people, based on their
6	characteristics or identities, are disproportionately
7	exposed to environmental health hazards. The concept
8	of environmental racism focuses then specifically on
9	this dimension of race and racism.
10	Other people have studied environmental
11	justice and focused on things like social class,
12	income, other sorts of inequalities that exist in the
13	country that may also shape opportunities and
14	environmental conditions.
15	Q. What does the environmental research reveal
16	about pollution and the impact on black communities?
17	A. Yeah. I mean, in a nutshell, studies have
18	consistently documented disparate exposures to
19	pollution among black communities in the United States,
20	and I could go through a few early studies.
21	So the earliest study that I'm familiar with
22	that would be called a distributional environmental
23	justice study where we're quantitatively trying to
24	examine whether particular groups of people, based on
25	their location of residence, experience
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disproportionate exposure to hazards -- the earliest 1 2 study that really looked at that was following the 3 conflict over the siting of that landfill in Warren County, North Carolina. 4

5 The United States federal government requested an analysis of the correlation between the б siting of toxic waste facilities and the racial and 7 8 sociodemographic makeup of the surrounding communities, 9 and findings from an analysis showed that there were 10 disproportionately high percentages of black residents 11 specifically living in the same ZIP codes as landfills 12 in the southeastern United States. And so that was a 13 really early study.

14 And soon thereafter, a study was conducted that examined demographic characteristics of 15 communities at risk to commercial hazardous waste 16 17 facilities at the ZIP code level across the entire United States. And that study released findings in 18 19 1987 that indicated that increased composition of people of color in ZIP codes was the most significant 20 predictor of the location of commercial waste 21 facilities nationwide, and black Americans in 22 particular were found to bear the most disparate 23 24 exposures among people of color in that study. 25 The same authors who wrote that study, that

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was in 1987 it was released, sort of a landmark study, 1 2 released another study 20 years later, a follow-up in 3 2007, where they basically found those same patterns had continued to exist 20 years later. 4

And so there have been subsequent technical 5 and analytical advances in studies of distributional 6 7 environmental justice, hundreds of which have been 8 conducted in the United States, many at the national 9 level and many more within specific localities in the United States, and the vast majority of those 10 11 subsequent studies documented a similar pattern of 12 disparate exposures to health-harming pollution among 13 black Americans.

14 In this particular application, which Ο. 15 pollutants particularly impact black communities? Well, I believe Dr. Grineski and everyone 16 Α. 17 were focused on a table in there. And so there have been studies that have focused on those specific 18 19 pollutants that are expected to have some sort of significant predicted impacts as a result of this 20 21 application. That includes PM2.5, PM10, and nitrogen 22 dioxide, and so there have been studies conducted of 23 those.

24 Just by coincidence, I was working on a paper that was focused on PM2.5, so I recently conducted a 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

1 comprehensive review of these environmental

justice-type studies that have focused on racial-ethnic disparities in exposure specifically to PM2.5 in the United States, and that review led to the following conclusions for me.

Despite examining different study extents and б applying various statistical analysis techniques, each 7 8 of the 29 studies that I was able to find focused on 9 PM2.5 found disparities in exposure based on people of 10 color status. And when I refer to "people of color," 11 I'm talking about people of any nonwhite race or people 12 who are of Hispanic, Latino ethnicity. And many of 13 those studies actually focused on particular people of 14 color groups. So specifically, all of the studies examining nonhispanic black or African American status, 15 and that's 22 of the 29 studies, found it was 16 17 associated with disproportionately high PM2.5 exposure, 18 right.

And there have been studies -- I mean, one 19 thing that's important to note is that nationally PM2.5 20 21 pollution has declined substantially over the past several decades. And so four recent national level 22 23 studies that have looked at PM2.5, changes in PM2.5, as 24 well as disparities based on race ethnicity in PM2.5 exposure, have found that while absolute levels of 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

PM2.5 have declined over several decades, those same disparities that were documented in the early environmental justice studies, whereby black people experienced higher exposure relative to the general population than white people in particular, have persisted or even increased across the decades to the present day, right.

8 And so the same pattern of disproportionate 9 exposure for black Americans applies to the studies of 10 PM10 and nitrogen dioxide that I have been able to find 11 as well.

And I could focus -- there's four studies in 12 13 particular that have been published in some of the most 14 prestigious scientific journals that have illustrated patterns of disparities for black Americans in terms of 15 their exposures to PM2.5, PM10, and nitrogen dioxide. 16 17 I think I submitted four of those articles as exhibits, and I could go through just briefly and sort of 18 describe those findings, if that's possible. 19

Q. Yes, please. Would you please briefly describe each one? And these are Exhibits 14, 15, 16, and 17 and 18? No. There's four. 14, 15, 16, and 17, correct?

A. I believe so. So the first one is one of the only studies I've been able to find that actually

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1 examines all three of those pollutants, PM2.5, nitrogen 2 dioxide, and PM10, and it examines it nationwide. Ιt 3 was recently published in 2021 in a journal called 4 Environmental Health Perspectives. It's called 5 Disparities in Air Pollution Exposure in the United States by Race-Ethnicity and Income, 1990 to 2010. 6

And what they did in this analysis, it's a 7 8 fairly simple analysis approach, they basically 9 calculated the mean exposures for the average based on 10 the location of residence for people nationwide, as 11 well as estimates of exposure to the air pollution 12 concentrations for these three pollutants. They 13 estimated sort of the average exposure for a black 14 American versus a white American. They also focused on 15 Hispanic, Latino, and other groups as well, but I'm 16 just making comparisons here between black and white 17 populations.

They found that for mean PM2.5 concentration, 18 19 the average black exposure was to 10 micrograms per meter cubed, whereas for whites it was 9.1 micrograms 20 21 per meter cubed. In terms of the mean nitrogen dioxide 22 concentration for blacks, 9.7 parts per billion, whites 23 7.2 parts per billion. For the mean PM10 24 concentration, 19 micrograms per meter cubed for the black population, 18 micrograms per meter cubed for the 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

1 white population.

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2	In that study they also focused on
3	state-level analyses of exposure disparities. And for
4	each of the three pollutants, the black versus state
5	average disparity and exposure was notably large in
б	Arizona. There's a Figure 4 in there depicts that
7	pattern. But Arizona is a state where you have the
8	black population really experiencing notably disparate
9	exposures relative to the state average, okay.
10	The most exposed group in this study overall
11	across U.S. states and each of the pollutants examined

disparities in exposures to PM2.5 and PM10 were marked, there were clear disparities, the nitrogen dioxide exposure disparities were found to be the most pronounced in that study, okay.

was the nonhispanic black group. And while those

17 The second study -- and what's interesting with these environmental justice studies is they keep 18 19 -- people are taking these more and more seriously, it seems. Prior to a few years ago, people were not 20 21 publishing these in journals of science and nature or 22 seeing these in the National Academies of Sciences, and 23 now they are. People are taking this quite seriously nationally, which is interesting to see. 24

25 A second study I'll focus on here was COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

published in Nature in 2022, and it's called Air 1 2 Pollution Exposure Disparities Across the U.S. 3 Population and Income Groups. And in a nutshell, that 4 study found that the average PM2.5 concentration for 5 the black population was nearly 14 percent higher than that of the white population nationwide. 6

And again, I'm just trying to lay out the 7 8 national context for this discussion of environmental 9 inequality in exposure to the pollutants of concern 10 here, okay.

The next study I'll focus on here focuses 11 12 specifically on -- it was published in 2021. It really 13 broke down exposure to PM2.5 specifically in terms of different sources of PM2.5. And what the study found 14 is that the average PM2.5 exposure from all domestic 15 human-caused sources was 6.5 micrograms per muter cubed 16 17 in the contiguous United States. For the black population, though, it was 7.9 micrograms per meter 18 19 cubed. For whites, 5.9 micrograms per meter cubed. 20 Emission sources that disproportionately 21 exposed black people to PM2.5 were pervasive throughout

22 society. What they basically concluded is that it's 23 not one specific economic sector that is driving the 24 disparities that black people experience. It's nearly every sector in our economy and in our industrial 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

society that leads to disparate exposures for black
 Americans.

3 The final one I think is particularly 4 relevant to this case. And again, it's a national 5 context. It doesn't focus specifically on Randolph. It's a national-level study. But I think it's relevant б to this case because what I've understood about this 7 8 case, this application, is that the benefits of the 9 expansion of the facility would largely serve the 10 Phoenix metro area, not the community of Randolph in 11 particular.

12 And so the study I'm going to focus on now is 13 called Inequity in Consumption of Goods and Services 14 Adds to Racial-Ethnic Disparities in Air Pollution Exposure. And basically, this study linked PM2.5 15 exposure to the various human activities that are 16 17 responsible for PM2.5 pollution, and they use the results to examine pollution inequities defined as the 18 19 difference between the environmental health damage caused by a racial-ethnic group through their 20 21 consumption patterns and the damage that that group 22 experiences in terms of their exposure to PM2.5 23 pollution where they live, right.

And the results showed that in the United States PM2.5 exposure is disproportionately caused by COASH & COASH, INC. www.coashandcoash.com COASH & COASH, AZ

785

786

consumption of goods and services mainly by nonhispanic 1 2 white people, but disproportionately inhaled by black people, as well as other people of color. And what 3 4 they summarize is that nonhispanic whites experience a 5 pollution privilege. They experience 17 percent less air pollution exposure than what is caused by their 6 consumption. In contrast, black Americans bear a 7 8 pollution burden of 56 percent excess PM2.5 exposure 9 relative to the exposure caused by their consumption. And so that's -- yeah, that's the other case I wanted 10 11 to focus on.

Q. In addition to these studies that you've already told us about, you participated in a study regarding noise pollution and light pollution. Can you tell us about first the light pollution study and then after the noise pollution study?

17 Α. Yeah. So my research team has conducted a few studies. And actually, each of those studies 18 19 showed that black Americans, or African Americans, experience disparate exposures to light pollution and 20 noise pollution nationwide in the United States. And I 21 22 do understand that those are concerns of the community. 23 The light pollution analysis was led by a 24 student of mine who was a graduate student, and she

25 basically used remotely-sensed imagery for nighttime COASH & COASH, INC. www.coashandcoash.com602-258-1440 Phoenix, AZ

lights and derived basically measures of light 1 2 pollution from that information and then assessed, 3 using data at the census tract level, assessed how the 4 composition of people from various racial-ethnic groups 5 associated with the light pollution outcome. And what she found is that the black -- increasing composition б of black or African American residents in census tracts 7 8 nationwide is associated with increasing light 9 pollution in their neighborhoods.

10 We found something similar with noise. The 11 noise data we obtained from the U.S. government, I 12 believe it's the United States Department of 13 Transportation. They have something called the 14 National Transportation Noise Map. And so one thing -one caveat with that study is we focused specifically 15 on road noise and aviation noise, rather than 16 17 industrial noise, which I think may be the concern in this case of this community. But the underlying point 18 19 is that with those transportation noise sources you have those disparities as well that the black African 20 21 American community confronts in the United States. 22 Ο. What was the impact of the light pollution on 23 the African American communities? 24 Well, so I did not examine the health effects Α. of that light pollution. But there is a whole body of 25

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research -- similar to the air pollution epidemiology 1 2 studies that Dr. Grineski covered, there are epidemiological studies of exposure to nighttime light. 3 And those studies find that they affect the circadian 4 5 rhythms of people in ways that lead to worse sleep, but also create hormonal imbalances within people that lead 6 to excess cases of cancer and other maladies that 7 8 basically lead to morbidity and mortality in people.

9 The same has been found for noise. Noise has 10 pretty profound health impacts that are well documented 11 in the epidemiological literature.

12 Q. Is there anything else you would like to add13 to your testimony?

14 You know, the one thing I reflected on after Α. 15 I sort of thought about my testimony is that I do want 16 to make the point that it isn't just black African 17 American communities that experience disparate exposures to these pollutants. Many of those same 18 19 studies I referenced also note the increased exposures in Hispanic and Latino community -- among Hispanic and 20 21 Latino people to these same pollutants. So I know that 22 Randolph has -- is historically black, but also today 23 has a pretty high composition of Hispanic and Latino 24 people, and I think that's worth pointing out as well. 25 Could you summarize your conclusions and Ο. COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

1 recommendations?

2 Α. Yeah. I mean, if I step back and reflect on 3 what I understand about this case in the context of environmental justice in the United States, the way I 4 view it is that this proposed project would reproduce a 5 pattern of environmental inequality that's been well 6 7 documented in the environmental justice research 8 literature. And given the historic and current social 9 characteristics of the community of Randolph, the clear increases in pollution that the proposal highlights 10 11 that are attributable to the expansion and the lack of 12 any tangible benefits to the community, I tend to sort 13 of view this as a case of environmental injustice if 14 this expansion went through. 15 MS. POST: Just for clarity, I'd like to make sure to move for admission of Exhibits 13 through 17 16 17 and pass the witness for cross. MR. ACKEN: I'm going to object to the 18

19 admission of those, and I think we should wait for 20 cross.

21 CHMN. KATZ: I'll wait until after 22 cross-examination and rule on that, but I will ask one 23 question.

Are the four studies that you made reference to, Dr. Collins, studies that are relied upon regularly COASH & COASH, INC. www.coashandcoash.com 602-258-1440 Phoenix, AZ

1 by people in your profession? 2 MR. COLLINS: Oh, yes. Yeah. And they're highly cited studies. I mean, a few of them are very 3 4 recent, 2022. CHMN. KATZ: And have you relied upon --5 б MR. COLLINS: It just got published, you know, recently. But the studies that I -- yeah, those 7 8 studies are in some of the highest-tier journals you 9 could publish any research in. There are no fringe 10 outlets. 11 CHMN. KATZ: And did you rely upon these four 12 studies in formulating your opinions in this case? 13 MR. COLLINS: I did, I reflected on those. I 14 reflected on them specifically because they addressed some of the pollutants of concern in this case. 15 CHMN. KATZ: And I'll rule on --16 17 MR. COLLINS: There are many other studies out there -- there are many other studies out there 18 19 that document similar patterns, but those many other studies don't necessarily focus on these particular 20 21 pollutants. CHMN. KATZ: And again, I'll hold off on 22 23 ruling on the admission of these four documents. And the other one is, what, the resume of this -- or, 24 curriculum vitae of the witness? 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

1 MS. POST: Right. 2 CHMN. KATZ: Exhibit 13? 3 MS. POST: Correct. 4 CHMN. KATZ: Okay. I'll go through cross-examination, and we'll either deal with the 5 exhibit issue when we're done with cross and redirect 6 or I'll deal with it later. 7 But that all being said, why don't we go 8 9 Are you going to begin in the same order down ahead. 10 the table as before? 11 MR. ACKEN: Thank you, Chairman. 12 13 CROSS-EXAMINATION 14 BY MR. ACKEN: 15 Good afternoon, Professor Collins. Can you Ο. 16 hear me okay? 17 Α. Yes, I can. I'm Bert Acken, counsel for Salt River 18 Ο. 19 Project in this proceeding. I want to take a step back and understand 20 21 what documents you reviewed related to this project 22 before the Committee. Did you --23 I actually -- I reviewed the application that Α. 24 you discussed with Dr. Grineski. 25 And the application you were referring to is Ο. COASH & COASH, INC. 602-258-1440 www.coashandcoash.com

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the Certificate of Environmental Compatibility 1

2 application?

3 Α. Yes.

4 Did you review the air quality permit Ο. 5 application?

Yeah, I reviewed the air quality -- the б Α. 7 material in that document pertaining to the air 8 pollutants that we just discussed and that Dr. Grineski 9 discussed. I did not review a separate air permit application. 10

11 Ο. Thank you. And so in your review of the CEC 12 application, you understand there were analyses done, 13 site-specific analyses, with respect to light pollution 14 and noise pollution?

15 Α. I didn't see the light pollution and noise 16 pollution elements in the CEC. I focused specifically 17 on the air quality one. So I did not see the air -the light and noise elements. 18

19 And light is probably -- I should be more Ο. precise -- the visual resources analysis? 20

21 Oh, yeah. No, I didn't put that together. Α. 22 No.

23 And just to clarify, you did not review the Ο. 24 noise study in Exhibit I?

25 T did not. Α.

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793

Q. What specific studies did you conduct in
 Randolph?

A. I've never conducted research on the ground4 in Randolph.

5 Q. Okay. And so all of your testimony -- none 6 of your testimony is based on site-specific studies of 7 the Randolph community?

A. The national studies that I reviewed include Randolph, the census data and the air pollution measures include this community, but they're not focused specifically on Randolph as one -- as a single study extent, if that makes sense.

Q. We'll go through it, and maybe you can help me understand it. Let's start with what's been marked as Randolph Exhibit 14. And this is the study of air quality from 1990 to 2010. Do you have that in front of you?

18 A. I don't, but I know the one you're talking19 about.

20 Q. Can you point me to where it references or 21 incorporates the Randolph community?

A. It would be under Arizona. It would be included within the United States and then the state of Arizona. That's where Randolph is.

25 Q. No, I understand that. But so you're looking COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

at it on an Arizona basis, not a Randolph basis? 1 2 Α. Yeah. No, you're going to be hard pressed to 3 find many studies that focus specifically on Randolph 4 in the peer-reviewed scientific literature. So the only studies that this Committee has 5 Ο. to rely on are the studies done --6 Nationally that include Randolph, that 7 Α. 8 include Arizona and Pinal County as part of the study 9 extent. 10 I'm sorry. We were talking over each other, Ο. 11 and maybe that's due to the lag. So is it your 12 testimony that you're not aware of any studies that 13 address Randolph specifically? 14 Α. I'm not aware of an environmental justice study that focuses only on the community of Randolph. 15 16 Ο. Okay. Thank you. Next question for you in 17 14. You testified that overall pollution was declining between 1990 and 2010, is that correct? 18 19 Particulate matter specifically, yeah. There Α. 20 have been declines in particulate matter, yeah, 21 nationally. 22 Ο. But I believe you said that you didn't see a 23 consistent decrease for -- or, how did you phrase it? 24 It was --I think you're talking about the absolute 25 Α.

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1 disparity versus relative disparity.

2 The relative. The relative disparity. Q. Α. Yes. So what several papers who have 3 Yes. 4 looked at this issue longitudinally across several 5 decades have found is that you've had generally declining PM2.5 concentrations nationally. And with 6 that, you see sort of a -- because there's such a 7 8 marked decline occurring generally in PM2.5 9 concentrations, the difference -- the absolute difference, in terms of the micrograms per muter cubed 10 11 concentration that the average black person versus 12 white person is exposed to, that absolute gap has 13 declined, but the relative difference in exposures, in 14 terms of the proportional increase that the average black American experiences relative to a white 15 American, those remained the same or increased. 16 The 17 Jbaily study, 2022, in Nature, documented actually an increased relative disparity between black Americans 18 19 and white Americans. 20 Q. Okay. But the disparity as an absolute number has decreased? 21 22 Α. Yeah. Yeah. By nature of just the absolute

23 decline in PM2.5 levels, yes.

Q. And does this study, I'm still referring to Randolph 14, specifically address impacts associated COASH & COASH, INC. www.coashandcoash.com

with a natural gas expansion? 1 2 Α. I don't believe so, no. They're modeling 3 PM2.5 concentrations generally, so it's all source. Ιt it's not source-specific. 4 Next, I want to turn your attention to 15. 5 Ο. And this is the one entitled PM2.5 Polluters 6 Disproportionately and Systemically Affect People of 7 8 Color in the United States. Are you familiar with 9 that? 10 Yes. Α. 11 Are you familiar with the attainment status Ο. 12 of the area in which the expansion project is located? 13 With regard to which pollutants? Α. 14 Q. PM2.5. 15 My understanding is that it's in attainment, Α. 16 Pinal County. 17 And your understanding is correct. Thank Q. 18 you. 19 On Page 3 in the discussion -- since you don't have it in front of you, I'm going to read it to 20 21 you. It says, "First, we use emission amounts and 22 locations, reduced complexity air quality modeling, and 23 population counts that all contain previously quantified uncertainty." Did you hear that? 24 25 Α. Yes. COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

1 MS. POST: Could you tell me where on Page 3 2 you're reading? MR. ACKEN: Oh, sure. This is Page 3 in the 3 4 first paragraph under "Discussion" after it says --5 MS. POST: Got it. MR. ACKEN: -- "Our results come with б 7 caveats." 8 MS. POST: Got it. 9 BY MR. ACKEN: 10 So what reduced complexity air quality Ο. 11 modeling are they relying on? I don't have it in front of me right now. 12 Α. 13 Yeah, I don't have the paper in front of me right now. 14 I'm not certain. I haven't memorized all the methods employed in each of these studies. 15 16 Ο. Okay. So you can't speak to the reduced complexity air quality modeling used in this study? 18 Α. No, not right now. I could probably review 19 it and speak to it, but -- yeah. That's okay. All right. Next, we're going 20 Q. 21 to -- oh, before I leave that, where can I find in that 22 study where it addresses the impacts associated with a 23 natural gas expansion project? I believe there is a category reviewed in 24 Α. there that focuses on like electric generation, but I 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

797

don't see anything in there that's -- I don't believe 1 2 there's a natural gas focus in that paper. Okay. So not only is there not a natural gas 3 Ο. 4 expansion focus, there's not a natural gas focus 5 period? Oh, I don't know if that's true. I don't 6 Α. believe that's true at all. I think it's subsumed 7 under another category and not possible to actually 8 9 disaggregate given what's presented in the paper. 10 Okay. So it does not -- you can't -- I can't Ο. 11 pull out of this study where it discusses natural gas 12 expansions? 13 Yeah. No, you'd probably -- yeah, it's going Α. 14 to be hard to find that in any paper. Yep. Okay. Let's talk about 16. 15 This is Air Q. Pollution Exposure Disparities. And this one -- let me 16 17 make sure I'm on the right one. CHMN. KATZ: That's Air Pollution Exposure 18 19 Disparities Across U.S. Populations and Income Groups. 20 MR. ACKEN: Bear with me. I just found out 21 he was testifying this morning. BY MR. ACKEN: 22 23 Okay. So on 16 I have a couple questions, Ο. 24 and they'll be familiar to you. Starting off, where does this study address impacts associated with natural 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

1 gas expansion projects? 2 Α. The focus isn't on natural gas expansion 3 projects in Randolph. 4 And I'd like to turn your attention to Page 3 Ο. of that study where it talks -- and the heading is 5 Disparities Among Racial and Ethnic Groups. 6 Can you repeat that? 7 Α. 8 Ο. The heading is -- Disparities Among 9 Racial/Ethnic Groups is the heading on Page 3. 10 CHMN. KATZ: And it's Page 230 of --11 MS. POST: It's Page 2. 12 CHMN. KATZ: Okay. But it's also Page 230 of 13 the study, if anybody is opening that. 14 MR. ACKEN: Oh, it's Page 3 on my version 15 because of the cover. 16 MS. POST: Okay. 17 CHMN. KATZ: Bottom line, there's a section 18 called Disparities Among Income Groups. 19 MR. ACKEN: Yeah. For clarity of record, that's 229. My apologies. 20 BY MR. ACKEN: 21 22 Ο. And that says that the U.S. EPA is required 23 to re-examine the NAAQS every five years. Is that your 24 understanding? 25 It is. Α. COASH & COASH, INC. 602-258-1440

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799

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1 Ο. And it goes on to say, "On average across the 2 U.S., we found that PM2.5 concentration levels 3 decreased from 2000 to 2016 with a population weighted 4 average of PM2.5 having decreased 40.4 percent from the 5 year 2000 to 2016." 6 Α. Sure. Is that your understanding? 7 Ο. 8 Α. Sure. Yeah. Okay. Let's turn to 17. And again, where 9 Ο. can I find the discussion of natural gas expansions in 10 11 this study? 12 Yeah. I think part of -- if you actually Α. 13 look at -- if I can make one comment about the focus on 14 natural gas. If you actually look at the application, the focus is on how much the natural gas expansion will 15 contribute to ambient background levels of these 16 17 pollutants. These studies speak directly to those ambient levels. 18 19 I don't think I got an answer to my question. Ο. Where does this --20 21 Α. No. No, but I think -- yeah, there's not --22 again, you're not going to find a study that focuses 23 only on natural gas expansion. 24 And I'm not even asking for a study that only Ο. addresses natural gas expansion, if I could finish, I'm 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

1 asking where does this study address natural gas
2 expansions?

A. This study basically -- because monitoring -the regulatory monitoring network informs the air pollution models they have, natural gas expansion -any increase in emissions and concentrations of PM2.5 caused by a natural gas expansion would be captured theoretically in the emissions and concentration estimates that they provide.

Q. You broke up a little bit on me. And certainly the air quality application addresses the emissions from the facility, as does the application prepared for the CEC. But again, my question is: On this exhibit -- and I think you're getting tired of this line of questioning, so let me ask you to turn to --

17 Α. I'm not. I'm not, actually. The point I 18 just made, you said I was breaking up, the point I just 19 made is that those emissions -- any additional emissions from natural gas expansion projects that 20 21 would occur near a regulatory monitor would likely be 22 picked up in the data that are presented in that study. 23 Now, the study doesn't analyze those specific 24 additional emissions from the expansion, but they would presumably be estimated in the pollution modeling. 25 COASH & COASH, INC. 602-258-1440

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1 Q. I'd like to turn your attention to Figure 1. 2 I'd like -- and somehow I've got to figure out a way 3 for you to see it, so maybe we could pull that up on 4 the screen. CHMN. KATZ: Is that the one with all the 5 maps of the United States in the left column? 6 7 MR. ACKEN: It is. 8 Thank you. 9 BY MR. ACKEN: 10 Do you have that in front of you? Ο. 11 Α. I don't. But I've seen this figure before; 12 although, I can't read the text, yeah. I don't have it 13 in front of me, but I --14 MS. POST: Can you see it on the screen now, 15 on the Zoom? MR. COLLINS: I can. I can see it on the 16 17 screen, yes. 18 BY MR. ACKEN: 19 Can you show me where noncoal electric 0. utilities are on the bar chart under -- for emitters? 20 21 Α. Yeah, on that chart I cannot see the text, so it would be difficult for me to do that. But I could 22 23 try to speculate if I had it in front of me, but it's 24 going to be difficult for me to do that here. Q. Subject to check, I'm going to have 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

1	whoever	

2	A. Can I say, though, the underlying data for
3	this are from the National Emissions Inventory. So the
4	National Emissions Inventory should capture emissions
5	from noncoal generating facilities. They should be in
6	the National Emissions Inventory. And so because
7	they're using a National Emissions Inventory, it's
8	going to be in one of those boxes. Which one, I'm not
9	certain. I don't even see the text in front of me
10	right now.
11	Q. Let's blow that up just a little bit, if we
12	can. The cursor first, make it larger so he can see
13	it.
14	A. Okay. There you go.
15	Q. Okay. Now can you read "off highway"?
16	A. Yeah, I can read "off highway." Yep.
17	Q. Can you read "miscellaneous"?
18	A. Yes, I can read "miscellaneous." I can see
19	"light-duty gas vehicle" and I can see "industrial."
20	Q. Can you see what is between off highway and
21	miscellaneous?
22	A. Barely, yeah.
23	Q. Would you take my word for it that it says
24	"noncoal electric utilities"?
25	A. Okay. There you go.
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CHMN. KATZ: I won't dispute that. That's 1 2 what that really tiny box does show. 3 MS. POST: I won't dispute it either. 4 MR. ACKEN: It's a really tiny box. 5 BY MR. ACKEN: And so then it's connected to a map of the 6 Ο. 7 United States, if we could scroll over and have the 8 cursor show that. And can you tell me the impact in Arizona from noncoal electric utilities as shown in 9 10 Figure 1, PM2.5? 11 Yeah, no. No. No. I'm sure they could Α. provide data that would -- the data contains that. But 12 13 because of the proportions of the PM2.5 that emissions 14 are attributable to other uses, what you're seeing is that it washes out across those sources. Does it mean 15 16 that it's unimportant? I don't think so. 17 But it doesn't show that as having any PM2.5 Ο. concentration --18 19 I think you may be misinterpreting what's Α. 20 going on in those maps. 21 Let me ask you the question. 0. 22 CHMN. KATZ: One at a time. Hold on. 23 MR. COLLINS: They're allocating all of the 24 emissions of PM2.5 in the country and they're including them on the same scale such that when you have 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

something that actually is a small component, a smaller 1 2 source relative to the others, you don't actually see 3 the pattern in the map. And that's just an issue --4 it's a presentation issue, again, because they're not 5 focused solely on natural gas expansion projects. BY MR. ACKEN: 6 7 Well, that figure of the United States is Ο. 8 specific to noncoal electric utilities, correct? Yes 9 or no? 10 It is, yes. It is, but it's --Α. 11 Ο. Yes or no? 12 Each of the maps for each of the sources has Α. 13 the same scale. 14 No, I understand what you're saying. But my Ο. 15 question was: Does it show natural gas -- or, excuse 16 me -- noncoal electric utilities on that map? And it's 17 a simple yes or no question. You'll get a chance to 18 follow up. I don't see it here. No, I don't see it from 19 Α. my view now. And it could be an issue too of the 20 21 National Emissions Inventory data not encompassing the 22 project. 23 Okay. And then on the right side from Ο. noncoal electric utilities there are -- well, excuse 24 me -- for all of the emitters, they then show these 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

blue lines connected to end use. Do you see that? 1 2 Α. Yes. Do you see a single blue line from noncoal 3 Ο. 4 electric utilities to any end use, yes or no? It would be hard to see in the map right now. 5 Α. I don't see it, but, yeah, it's a small -- it's such a 6 7 small source. Given the figure, it's hard to 8 ascertain. 9 Well, we'll blow it up for you. Ο. 10 CHMN. KATZ: Counsel, in just a couple of 11 minutes -- we've been going for probably at least an 12 hour and a half, and I want to give the --13 MR. COLLINS: Yeah, I actually do see what 14 appears to be a line, but I can't -- honestly, I can't 15 tell from here. It's apparently encompassed in there. 16 It's just a small component included on a scale with 17 much larger sources, so it doesn't show up very well. BY MR. ACKEN: 18 19 So your testimony is that there is a blue Ο. line from noncoal electric utility? 20 I can't ascertain. I see a small blue -- I 21 Α. 22 do see a small blue line at the bottom of that. Ι 23 cannot ascertain if that line -- sorry. One sec. 24 Oh, I see now where you're talking about, the noncoal electric. It's white space that's included 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

there, yep, so it doesn't look like there's a line 1 2 connecting it in that figure. I think it's very small 3 and they just haven't represented it, but I don't know. I couldn't say. 4 MR. ACKEN: Mr. Chairman, I would have been 5 done a while ago if I could have gotten a yes or no. 6 BY MR. ACKEN: 7 8 So, yes or no, is there a blue line from the Ο. 9 noncoal --10 Α. I don't see one. I don't see one now, yeah. 11 Ο. So that's a no? 12 Yes, that's a no. Α. 13 MR. ACKEN: Thank you. I appreciate that. 14 No further questions. 15 CHMN. KATZ: What I'm going to do is we'll 16 take about -- sorry to do this to you, Professor, but 17 we're going to take about a 15-minute break. I'm showing it about a quarter to 3:00, or 2:46, I think, 18 19 our time. I think you're on the same time as we are. So we'll resume at about 3:00 or a couple minutes past, 20 21 okay? 22 MR. COLLINS: Okay. 23 (Off the record from 2:45 p.m. to 3:00 p.m.) 24 CHMN. KATZ: I don't know with certainty, Mr. Acken, whether you were finished or had a few more 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

1 questions. 2 MR. ACKEN: Thank you, Mr. Chairman. I have 3 nothing further for this witness. 4 CHMN. KATZ: Okay. We'll then proceed to 5 Mr. Rich, if he has questions of this particular witness. 6 MR. RICH: Just a couple of questions. Give 7 8 me one second to log back into my computer. 9 CHMN. KATZ: Take your time. 10 11 CROSS-EXAMINATION BY MR. RICH: 12 13 Good afternoon. I don't know if you were Ο. 14 watching earlier, but my name is Court Rich and I'm an 15 attorney representing the Sierra Club. I have just 16 have a couple of questions for you. 17 Have you been able to watch any of the testimony that's come before you from other witnesses? 18 19 CHMN. KATZ: You're muted. I'll make sure it's not on our end, but you're still not coming 20 21 through. Try again. 22 MR. COLLINS: Is it on your end? 23 MR. RICH: We can hear you now. 24 CHMN. KATZ: We can hear you now. 25 MR. COLLINS: Okay. Okay. Good. I don't COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

1 know what happened there.

2 The only testimony I've seen so far was from3 Mr. Grineski.

4 BY MR. RICH:

Q. Okay. Great. Well, earlier SRP had a witness, one of their consultants on this case, who testified that essentially there was not an issue with environmental justice in this proceeding. And I guess, just in a summary, what's your position on whether or not there is an environmental justice issue?

11 Α. Yeah, that's -- for me it's -- I would say 12 the opposite. For me, the issue surrounds the 13 characteristics of the community, the fact that it's a 14 historically black community and today remains --15 continues to have a very high composition of black African American residents, as well as Hispanic, Latino 16 17 residents, and I understand some Native American presence as well, and that this community is confronted 18 19 with a facility that releases harmful pollutants into the nearby environment where they live and, to my 20 21 understanding, hasn't received substantial benefit from 22 it. It falls in line with my understanding of 23 environment injustice.

Q. Okay. And you're not being compensated for giving your opinion today, are you?

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Α. No. No. This is purely pro bono. I'm not receiving anything. MR. RICH: Okay. That's all I have. Thank you. MR. STAFFORD: No questions, Chairman. CHMN. KATZ: Anything further from Ms. Post? MS. POST: Yes. CHMN. KATZ: Oh, let me ask, does the Corporation Commission have any questions? MS. UST: No questions from Staff. Thank you. CHMN. KATZ: Thank you kindly. REDIRECT EXAMINATION BY MS. POST: Mr. Acken asked you several times about Ο. whether these particular studies focused on natural gas or not. And my question would be: When you're looking at the ambient pollution level in the air from PM2.5 and PM10, does it matter where it comes from? Α. When people are studying health effects and

22 outcomes, they typically look at the ambient levels.
23 The source-specific contribution isn't something, when
24 people are concerned about health effects, they are
25 typically looking at to understand the relationship
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between a pollutant exposure and a health outcome. 1

2 Now, in this case, I do think it's relevant. 3 I think it's -- obviously the question -- there are 4 questions surrounding how much pollution -- added 5 pollution will be created by the expansion of the facility, and obviously the case revolves around that. 6 7 But the question as to the impacts on this community 8 have to be considered in reference to ambient pollution 9 levels.

10 And so I think there was -- yeah, it was a 11 little bit hard for me to follow that, I guess, because 12 for me the ambient pollution levels are a critical part 13 of the story as to whether any additional pollution 14 would cause harm or not. And so, you know, even the 15 report focuses on those ambient background pollution levels with respect to additions that would come from 16 17 the expansion of the facility. So I don't -- yeah. Ι guess my point is that all source pollution matters. 18 19 It's the concentrations that are key in terms of considering the impacts on a population. 20

Dr. Grineski testified just before you, of 21 0. course, and she said that even small levels of increase 22 23 harm a person's health. So even if the level of increase is small, does that have an impact on the 24 primarily minority population of Randolph? 25 COASH & COASH, INC. 602-258-1440

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Yeah, I see what you're saying. That's my 1 Α. 2 understanding too. I have some familiarity with recent studies in the air pollution epidemiology literature 3 4 that have found that the -- most of these studies have 5 not found a safe threshold. So like the NAAQS, our National Air Quality Standards, are founded on the 6 presumption that there is some sort of safe exposure 7 8 threshold to these pollutants. The air pollution 9 epidemiology literature is increasingly finding very clear evidence that really such safe exposure 10 thresholds does not exist, that increases at relatively 11 12 low levels of ambient background pollution are 13 associated with adverse health effects in people. 14 Some studies are finding, with PM2.5, that

actually the dose response relationship at lower levels 15 16 of exposure is actually steeper and tails off, such 17 that the increases at low levels may actually be more health harming than increases at high levels. 18 So 19 that's the point that Dr. Grineski is making. I do -based on what I'm familiar with in the literature, 20 21 those were well-founded points.

Q. And there was a bit of a communication problem between you and the other attorney regarding -you said that you thought he was misinterpreting or misunderstanding some of the studies as he was talking COASH & COASH, INC. www.coashandcoash.com 602-258-1440 Phoenix, AZ

about how to allocate PM2.5 through the entire United 1 2 States or just in Randolph or in Pinal County or in 3 Arizona. Could you explain what misunderstanding you 4 think he was under?

Well, I think the point -- my understanding 5 Α. was that he thought that these studies didn't focus on 6 Randolph or did not maybe perhaps include Randolph in 7 8 the studies, and that's not actually the case. All the 9 studies mentioned actually were inclusive of -- they're national studies in the contiguous United States. They 10 11 exclude Alaska and Hawaii. So if you're focusing on 12 Alaska or Hawaii, I would say, well, the study doesn't 13 really encompass those states. But these studies have 14 focused on the contiguous United States. Randolph and Arizona are included in those studies, is one thing I 15 would clarify. 16

17 So just because a specific small little area Ο. 18 like Randolph is not mentioned in this study, does that 19 mean that the findings do not apply to that place?

I would say I would disagree with that idea, 20 Α. 21 yes, that the findings are inapplicable to the case of 22 Randolph if, for some reason, the community of Randolph 23 isn't mentioned in a study that focuses on the entire 24 contiguous United States.

25 MS. POST: I have no further questions. COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

CHMN. KATZ: May this witness be excused? 1 2 MEMBER HAMWAY: No, I have a question. CHMN. KATZ: Oh, I keep doing that. 3 4 Ms. Hamway -- or, Member Hamway, please. MEMBER HAMWAY: Okay. So I'm just trying to 5 get a better understanding for myself of when 6 environmental justice or environmental racism --7 8 CHMN. KATZ: Hold on. Perhaps -- I think 9 we're getting feedback from your voice going through the speakers of Dr. Collins and it getting -- I don't 10 11 know how we remedy that. MEMBER HAMWAY: Is it better close or back? 12 13 CHMN. KATZ: I don't think it's you. I think 14 it's coming out of his speakers and going back into the 15 microphone of the Professor. 16 MR. COLLINS: I'm going to mute while you 17 speak. 18 CHMN. KATZ: Okay. Go ahead. 19 MEMBER HAMWAY: I don't think that's doing it. I think it's us. 20 CHMN. KATZ: Well, now that different. Go 21 22 ahead. You might need to go closer, but we were 23 getting feedback. 24 MEMBER HAMWAY: Closer or back? 25 CHMN. KATZ: Closer. COASH & COASH, INC. 602-258-1440

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MEMBER HAMWAY: Okay. So what I'm trying to get an understanding of is -- because I do land use decisions, have been doing them for a long time, so I just am trying to make myself more aware of when environmental justice or environmental racism might come into play into a land use decision that I might make in the future.

8 And so this property was rezoned from ag to industrial I think in 2011. And if I'm wrong, please 9 10 correct me. So I just want to know if that particular 11 action of a rezoning is environmental racism, or does 12 it have to be next to a community of color or a 13 community of -- a minority community and then does it 14 become environmental justice or environmental racism, or is it until the industrial component is built and 15 begins emitting, is that when it becomes environmental 16 17 racism, or ever?

18 MR. COLLINS: I'm trying to process the 19 question. It's complex. I mean, this is a complex area here. A lot of people have different conceptions 20 21 of what constitutes racism in the first place. Many 22 people think that for something to be a racist act it 23 must be reducible to intentional neglectful or maligned 24 acts. People who study environmental justice tend to conceive of it as something that's more encompassing 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

1 that has structural or institutional features, where 2 racism can occur due to disparate outcomes of a 3 decision where intent wasn't at play.

4 In this case, I would consider decisions that relate to the land use. A lot of people in 5 environmental justice literature do focus on these 6 questions of land use and they think about these issues 7 8 in historical context, like what sorts of decisions 9 paved the way for a particular community to be -- to suddenly, over time -- not suddenly, but over time to 10 11 have industrial sort of land uses concentrate in its 12 midst. And it does matter, you know, what the 13 composition of that community is. And so those things 14 do matter.

I mean, I typically would not see someone make an argument about a case being environmentally unjust if there isn't a population that has particular characteristics, a racial-ethnic minority disadvantage, economic disadvantage is another factor that people consider when they try to assess whether a community may have been subject to environmental injustice.

22 So I'd say that the response depends on the 23 particulars to how I would interpret it. And land use 24 decisions I think do matter, yes.

25 MEMBER HAMWAY: So this community, in the COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

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'20s, was established next to the railroad. So I think 1 2 today you would probably say that that is probably environmental injustice if we put a railroad next to a 3 4 black community, right, or a transmission line? Ι 5 mean, we try to keep these things in corridors, transportation corridors. And in this particular 6 instance, in the 1920s and 1930s, this community grew 7 8 up around the railroad, so --

MR. COLLINS: Right. Yeah, and I think 9 that's the case in a lot of western U.S. contexts. 10 Ι 11 think a lot of communities sprung up around rail lines 12 to begin with. And then with the advent of automobile 13 transportation and air-conditioning in Arizona, you had 14 the sort of urban expansion that people tend to 15 associate with a metropolis like Phoenix, whereby a lot 16 of people now don't live anywhere near a railroad. But. 17 I do believe early settlement in Phoenix, for example, and in many places in Arizona, if you're going back 18 19 to before statehood, you're going to have people settling near rail lines in many cases, yes. 20 21 MEMBER HAMWAY: So it's not the act 22 necessarily of rezoning, it's when the rezoning is next 23 to a sensitive community that it could become 24 environmental racism? 25 MR. COLLINS: Yeah, no one is going to claim COASH & COASH, INC. 602-258-1440

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that something was a case of environmental racism if 1 2 there's no basis for believing that there was a -- that 3 race was at play in any way. Race wouldn't be at play 4 if you had a -- if you didn't have a disadvantaged community there in the first place. 5 б MEMBER HAMWAY: Okay. Thank you. CHMN. KATZ: Any other Committee Members have 7 8 any questions? MEMBER BRANUM: Chairman, this is Member 9 10 Branum. I have a question. 11 CHMN. KATZ: Yes, sir. Go ahead. 12 MEMBER BRANUM: So I don't really know who can answer this for me, but -- I appreciate the 13 14 testimony we just heard, and I'm trying to, I guess, frame what I heard with kind of the air permit 15 16 discussion that SRP had presented in its testimony. I 17 guess I'm just trying to reconcile some of the issues discussed here with the air permit process and I guess 18 19 the standards that the EPA has set and I quess the air permit will hold SRP accountable for too. 20 21 So I guess my question -- the first question 22 is: Is the request here that any additional pollution 23 -- any additional pollution from the operation of this 24 plant not exceed the existing air permit requirements, or is the concern that this -- the community is already 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

impacted, and any additional, I guess, pollution, regardless of whether the EPA guidelines are satisfied by SRP's ability to obtain this air permit, is still unacceptable and should not go forward?

I don't know if my question is clear. I 5 guess I'm just trying to understand if the EPA or the 6 authority having jurisdiction is granting the permit, 7 8 and the agency that the sets the pollution thresholds, if you would -- I'm by no means an expert in this 9 realm, so I'm certainly asking for help. But if SRP 10 11 can obtain a permit, by virtue of getting that permit 12 is the EPA essentially saying that the health risks are 13 known, but because they're under this threshold, we're 14 comfortable with the operation of this plant?

15 MR. COLLINS: Is that a question for me? I 16 just want to --

17 CHMN. KATZ: If you understood it or --18 MR. COLLINS: I understood the gist of it. 19 Some of it I don't think I'm at -- it's not really --20 that larger argument isn't one that I'm necessarily the 21 architect of, I guess.

I think I would tend to lean toward the latter interpretation you said whereby you said we know this community is impacted already and that -- I mean, scientifically we know that increases in pollution are COASH & COASH, INC. www.coashandcoash.com 602-258-1440 Phoenix, AZ

likely to add burden, but that -- sure, the EPA -- I'm 1 2 not even certain. I've looked at the tabular 3 information provided about how these increases may impact air quality. I do see that for many of them 4 5 they will be below the -- they will not put Pinal County in nonattainment status. That doesn't refute 6 the fact that this will not be good for this community 7 8 and may present health harms to this community, if that 9 is an answer to your question.

10 MEMBER BRANUM: Thank you. I think that 11 answers some of what I'm trying to wrestle with, what 12 I'm wrestling with here. And I know that probably 13 under further meditation I could have crafted that 14 question a little bit better, so I appreciate that. And really I think I was kind of putting it out there 15 16 for either you or maybe SRP or whoever.

17 But I guess a follow-up question or idea that kind of popped up in my mind is, earlier I thought I 18 19 heard SRP -- an SRP witness state that the air permit process, there's a public process component of it. And 20 21 I quess my question is: Do you or the citizens of 22 Randolph -- do they plan to participate and basically, 23 I guess, let Pinal County, the agency that's going to 24 be issuing this permit, let them know that there's this concern that even though the thresholds have been set, 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

the plant will not exceed those, that there's still 1 2 this concern and they want the County to take maybe a closer look or another look before it issues this 3 4 permit.

I'm not sure of the intent -- I 5 MR. COLLINS: don't know when the public hearing period is. 6 I do think the community should definitely speak up during 7 8 public comment. That's what that's intended for. But 9 yes, they should definitely take that as an 10 opportunity.

11 CHMN. KATZ: I just had a question, and it's 12 not one that's probably easy to answer. But we have a 13 situation in which some sources of pollution create 14 significant increases in ambient -- poor ambient air 15 quality at or near the source, such as at the plant or 16 close by to the Randolph community, and other sources 17 of pollution disperse from the source fairly quickly and obviously affect the ambient air quality of a 18 19 larger area. And I don't know whether any of the studies have been done with a focus on gas generated 20 21 power on source pollution versus community pollution, 22 and it could make a difference in terms of how greatly 23 the community adjacent or near the plant might be 24 affected.

You're muted, I think.

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1	MR. COLLINS: Yeah, that's interesting. I've
2	done some work looking at other pollutants as well. I
3	think PM10 tends to reside nearby emissions. PM2.5,
4	there's secondary formation that can occur that. It
5	can impact a little bit larger of an area. Ozone is an
б	interesting one. It's entirely secondary formation.
7	And ozone, you know, the highest concentrations are
8	often downwind at great distance from the source. So I
9	see what you're saying. This is complex, yeah.
10	CHMN. KATZ: Thanks.
11	MEMBER LITTLE: Mr. Chairman.
12	CHMN. KATZ: Yes.
13	MEMBER LITTLE: This is Member Little.
14	CHMN. KATZ: Yes, Member Little.
15	MEMBER LITTLE: Sort of in the same lines as
16	what Member Branum was asking, I'm curious and I
17	don't know who can answer this. Perhaps Ms. Post. The
18	whole area is zoned industrial, and I know there's a
19	concrete plant already in existence there. And I'm
20	just wondering, when future industry tries to locate in
21	that area, which they could because it's zoned for
22	that, if the citizens of Randolph intend to basically
23	intervene in those, if that's even possible? I don't
24	know.
25	CHMN. KATZ: That's something I don't think
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602-258-1440 Phoenix, AZ 1 we can answer in these proceedings. But obviously,
2 anybody that might be adversely affected by any
3 increase in industry can bring -- or, can intervene in
4 one of these proceedings or file a lawsuit or whatever
5 they think is appropriate.

6 MEMBER GENTLES: Mr. Chairman, this is Member 7 Gentles.

8 CHMN. KATZ: Yes, sir.

9 MEMBER GENTLES: Just some clarification, because I've been struggling with this the entire 10 11 hearing. The plant is going to double in its size and 12 it's a complete build-out, I believe, correct? And 13 this is addressed to anybody on the SRP team or anybody 14 else. So if that's the case, does that mean that the emissions from the plant will double as well, or does 15 that mean that there's a different standard that will 16 17 be in place based on the size of the plant? I just need a little bit more clarification on that, because 18 19 I'm struggling to understand how a plant of this size would comply with the emissions regulations that are --20 21 that they're trying to meet now.

22 CHMN. KATZ: And I don't know if this witness 23 is capable of answering that, and I don't necessarily 24 want to get into the lawyers trying to give their 25 presentation. We might be able to recall a witness at COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ
1 a later point in time.

2	MEMBER GENTLES: Okay. That's fine. I don't
3	want to slow anything down, but I certainly would like
4	that clarification or at least further understanding.
5	CHMN. KATZ: The one thing that was indicated
б	is that these new generators would be running no more
7	than a thousand hours per year and they wouldn't be all
8	running at the same time, at least as currently
9	planned. But I won't pretend to be a witness in this
10	matter, so we'll see if anybody else later can answer
11	that question.
12	Any other questions, though, for this
13	witness, Dr. Collins?
14	(No response.)
15	CHMN. KATZ: You are excused. I thank you
16	very much for your courtesy and your time. And I don't
17	think we'll be recalling you, but if so, it will be up
18	to Ms. Post to let you know. But thanks kindly.
19	MR. COLLINS: Thank you.
20	CHMN. KATZ: And you may disconnect yourself
21	from us or leave our meeting.
22	Do we have our next witness ready or how are
23	we going to proceed?
24	MS. POST: No, we don't. I could call Ron
25	in; but if we did that, then we're going to be very
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short for witnesses tomorrow morning. Because the two

2 residents were planning to testify tomorrow morning. CHMN. KATZ: I also don't know what the plans 3 would be with respect to witnesses for the Sierra Club. 4 MR. RICH: Mr. Chairman, we had agreed on a 5 6 date certain, and our witnesses are prepared, and one 7 is coming from out of town, to present on Tuesday. 8 CHMN. KATZ: Next Tuesday? MR. RICH: Yes. 9 MR. ACKEN: We had asked for flexibility, but 10 11 -- just to clarify the record. CHMN. KATZ: Yeah, I want flexibility. I 12 13 just want to know whether we're going to leave -- be 14 done early tomorrow and then busy again next week, but 15 hopefully not through the end of the week. 16 MR. ACKEN: So let me speak to the schedule, 17 and maybe I can be a little clear. Again, we had asked for flexibility. WRA and Randolph have given us that 18 flexibility. Sierra Club has said they needed a date 19 20 certain, and so that's what they have -- that's what 21 they have. 22 As far as witnesses go, as Ms. Post said, she 23 has two available tomorrow morning, that I understand. 24 MS. POST: Correct. MR. ACKEN: And then Mr. Stafford has his 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

witness that can go tomorrow afternoon, but can't go
 earlier than tomorrow afternoon. So that's what we can
 do tomorrow afternoon, and then Monday pick up with the
 four remaining Randolph witnesses.

MS. POST: Correct.

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6 MR. ACKEN: So perhaps we can get to a later 7 start Monday so that we don't all -- so again, we can 8 start a little later in the day, we don't have to come 9 down here Sunday evening.

10 CHMN. KATZ: Well, I know a lot of the 11 Members of the Committee and perhaps a lot of the 12 witnesses here and lawyers are planning to travel, 13 whether it's to Phoenix or Safford or elsewhere. I 14 know that I'm not staying and would like to get home 15 Friday evening. The Committee has pretty much agreed 16 that we'd like to start at 1:00 on Monday, even though 17 some might prefer to start earlier. It's just awful 18 hard for us to get up and get --

19MS. POST: Could I speak to that, please?20CHMN. KATZ: Yes, please.

MS. POST: We have two of the witnesses left that didn't speak today, obviously, and they do have time limits and one has to be gone by 2:00. So if we start at 1:00, that's going to be difficult.

25 CHMN. KATZ: Is that Monday?

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MS. POST: Monday. Is it possible to at 1 2 least start at 12:00 or 11:00? CHMN. KATZ: Or we could start at 1:00 and go 3 4 later. MS. POST: Well, one has to be gone by 2:00 5 and the other has to be gone by 5:00. So we could put 6 the -- the one that has to be gone by 2:00, put her on 7 8 immediately at 1:00, and then do her cross and get her 9 out, and then put the other one on. And then I would have Stapp -- he can come after 2:30. 10 11 CHMN. KATZ: Well, do you think we can get 12 things done properly and accommodate the witnesses if 13 we start at 1:00? 14 MS. POST: I think it will be hard. 12:00? Could we start at 12:00 at least? 15 16 CHMN. KATZ: I don't know if we want to get 17 input from the Committee right now or have us let you 18 know tomorrow. 19 MS. POST: Or maybe figure it out tomorrow. 20 I can talk to the witnesses tonight. 21 CHMN. KATZ: Okay. What I think we could do is, obviously, with your two witnesses tomorrow morning 22 23 and Mr. Stafford's witness --24 How long do you think your witness will take, I'm just curious, and what time would we likely start 25 COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

828

1 with that individual, about 1:00?

2 MR. STAFFORD: Are you asking me, Chairman?
3 CHMN. KATZ: Yes, sir.

4 MR. STAFFORD: I anticipate putting him on 5 immediately after lunch. I don't expect him to be on 6 the stand more than two hours, I would think, including 7 cross, hopefully.

8 CHMN. KATZ: What I'm just saying is that we 9 don't need to go into the evening likely late tomorrow. 10 Is there anything we can productively do now,

11 or does it make sense to recess?

12 Yes, Mr. Acken.

MR. ACKEN: We can recess briefly because -and this may or may not be productive, but I'm going to try to see if we can clarify the confusion on what was Table 7. That was a typo error. The correct table is also in the application as Table 5, also in Exhibit B, but on Page 6-3. The PDF number for that is -- I will get to you presently.

20 CHMN. KATZ: Do you want to just take a short 21 recess and perhaps the parties can consult with one 22 another and see whether we need any additional

23 clarification or not?

24 MR. ACKEN: That's fine. Well, if you want 25 to take the time to come back. I just wanted that 26 COASH & COASH, INC. 602-258-1440 27 www.coashandcoash.com Phoenix, AZ

record to be cleaned up as to the correct table. 1 2 CHMN. KATZ: Well, if there's no objection, we could have you do that and allow the other lawyers 3 4 to engage in cross-examination if they feel it 5 necessary on that limited issue. Any objection to 6 doing that? 7 MR. ACKEN: It was brought up in the 8 testimony --9 CHMN. KATZ: I know it was. 10 MR. ACKEN: Yeah, okay. 11 CHMN. KATZ: I mean, it's not normally the 12 time for redirect, but I just want to keep us moving. 13 MR. ACKEN: Yeah, I hear you. 14 CHMN. KATZ: So if there's no objection, we 15 could at least focus only on that one point through 16 you, Mr. Acken, and then allow all of our other parties 17 to cross-examine, if necessary, and then recess for the 18 day and pick back up at 9:00 tomorrow morning. 19 And let me ask you, Ms. Post, do you believe that your witnesses will be -- if we start at 9:00, be 20 21 done by about noon or slightly thereafter? MS. POST: Yes. But you were going to have 22 Diane Brown first at 9:00. 23 24 CHMN. KATZ: Yeah, that's true, but I'm going 25 to give her the same -- she may not like it, but I'm COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

going to give her the same three or four minutes that 1 2 we gave everyone else.

MS. POST: So then we'll have Melvin Moore 3 4 first, because he's the older gentleman that doesn't have a lot of stamina, and then Ron will take longer 5 than Melvin. 6

CHMN. KATZ: But you still think we by 7 8 lunchtime should be done with those two?

9 MS. POST: Yes, we should be done by lunchtime. I'll try to also get Whittaker on hold just 10 11 in case we have time, with your witness or mine in the 12 morning, to see if he can fill in if that happens.

13 CHMN. KATZ: Okay. I don't see any reason 14 why we shouldn't keep going for at least a little while 15 longer. I'm not hearing any vociferous objections or 16 any at all.

17 So if you wanted to try to clarify that one 18 issue, Mr. Acken, you can do that, subject to that 19 witness being further cross-examined.

Thank you, Mr. Chairman. As the 20 MR. ACKEN: 21 benefit of the project manager, Mr. Mcclellan will try 22 to get this clarified for us.

23 CHMN. KATZ: And you're still under oath or 24 affirmation.

And you may proceed, Counsel.

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1 BILL MCCLELLAN - RECALLED, 2 recalled as a witness on behalf of the Applicant, 3 having been previously affirmed by the Chairman to 4 speak the truth and nothing but the truth, was further 5 examined and testified as follows: 6 FURTHER REDIRECT EXAMINATION 7 8 BY MR. ACKEN: 9 Mr. Mcclellan, you're going to need a copy of Ο. the application. So do you have one up there? 10 11 MEMBER HAMWAY: Here is mine. 12 MS. POST: Could you reference the number in 13 the original application -- it's 386 pages -- again in 14 the PDF? 15 MR. ACKEN: Yes, I'm going to get to that. 16 MS. POST: Okay. 17 BY MR. ACKEN: 18 Ο. Mr. Mcclellan, do you have the application in 19 front of you? 20 Α. Yes. 21 I'm going to ask you to turn to this --Ο. 22 again, the application has been marked for identification as SRP Exhibit 1. I'd like you to turn 23 24 to Exhibit B, Page 9, Table --25 CHMN. KATZ: And I have the a hard cover, but COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

831

1 can we project the charts that you're going to be 2 looking at up on the screen? 3 MR. ACKEN: You bet. CHMN. KATZ: And is that Appendix B? 4 MR. ACKEN: Yes, Mr. Chairman. 5 6 CHMN. KATZ: Whenever you're ready. MR. ACKEN: Well, we need to get this 7 8 screen -- can we just scroll up to Table 7? Thank you. BY MR. ACKEN: 9 10 And do you have that in front of you, Ο. 11 Mr. Mcclellan? 12 Α. Yes. 13 Do you recall the testimony today from the Ο. 14 Randolph witness, Professor --15 Grineski. Α. 16 0. Thank you. 17 Α. Yes, I do. Regarding this table? 18 Q. 19 CHMN. KATZ: You might need to change the angle of your microphone. We're getting some feedback. 20 21 Okay. Go ahead. BY MR. ACKEN: 22 23 And do you recall there was a discussion Ο. 24 about potential inaccuracies in that table? 25 Α. Yes. COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

I'd like you to turn to, it's a later page in 1 0. 2 Exhibit B that is labeled 6-3, Table 5. It is in the 3 air dispersion modeling for the proposed expansion of 4 the Coolidge Generating Station towards the end of 5 Exhibit B. And I'm going to try and get PDF numbers as well. Oh, it's in front of me. It's 143 of 394. 6 Do 7 you have that in front of you? 8 Α. Yes. 9 I'd like you to compare -- let's leave Ο. Table 5 on the screen and have you look at Table 7 in 10 11 the hard copy that's in front of you. Do you have that 12 in front of you? 13 Α. Yes. 14 CHMN. KATZ: Do you think you could put both 15 of them up, one on one screen and one on the other? 16 MR. ACKEN: That's a great idea. 17 And this is Table 7. CHMN. KATZ: There is Table 7 now. 18 19 BY MR. ACKEN: It is shown as Page 53 of 394 in the PDF 20 Q. version. Again, Page 9 of Exhibit B to the 21 22 application. 23 So Mr. Mcclellan, you now have both tables in 24 front of you. Do you see that? 25 Α. Yes. COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

833

Q.	Can you confirm that the table that's labeled		
Table 5 is	s the correct version?		
Α.	Yes.		
Q.	And Table 7 has a typographical error, is		
that corre	ect?		
Α.	Yes, that's correct.		
Q.	Okay. So can you confirm that for NO2 the		
1-hour sta	andard is 188 micrograms per cubic meter?		
Α.	Yes.		
Q.	And the next analysis result shows that the		
project will be in compliance with that standard?			
Α.	Yes.		
Q.	And the annual standard for NO2 is 100		
micrograms per cubic meter?			
Α.	Yes.		
Q.	And the total concentration will be 19.2		
micrograms	s per cubic meter?		
Α.	Yes.		
Q.	And that 19.2 is the results of the modeling		
analysis?			

21 Yes, that's correct. Α.

22 Q. And for PM2.5 the 24-hour standard is 35

23 micrograms per cubic meter?

24 Α. Yes.

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And the total concentration from the ambient 25 Q. COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

air quality modeling is 21.9 micrograms per cubic 1 2 meter? 3 Yes. Α. 4 Ο. And for the annual PM2.5 standard, it is 12 5 micrograms per cubic meter? Α. 6 Yes. And the total concentration is 8.97 7 Ο. 8 micrograms per cubic meter? 9 Yes, that's correct. Α. 10 Again, that 8.97 number comes from the Ο. 11 ambient air quality dispersion modeling? 12 Α. Yes. 13 Ο. And the PM10 24-hour standard is 150 14 micrograms per cubic meter? 15 Α. Yes. And the total concentration from ambient air 16 Ο. 17 quality dispersion modeling is 137 micrograms per cubic 18 meter? 19 Yes, that's correct. Α. 20 MR. ACKEN: Thank you. No further questions. 21 CHMN. KATZ: Any cross-examination? MEMBER LITTLE: This is Member Little. I 22 23 would just like to thank you very much for that. I was 24 very confused. 25 MR. ACKEN: So was I. You're welcome. Thank COASH & COASH, INC. 602-258-1440 www.coashandcoash.com Phoenix, AZ

1 you. 2 CHMN. KATZ: Anything further? 3 MR. STAFFORD: No questions. 4 MS. POST: No questions. 5 CHMN. KATZ: Are we going to recess early, then, for today and pick back up at 9:00 tomorrow 6 morning? 7 8 (No response.) 9 CHMN. KATZ: Okay. Anything further from the Committee before we take our break? 10 11 (No response.) 12 CHMN. KATZ: Okay. Thanks. We do stand in 13 recess. 14 (The hearing recessed at 3:38 p.m.) 15 16 17 18 19 20 21 22 23 24 25 COASH & COASH, INC. 602-258-1440

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2	COUNTY OF MARICOPA)	
3		
4	BE IT KNOWN that the foregoing proceedings were taken before me; that the foregoing pages are a	
5	full, true, and accurate record of the proceedings all done to the best of my skill and ability; that the	
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7	I CERTIFY that I am in no way related to any	
8	of the parties hereto nor am I in any way interested in the outcome hereof.	
9	I CERTIFY that I have complied with the	
10	ethical obligations set forth in ACJA 7-206(F)(3) and ACJA 7-206 J(1)(g)(1) and (2). Dated at Phoenix,	
11	Arizona, this 18th day of February, 2022.	
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15	KATHRYN A. BLACKWELDER Certified Reporter	
16	Certificate No. 50666	
17	I CERTIFY that Coash & Coash, Inc., has	
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