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EVIDENTIARY HEARING BEFORE THE

ENERGY RESOURCES CONSERVATION AND DEVELOPMENT

COMMISSION OF THE STATE OF CALIFORNIA

CALIFORNIA ENERGY COMMISSION

In the matter of,	)	
	)	Docket No. 19-SPPE-02
Walsh Backup Generating Facility	)	

EVIDENTIARY HEARING

REMOTE WEBEX ACCESS ONLY

WARREN-ALQUIST STATE ENERGY BUILDING

1516 NINTH STREET

1ST FLOOR, ARTHUR ROSENFELD HEARING ROOM

SACRAMENTO, CALIFORNIA 95814

WEDNESDAY, MAY 27, 2020

10:17 A.M.

Reported by:

Peter Petty

APPEARANCES

SITING COMMITTEE MEMBERS AND ADVISORS PRESENT:

Karen Douglas, Commissioner, Presiding Member

Kourtney Vaccaro, Advisor to Commissioner Douglas

Eli Harland, Advisor to Commissioner Douglas

Patty Monahan, Commissioner, Associate Member

Jana Romero, Advisor to Commissioner Monahan

HEARING OFFICER:

Susan Cochran, California Energy Commission

CEC STAFF PRESENT:

Jared Babula, Staff Counsel

Rosemary Avalos, Public Advisor's Office

Dr. Tao Jiang

Dr. Huei-An Chu

Dr. Wenjun Qian

Kenneth Salyphone

Liza Lopez

CONSULTANTS/CONTRACTORS PRESENT

Brewster Birdsall, Aspen Environmental Group

APPLICANT:

Scott Galati, Applicant's Representative

Joe Hubbard, Digital Realty Trust

Michael Lisenbee, David J. Powers & Associates

Greg Darvin, Atmospheric Dynamics

APPEARANCES (CONT.)

INTERVENOR:

Robert Sarvey

PUBLIC AGENCIES

Kevin Kolnowski, Silicon Valley Power (SVP)

Henry Hilken, Bay Area Air Quality Management District (BAAQMD)

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MAY 27, 2020 10:17 A.M.

PRESIDING MEMBER DOUGLAS: This is the evidentiary hearing for the application for a small power plant exemption for the Walsh Backup Generating Facility.

I'm Karen Douglas, the Presiding Member of the Committee assigned to conduct proceedings on the application.

Before we begin, I would like to make introductions and then ask the parties to identify themselves for the record. So, I'm Karen Douglas, Commissioner and Presiding Member.

Patty Monahan is the Commissioner and -- is a Commissioner and the Associate Member of this Committee.

My Advisors are Kourtney Vaccaro and Eli Harland. And Patty Monahan's Advisor is Jana Romero.

We've heard from Rosemary Avalos, from the Public Advisor's Office. Then, of course, from Susan Cochran, the Hearing Officer.

I will now ask the parties to please introduce themselves and their representatives, starting with the Applicant.

HEARING OFFICER COCHRAN: That means he can't unmute himself.

MR. GALATI: I got it. This is Scott Galati, representing 651 Walsh Partners, LLC. The managing partner is Digital Realty. We are the Applicant for the Walsh Backup

Generating Facility and the Data Center.

PRESIDING MEMBER DOUGLAS: Great. Let me now ask staff if you could introduce yourselves.

MR. BABULA: Yeah, hi. This is Jared Babula and I'm Senior Attorney for staff. And today, who will be speaking, at least providing some direct testimony is Dr. Ann Chu and Dr. Tao Jiang. Thank you.

PRESIDING MEMBER DOUGLAS: Thank you. Now, we'll go to Intervenors. I'll ask first if Helping Hand Tools is -- has joined us today? What about California Unions for Reliable Energy? All right and Mr. Sarvey.

I know we all know you're here, but if you don't mind speaking up, Mr. Sarvey, and then we'll move on.

MR. SARVEY: Bob Sarvey, Intervenor. Thank you.

PRESIDING MEMBER DOUGLAS: Thank you very much.

Let me now ask for agencies. Are there any elected officials or representatives from agencies of the federal government?

What about State of California, with the exception of the Energy Commission? Any state agency representatives here?

Native American Tribes?

All right, let me ask if the Bay Area Air Quality Management District has a representative?

MR. HILKEN: Yes, Henry Hilken.

PRESIDING MEMBER DOUGLAS: Great, thank you.

And what about City of Santa Clara or Silicon Valley Power?

MR. KOLNOWSKI: Yes, Kevin Kolnowski.

PRESIDING MEMBER DOUGLAS: With the City or Silicon Valley Power?

MR. KOLNOWSKI: We're one in the same. I'm an employee of the City of Santa Clara, but I work for Silicon Valley Power.

PRESIDING MEMBER DOUGLAS: Excellent. Thank you.

Anyone else from any local government agencies?

All right, at this time I will hand over the conduct of this hearing to the Hearing Officer, Susan Cochran.

HEARING OFFICER COCHRAN: Thank you and good morning. The Committee noticed today's evidentiary hearing in the Notice of Prehearing Conference and Evidentiary Hearing Revised Scheduling Order, and further orders issued on April 30, 2020.

The evidentiary hearing is being held remotely. That is we are in separate locations and communicating only through electronic means. We are meeting in this fashion consistent with Executive Orders N25-20 and N29-20, and the recommendations from the California Department of Public Health to encourage physical distancing in order to slow the spread of COVID-19.

Before we proceed with the substantive portion of this evidentiary hearing, I wanted to discuss housekeeping issues. During last week's prehearing conference we discussed the changes necessary to ensure a smooth hearing and a complete transcript as we meet remotely. We practiced those changes and I would like to remind you of some of them.

First, I'm going to ask that only one person speak at a time. Use the raise your hand or chat feature if you would like to be recognized. Chat is probably going to be easier today because of the number of folks participating and I have to scroll up and down to see your raised hand. So, if you can use the chat feature that would be easiest for me.

Second, I would like it if you could please identify yourself before you speak. When we meet remotely it's harder for the court reporter and me to identify who is speaking or wishes to be recognized.

Moving now to the substance. This evidentiary hearing concerns the application for a small power plant exemption, SPPE, for the Walsh Backup Generating Facility. The application was filed on June 28th and it and many of the other documents I will be mentioning today are available on the online docketing system used by the Energy Commission.

The Backup Generating Facility would be used to ensure an uninterruptable power supply for the Walsh Data Center. The Data Center consists of a four-story, 435,050

square foot data center building that will house computer servers in a secure and environmentally controlled structure, and a three-story administrative building containing support facilities such as the building lobby, restrooms, conference rooms, and office space.

The Backup Generating Facility includes a totally of 33 diesel-fired generators. A single, 2-megawatt diesel-fired generator would support the administration space, shipping and receiving, and common building systems such as elevators. The remaining generators will be 3-megawatt diesel-fired generators that will provide up to 80 megawatts of electricity to the Data Center. The 80 megawatts represents the maximum building load of the Data Center.

Under Public Resources Code Section 25541, the Commission may grant an SPPE only when it makes three separate and distinct findings. The proposed power plant has a generating capacity of up to 100 megawatts; no substantial adverse impact on the environment will result from the construction or operation of the power plant; and three, no substantial adverse impact on energy resources will result from the construction or operation of the power plant.

In addition, the Energy Commission acts as the lead agency under CEQA. In reviewing an SPPE, the Energy Commission considers the whole of the action. For the application, the whole of the action means the backup

generators, the Data Center, and the other project features such as the substation.

Staff prepared and published an initial study and Proposed Mitigated Negative Declaration on February 18, 2020. The initial study, Proposed Mitigated Negative Declaration, was subject to a public review and comment period that ended on March 19, 2019. Comments were received from the Bay Area -- I'm sorry, from the County of Santa Clara Roads and Airports Department, and from the Bay Area Air Quality Management District that I'm going to refer to as BAAQMD from now on. No comments were received from any intervenor or the Applicant.

Last Friday, May 22nd, we received comments from the National Fuel Cell Research Center. As explained in the April 30, 2020 notice, we required a prehearing conference statement from any party seeking to present evidence or cross-examine the witnesses at this evidentiary hearing.

We received prehearing conference statements from staff, Applicant, and Intervenor Sarvey. Neither Intervenor Californians for Reliable Energy, nor Helping Hand Tools filed a prehearing conference statement.

As set forth in the April 30, 2020 notice, the evidentiary hearing will be conducted using a formal hearing procedure modified to fit the remote nature of the hearing. As discussed during the PHC, we will deem all parties'

opening and rebuttal testimony as their direct. There is no need to discuss experts' resumes if we have them in writing, and there's no objection to the witness as an expert.

If witnesses testify who have not filed written testimony, please have them identify themselves by name and title. For example, I would introduce myself as Susan Cochran, Hearing Advisor II for the California Energy Commission.

If any party has an objection to a witness or his or her qualifications, please state the objection.

After the prehearing conference, both Applicant and Intervenor Sarvey identified additional exhibits for introduction at today's evidentiary hearing.

Liza, can you display the exhibit list, please?

Mr. Sarvey yesterday informed us that he was withdrawing Exhibit Number 504. Is that correct, Mr. Sarvey?

MR. SARVEY: Yes, it is, that's correct.

HEARING OFFICER COCHRAN: Have the parties had a chance to prepare their own witness list?

MR. BABULA: This is Jared. Jared Babula for staff. So, it's the same -- the witness list in the original prehearing statement. So, did you have an additional -- an additional question on that because --

HEARING OFFICER COCHRAN: Well, I want to make sure. What I wanted -- my purpose in asking this question is to be

able to admit all of the witness -- all of the exhibits at once.

MR. BABULA: Okay. Were you talking about witnesses or documents?

HEARING OFFICER COCHRAN: The exhibit list.

MR. BABULA: Oh, okay. I thought you --

HEARING OFFICER COCHRAN: I'm talking just about the exhibit list.

MR. BABULA: Oh, okay. I thought you said witness list.

HEARING OFFICER COCHRAN: No, I'm sorry, exhibit list.

MR. BABULA: Okay.

MR. GALATI: This is Scott Galati. On behalf of the Applicant I docketed a revised exhibit list, counting the exhibits that I intend to use during cross-examination.

HEARING OFFICER COCHRAN: Okay.

MR. GALATI: Yesterday. And so, my exhibits now are complete, 1 through 30.

HEARING OFFICER COCHRAN: And do you have a motion regarding your exhibits?

MR. GALATI: I'd like to move them into evidence.

HEARING OFFICER COCHRAN: Does anyone have any objection to Applicant's Exhibits 1 through 30?

MR. SARVEY: No objection.

MR. BABULA: This is Jared Babula. No objection.

HEARING OFFICER COCHRAN: Thank you.

With that, Applicant Exhibits are admitted.

(Applicant Exhibit Nos. 1 through 3 admitted into evidence.)

HEARING OFFICER COCHRAN: Staff, do you have a motion concerning your exhibits?

MR. BABULA: Yeah, this is Jared Babula. I'd like to move Exhibits 200, 201, 202, and 203 into evidence.

HEARING OFFICER COCHRAN: Is there any objection? Mr. Galati?

MR. GALATI: No objection.

HEARING OFFICER COCHRAN: Mr. Sarvey?

MR. SARVEY: No objection.

HEARING OFFICER COCHRAN: The exhibits are admitted.

(Staff Exhibit Nos. 200 through 203 admitted into evidence.)

HEARING OFFICER COCHRAN: Mr. Sarvey, do you have a motion to make regarding your exhibits?

MR. SARVEY: Yeah, I move that we move Exhibits 500 through 512 into the record.

HEARING OFFICER COCHRAN: Except for 504, correct, you're withdrawing 504?

MR. SARVEY: Except for 504. I'm withdrawing 504, thank you.

HEARING OFFICER COCHRAN: Is there any objections from staff?

MR. BABULA: This is Jared. I just have a question on -- there's the EIR he's introducing from the City's General Plan, which is a 600-page document. Was that -- was there a part in there that is of relevance?

HEARING OFFICER COCHRAN: Mr. Sarvey?

MR. SARVEY: Yes, I had referenced it in my testimony. And the relevance of it pertains to the conclusion in the EIR; the Santa Clara General Plan EIR that mentions GHG emissions would be significant. Significant and unavoidable for 2035.

HEARING OFFICER COCHRAN: Okay. Mr. Galati, do you have any objections to Mr. Sarvey's proffered evidence?

MR. GALATI: Yes, I object to the EIR. The questions that were answered by the Commission staff and Applicant is no one has tiered off the EIR, so I don't believe that it is relevant. So, I object on the grounds irrelevancy.

HEARING OFFICER COCHRAN: Well, I think because Mr. Sarvey has indicated that he relied on it in his testimony as the source document, so we're going to overrule the objections and will admit the CEQA -- the City of Santa Clara's EIR for its General Plan.

MR. GALATI: No other objections from me on Mr. Sarvey's other exhibits.

HEARING OFFICER COCHRAN: Okay. With that, we will admit Mr. Sarvey's Exhibits 500 through 512, excluding 504. That has been withdrawn.

(Intervenor Sarvey Exhibit Nos. 500 through 503 and 505 through 512 admitted into evidence.)

HEARING OFFICER COCHRAN: During the prehearing conference we discussed which areas would require testimony today. They are Air Quality and Public Health, Greenhouse Gas Emissions, Utilities and Service Systems, and Energy Resources.

Are there any topics that I forgot or did not mention that you were expecting to cover at today's evidentiary hearing?

MR. GALATI: None.

HEARING OFFICER COCHRAN: Mr. Babula?

MR. BABULA: No, that covers it, thanks.

HEARING OFFICER COCHRAN: Mr. Galati?

MR. GALATI: That covers it.

HEARING OFFICER COCHRAN: Mr. Sarvey?

MR. SARVEY: Yes, I agree with that assessment.

HEARING OFFICER COCHRAN: Okay. Do the parties have a preference for the order in which these are taken? I know that we have representatives from both BAAQMD and Silicon Valley Power. Are there topic areas that you would prefer to have first in order to allow those witnesses to be excused

after they testify?

MR. BABULA: This is Jared Babula for staff. I would suggest we go with like Silicon Valley Power first, and then the Bay Area Air Quality Management District and then get into -- at least for our order, then staff witnesses. So, go first with our sister agencies that are calling in to allow them to provide the information, and then they can get off the line if they'd like.

HEARING OFFICER COCHRAN: Okay. And so, we have Mr. Babula's suggestion. Mr. Galati, do you have any comments on that?

MR. GALATI: No. My witnesses are going to testify as a panel on all of these subjects. We can take them in whatever order. I'd just point out that the Bay Area Air Quality Management District is specifically about Air Quality and Public Health. And Mr. Kolnowski, his testimony would be relevant to both Air Quality with respect to emergencies, as well as Energy Resources and Utilities.

HEARING OFFICER COCHRAN: Okay. Mr. Sarvey, do you have a preference with order?

MR. SARVEY: I agree with staff's attorney that we should take SVP and BAAQMD first, and that would probably eliminate a lot of questions and a lot of responses.

HEARING OFFICER COCHRAN: Okay. So, then at this point let's begin with Utility and Service Systems. Who all

will be testifying on the topic of Utilities and Service Systems?

MR. GALATI: This is Mr. Galati. I do not have any direct witnesses for Utilities and Service Systems.

HEARING OFFICER COCHRAN: Staff?

MR. BABULA: So, we would be utilizing Mr. Kolnowski from SVP as the primary person dealing with the Utility Services for the grid. And then, I do have staff witnesses that potentially could respond to cross or questions, but no direct from a staff witness.

HEARING OFFICER COCHRAN: Did you have an open summary that you were going to be offering?

MR. BABULA: I have questions to provide Mr. Kolnowski to address.

HEARING OFFICER COCHRAN: Okay. So, any witness that -- I need the names of any witness that you believe will be testifying either on direct or on cross.

MR. BABULA: So, that would -- this is Jared again. So, I would have a representative from SVP. Then, we have Henry Hilken, a representative from Bay Area Air Quality Management District. I will have questions for him.

And then for staff we have direct opening statement from Dr. Tao Jiang on Air Quality and GHG.

HEARING OFFICER COCHRAN: Right now, all I want to do is Utility Services.

MR. BABULA: Okay, then --

HEARING OFFICER COCHRAN: I just want Utility Services.

MR. BABULA: So, the only --

HEARING OFFICER COCHRAN: Because what I want to do is I want to be able to swear the panel.

MR. BABULA: Okay. Then for Utility Services relating to grid stuff, then I would like to with Kevin Kolnowski. And then also for staff, in case there are any cross-examination questions from Mr. Sarvey or the Applicant, then I would go with Shahab Khoshmashrab and Kenneth Salyphone.

HEARING OFFICER COCHRAN: Okay. Mr. Galati, do you have witnesses that you expect would be responding to questions on Utility Services? So, would that be Mr. Hubbard, Mr. Darvin, and Mr. Lisenbee?

MR. GALATI: No, I do not.

HEARING OFFICER COCHRAN: Okay.

MR. GALATI: We're standing on our writings. I'll have cross-examination questions and maybe some questions for Mr. Kolnowski.

HEARING OFFICER COCHRAN: Okay, thank you so much.

Mr. Sarvey, will anyone other than you be testifying?

MR. SARVEY: No, I'll be the only one. Thank you.

HEARING OFFICER COCHRAN: Okay. So, those witnesses

that we just discussed, Mr. Kolnowski, Mr. Khoshmashrab, Mr. Sarvey, and I'm sorry I missed that third witness. If you could raise your right hand? And I know that you're all doing this.

Do you swear or affirm that the testimony you're about to give in this proceeding is the truth and nothing but the truth?

Each of you needs to respond individually, starting with Mr. Sarvey.

MR. SARVEY: Yes. Bob Sarvey, yes.

HEARING OFFICER COCHRAN: Mr. Kolnowski?

MR. KOLNOWSKI: Mr. Kolnowski, yes, I do.

HEARING OFFICER COCHRAN: Mr. Khoshmashrab? I am not seeing Mr. Khoshmashrab.

MR. BABULA: Yeah, I don't see him, either. Okay, well, if he comes on we'll have to do it later. We can go to Kenneth Salyphone.

HEARING OFFICER COCHRAN: Thank you.

MR. SALYPHONE: Yes, this is Kenneth Salyphone and yes, I do.

HEARING OFFICER COCHRAN: Okay. So, Mr. Babula would you like to begin with your opening, please?

MR. BABULA: I can do that. I just wanted to make sure, our original order had had the Applicant asking questions first, so I don't know if you want to change that

or just go right to me or whether --

HEARING OFFICER COCHRAN: Because he is not sponsoring any testimony, I would like to hear from you.

MR. BABULA: Okay.

HEARING OFFICER COCHRAN: And because everyone is agreeing that Mr. Kolnowski has the information and he's not previously provided testimony, let's start with him.

MR. BABULA: Okay.

HEARING OFFICER COCHRAN: Thank you.

MR. BABULA: That's great. Mr. Kolnowski, can you hear me okay?

MR. KOLNOWSKI: Yes, I can.

MR. BABULA: Okay, great. Can you state your name and title?

MR. KOLNOWSKI: My name is Kevin Kolnowski, K-O-L-N-O-W-S-K-I. And I'm the Chief Operating Officer for Silicon Valley Power. And Silicon Valley Power is the municipal utility for the City of Santa Clara.

MR. BABULA: Can you briefly describe your responsibilities at Silicon Valley Power?

MR. KOLNOWSKI: I'm responsible basically for the day-to-day operation of the electric utility. And that includes transmission, distribution, resources, engineering, everything it takes to run the utility.

MR. BABULA: What is your level of knowledge of SVP's

Integrated Resources Plan?

MR. KOLNOWSKI: I am familiar with the document.

MR. BABULA: Did you review Mr. Sarvey's filings, Exhibit 501 and 502, Energy Resources, Utilities, and Service Systems?

MR. KOLNOWSKI: Yes, I did.

MR. BABULA: At page 5 of Exhibit 501, Mr. Sarvey calculates that due to various approved or formal data centers, SVP has a procurement shortfall of at least 187 megawatts. Do you agree with Mr. Sarvey's calculation that SVP has a procurement shortfall?

MR. KOLNOWSKI: I do not.

MR. BABULA: Has SVP considered the addition of various proposed data center loads, including Walsh and Sequoia in its planning process?

MR. KOLNOWSKI: It has, yes.

MR. BABULA: Does SVP have sufficient resources to meet the electricity demand out to 2030?

MR. KOLNOWSKI: Yes, we do.

MR. BABULA: Does SVP's planning for demand growth due to potential data center expansion predate 2018?

MR. KOLNOWSKI: Yes, it does.

MR. BABULA: Can you explain what the planning horizon is for SVP's energy infrastructure?

MR. KOLNOWSKI: We typically look out ten years and

that's due to the long-term nature of a lot of the projects that are required to be implemented and get approved, so we typically have a ten-year planning horizon.

MR. BABULA: At page 2 of Exhibit 501, Mr. Sarvey argues that based on the 2018 power content label that nonresidential consumers, like data centers, consume all of SVP's natural gas-generated electricity, while most of the renewable generation are allocated to residential sources. Therefore, the data centers will increase reliance on fossil fuels. Is this an accurate description of how the energy is allocated on SVP's system?

MR. KOLNOWSKI: No, it is not.

MR. BABULA: Can you explain why this description is incorrect?

MR. KOLNOWSKI: Silicon Valley Power has about a 90 percent industrial/commercial load where the residents are about 6 to 7 percent. So, in that 6 to 7 percent, on a given day the residential load is approximately I would say between, you know, 28 and 40 megawatts. And our resources are significantly -- our renewable resources are significantly greater than that.

MR. BABULA: In staff's initial study, staff identified SVP's (indiscernible) -- carbon intensity or emissions factor. As noted in the initial study on pages 5.8-9, in 2017 SVP had an estimated carbon intensity of 430

pounds, but by 2019 SVP's carbon intensity had fallen to 341 pounds. Are these carbon intensities based on SVP's overall portfolio or a specific product offering?

MR. KOLNOWSKI: This is based on the overall portfolio.

MR. BABULA: Why is calculation based on SVP's overall portfolio a more accurate reflection of its carbon intensity?

MR. KOLNOWSKI: We feel it is the most accurate and I believe it follows the CEC recommendation of -- I'd have to find that document -- of how to do this. And we feel that the overall is more representative of what our community is experiencing. And it's not based on, you know, picking one sector or another. We felt that that was the best approach to do that.

MR. BABULA: Are you familiar with the targets in SB 100 for a hundred percent zero carbon electricity by 2045 and a 60 percent RPS by 2030?

MR. KOLNOWSKI: Yes.

MR. BABULA: Is SVP working to meet these targets?

MR. KOLNOWSKI: Yes, we are.

MR. BABULA: Can you explain what action SVP is taking to meet the state's GHG and RPS requirements?

MR. KOLNOWSKI: Continue to evaluate projects to bring in new resources to our portfolio mix. We currently

have about 400 megawatts of new projects coming in, another 100 megawatts that we're investigating. And all of the items that we're looking at are renewable. We know we have to meet the RPS standard and that is our objective, and that's what is expected of us by our residents and the city council. So, we're continually trying to find resources to make that happen.

And we currently have 672 megawatts of carbon-free resources in our mix, out of our total of 978. And we have another 412 coming online over the next several years. And we're investigating another 100 megawatts of additional renewable resources to add to the mix. We're projected to have into the future, within the next couple years about 1,400 megawatts. Of that, 78 percent is renewable generation.

MR. BABULA: Does the potential electricity demand, including demand from the data centers, such as Walsh and Sequoia, impede the ability for SVP to meet its GHG and RPS requirements?

MR. KOLNOWSKI: It does not impede it.

MR. BABULA: And can you explain why?

MR. KOLNOWSKI: We're continuing to evaluate products that are out there. We're part of the Northern California Power Agency. They recently went out for a request for proposals for renewable products. And we know we have to

meet the LPS standard and we have staff members that that's their focus. We have a team of about ten people that this is what they do on a regular basis. Trying to evaluate, procure, and secure long-term contracts with generation that is renewable because that's the direction we have to go.

MR. BABULA: Thank you. I have no further questions for Mr. Kolnowski and he's available for the other parties.

HEARING OFFICER COCHRAN: Okay, thank you. Mr. Sarvey, did you have opening remarks?

MR. SARVEY: Opening remarks on Utilities and Service Systems?

HEARING OFFICER COCHRAN: Yes.

MR. SARVEY: I would just ask that -- I would ask that you -- can you illustrate Exhibit 28, the Silicon Valley Power's Integrated Resource Plan, page 3-18, figure 3-4?

HEARING OFFICER COCHRAN: A little more slowly with the numbers, please?

MR. SARVEY: That would be Silicon Valley Power's Integrated Resource Plan, which is Exhibit 28.

HEARING OFFICER COCHRAN: Right. What pages?

MR. SARVEY: Page 3-18 and figure 3-4.

HEARING OFFICER COCHRAN: Liza, could you pull up Exhibit 28? I don't believe that Mr. Kolnowski has that.

Mr. Kolnowski, do you have that document?

MR. KOLNOWSKI: I do not.

HEARING OFFICER COCHRAN: Okay, if you could pull up Exhibit 28? Liza, you might want to do a control F for figure 3-4, it would be easier.

MR. GALATI: Liza, this is Scott Galati. It's on page 53 of the PDF, if you wanted to jump that way.

HEARING OFFICER COCHRAN: So, you're sharing your screen, correct, Liza?

MS. LOPEZ: Yes.

HEARING OFFICER COCHRAN: Thank you. So, is this the table that you're referencing, Mr. Sarvey?

MR. SARVEY: I can't use WebEx, but I'm assuming you got figure 4-3 on there.

HEARING OFFICER COCHRAN: Okay, 3-4 correct? Not 4-3? Mr. Sarvey?

MR. SARVEY: It's 3-4. 3-4.

HEARING OFFICER COCHRAN: Thank you. Mr. Kolnowski can you see the screen and the document on the screen?

MR. KOLNOWSKI: Yes, I can.

HEARING OFFICER COCHRAN: Thank you. Mr. Sarvey, please ask your questions.

MR. SARVEY: Mr. Kolnowski, I'd like you to talk about the tremendous amount of utility upgrades and service systems that are required to accommodate these data centers that are coming in, specifically the South Loop expansion and the five data center substations.

MR. KOLNOWSKI: I think the diagram you're showing is incorrect. I think you're asking figure 3.4, not table 3.4, correct?

MR. SARVEY: Yes.

HEARING OFFICER COCHRAN: Okay. Slide up, maybe. Let me find the controller.

Liza, try page 52 of the -- is it the Resource Map? Is there a title for this table? Or, I'm sorry, this figure, Mr. Sarvey?

MR. SARVEY: It's the Capital Improvement Map.

HEARING OFFICER COCHRAN: Keep going. Keep going, Liza. Keep going. Keep going. Looking for pictures.

MR. GALATI: Yeah, it's page 52 of the PDF.

HEARING OFFICER COCHRAN: 52 of the PDF, Liza. Thank you. Perfect thank you. Okay, now. Now, we're looking at figure 3-4, not table 3-4. Figure 3-4. What are your questions, Mr. Sarvey?

MR. SARVEY: Well, my question was to ask Mr. Kolnowski to describe the tremendous amount of utilities and service systems that are going to be required to accommodate all these data centers that are being proposed and being approved.

MR. KOLNOWSKI: In 2017 -- Santa Clara is a unique area compared to a utility. We have experienced an 7 percent annual growth, whereas a lot of utilities are flattening. As

we've investigated this in 2017 we came up with a plan to increase the capacity of our utility to be able to have a 1,000-megawatt capability. And we laid out a series of projects, the South Loop expansion is a -- we currently have the South Loop as I think we've discussed before. Santa Clara utilizes a loop technology or a loop methodology for ensuring high reliability for power supply to customers. We don't -- we typically don't do a radial connection to a customer, we do a loop. So, if the loop fails, that the only breaks it in part, you end up with two radials.

And as we went through that, we realized we needed to do some upgrades. And the South Loop expansion has been on our books probably for about the last 15 years. We've been working on the design. So, we needed to expand the capability of the South Loop. The South Loop also feeds our residential community in the Sierra and Homestead Substations.

So, to improve, ensure the reliability for the residents and to accommodate system growth the Scott Receiving Station is a receiving station that brings in 115 kv power. And we have a plan to upgrade the breakers and transformers to newer units, and it will also increase the capacity of the substation.

The Northern Receiving Station has two 230 to 115 kv transformers and they're nearing their end of life. So, we

came up with a project to install that.

We also have out here, in 2024, another transformer which is at the Northern Receiving Station, which is a parallel unit for our 230 line that we take from PG&E. Once we approach 1,000 megawatts we need to have -- we can withstand our 230 line going out of service in say a maintenance situation. But as we get to near 1,000 megawatts, we need to have a backup for that. So, we came up with a plan to install a redundant transformer.

Serra Substation replacement is a substation that was build 42 years ago. It's a single-bank transformer. And, you know, we try to have more redundancy at the substations. This project's been on the books probably for about the last 15 years.

Over the last 18 months we came to an agreement with -- we have a lease from a -- I'm trying to think, a medical supply company that has a 100-year lease. We're 42 years into the lease. We are committed to when we expanded the substation we wanted to make a larger footprint. We couldn't come to an agreement. We've reengineered and were able to keep the expansion in the existing footprint, which improves the reliability to our residents in that area.

Homestead Substation is similar. It's a two-phase project. We've got to do one transformer, then another transformer to enhance the load on that system. But that is

an infrastructure enhancement due to older equipment.

The Esperanca Substation is a substation that is coming because of City Place. It's a development project that the City had approved probably about -- it's been in process probably about eight to nine years. And as City Place comes onboard they're going to be taking about 42 percent of the Esperance Substation, and the other remaining is going to be enhancing the reliability of the grid in that area.

Parker Substation, when this graph was originally created, Parker Substation was in development. You guys know it as McLaren. This was a Vantage project. There's a slight difference in nomenclature. We name a substation versus not the data center. So, Parker was the name of the substation but that was for McLaren. That project has been complete. That was commissioned about a year ago. And that station is currently in operation.

Fairview Substation is an additional transformer being added to. It was originally designed about ten years ago as a three-bank substation. Two transformers have been installed and a third bank is being added. That is a general distribution substation, but it also feeds the CoreSite Data Center.

The RW Substation is -- I don't know if I can say who it is, but that is for a data center.

And Laurelwood, there was some confusion about a Laurelwood Substation. This is not a substation for Laurelwood Data Center. But there's another substation being developed for another data center.

MR. SARVEY: Okay, so most of this utility growth is to accommodate data center growth, is that correct?

MR. KOLNOWSKI: We do see a lot of our growth as based on data centers, yes.

MR. SARVEY: Okay. Does the Walsh Data Center interconnect to any of these new substations?

MR. KOLNOWSKI: I do not believe so. I'm not positive, but I don't believe so.

MR. SARVEY: Okay. Okay, thank you.

MR. KOLNOWSKI: I believe the Walsh is having a dedicated data center for it and the name of the data -- or the substation, I'm not positive of.

MR. SARVEY: Do you have a separate carbon content for your nonresidential power mix?

MR. KOLNOWSKI: I'm not exactly sure what you're asking. We do -- what we present to the CEC is based on our overall portfolio. And that's --

MR. SARVEY: So, I notice your -- oh, I'm sorry, go ahead.

MR. KOLNOWSKI: It's how we prefer to look at it. And I believe that's how the Energy Commission prefers to

look at it. I'll try to find out the name of the buildup we're following.

MR. SARVEY: But your nonresidential power mix uses all your natural gas-fired resources and all your unspecified sources of power, is that correct?

MR. KOLNOWSKI: I'm not sure I exactly understand what you're asking there.

MR. SARVEY: Okay. What is the carbon content of the unspecified sources used in your nonresidential mix?

MR. KOLNOWSKI: I don't believe we have any -- are you looking at the power content label now?

MR. SARVEY: Yeah, 2018 power content label, yes.

MR. KOLNOWSKI: Let me find it. Do you want to put a copy of it up so we can look at it or I have a copy in front of me?

MR. SARVEY: Yeah, I have it as an exhibit. We can put it up.

HEARING OFFICER COCHRAN: What exhibit is that, Mr. Sarvey?

MR. SARVEY: Give me one second here and I'll find it for you.

MR. BABULA: This is Jared Babula. That's Exhibit 501 of Mr. Sarvey's exhibits, and it has the page 3 that has the 2018 power content label on it.

MR. SARVEY: It's 507, Exhibit 507.

HEARING OFFICER COCHRAN: And is that -- and what page are you looking at, Mr. Sarvey?

MR. SARVEY: It's only one page.

HEARING OFFICER COCHRAN: Okay. Could you repeat your question to Mr. Kolnowski, please, about Exhibit 507?

MR. SARVEY: Yes. I just wanted to know what the carbon content of the unspecified resource is that you utilize in your nonresidential power mix.

MR. KOLNOWSKI: I'm not positive. I'd have to do some research on that.

MR. SARVEY: Okay.

MR. KOLNOWSKI: That is what usually comes from the Cal-ISO grid. And I believe there's a value that is modeled for that. And a lot of that occurs, you know, during the peak from noon to 6:00, while the sun is up. But, specifically, I don't have it off the top of my head.

MR. SARVEY: Does .428 metric tons per CO2 per megawatt sound familiar?

MR. KOLNOWSKI: I have to research it.

MR. SARVEY: For that number?

MR. KOLNOWSKI: It could be.

MR. SARVEY: Okay, no problem. I'll move on to the next question. SVP has already been impacted by the PG&E public safety shutoff events, hasn't it?

MR. KOLNOWSKI: The City of Santa Clara has not had

any power outages in Santa Clara caused by a PSPS.

MR. SARVEY: During the October PSPS shutoff SVP lost access to its geothermal resources that operates in conjunction with Northern California Power Authority, isn't that true?

MR. KOLNOWSKI: Correct.

MR. SARVEY: And how long were those geothermal resources offline?

MR. KOLNOWSKI: They were off for an extended period of time.

MR. SARVEY: Particularly, Geothermal Plant 1 was unable to come back online because of transmission line issues, is that correct?

MR. KOLNOWSKI: Correct.

MR. SARVEY: Okay. Do you have any estimate of how many megawatts of renewable energy were lost due to this curtailment?

MR. KOLNOWSKI: I do not.

MR. SARVEY: Okay.

MR. KOLNOWSKI: We have a fairly robust -- you know, we have 672 megawatts of renewable power that is available to us. So, if one resource goes down, it's not a -- the reliability and integrity of the grid was continued. And what will happen is when we do the 2019 power content label it will reflect what those -- what the impact of that was to

our GHG values.

MR. SARVEY: Thank you. Did SVP also lose access to some of its hydroelectric resources in Calaveras County due to the PSPS in October?

MR. KOLNOWSKI: Not the ones that we directly control, other than our Grizzly Power Plant, which has been out of service since the Camp Fire in 2018, due to a transmission line.

MR. SARVEY: Okay, thank you. Thank you. Do data centers report to the Silicon Valley Power every time they use their backup generators in emergency mode for any reason?

MR. KOLNOWSKI: No, they do not.

MR. SARVEY: Okay. So, did Vantage Data Center notify you when they tested all 30 diesel generators on May 17th, 2017?

MR. KOLNOWSKI: Do not.

MR. SARVEY: Okay. Would a data center notify you if the operation of its backup generators due to a UPS failure or other internal issue, like the Friendster Data Center did in 2008? Would they report that to you?

MR. KOLNOWSKI: They typically report to us when we have a power outage, not when they operate their data centers or use their generators.

MR. SARVEY: So, basically, diesel generators could be operating without your knowledge, basically?

MR. KOLNOWSKI: Could. I do not -- they don't report to us, they're not required to.

MR. SARVEY: Okay.

MR. KOLNOWSKI: In fact --

MR. SARVEY: Are there -- go ahead.

MR. KOLNOWSKI: -- I found the information related to our urban content label. We follow AB 1110 and we work with the Energy Commission to make sure that we're doing that correctly in terms of the reporting for the power content label.

MR. SARVEY: Thank you. Are there other projects, other than these data centers that SVP has provided will serve letters to that have not commenced operations?

MR. KOLNOWSKI: I'm trying to think. I don't believe there's -- ask the question again. I'm trying to think of what you're asking for here, Mr. Sarvey.

MR. SARVEY: Pardon me?

MR. KOLNOWSKI: Could you ask your question again? I'm not sure I completely understand.

MR. SARVEY: Oh, sure. I was asking whether there are other projects that SVP has provided will serve letters to outside of the five data centers the CEC is permitting.

MR. KOLNOWSKI: I'm not positive we have provided will serve letters to all the data centers that are in the list.

MR. SARVEY: Okay.

MR. KOLNOWSKI: I don't have the list in front of me. But I know for us to -- I usually look at what agreements do we have, which for an agreement we have to go to counsel.

MR. SARVEY: Uh-hum.

MR. KOLNOWSKI: And not all the data centers that are on your list go to counsel or haven't gone to counsel yet.

MR. SARVEY: And do you have a GHG figure for 2019 that SVP emitted?

MR. KOLNOWSKI: I do not have that yet.

MR. SARVEY: Not an actual number?

MR. KOLNOWSKI: No.

MR. SARVEY: Okay. So, the estimated GHG emissions from electricity used from just the five data centers the CEC is permitting is 693,519 metric tons per year, as shown in Exhibit 300, page 3. How do you propose to lower your GHG emissions to your 2030 level with those kind of impacts from the five data centers that the Energy Commission is permitting?

MR. KOLNOWSKI: Like I mentioned earlier, we currently have --

MR. GALATI: I'd like to make an objection to that question. Could you please, Mr. Sarvey, tell the witness where you got that number? And you said something about page 3. Page 3 of what?

MR. SARVEY: That's my exhibit. That's my opening testimony. Page 3 has a table that shows all of the projected GHG emissions from the CEC data centers, and I backed out the San Jose Data Center since Silicon Valley Power doesn't have any reason to just provide them with electricity. So, basically, I was just telling him, reporting to him what the CEC initial studies project as the GHC emissions from these five data centers. And I'm asking him at 692,519 metric tons per year how Silicon Valley Power is going to meet their GHG emission reductions that they're supposed to achieve by 2030.

HEARING OFFICER COCHRAN: Okay, give us just a moment. Liza, could you pull up exhibit -- I believe it's Exhibit 501, Mr. Sarvey, or is it 500?

MR. SARVEY: 500.

HEARING OFFICER COCHRAN: Could you pull up Exhibit 500, please, so we could all refer to the table? And what page is this on in your testimony, Mr. Sarvey?

MR. SARVEY: Page 3. Oh, excuse me, it's on page 4, I'm sorry.

HEARING OFFICER COCHRAN: Is this the correct table, Mr. Sarvey, that's currently on the screen?

MR. SARVEY: I can't -- I can't see the screen so I couldn't tell you.

HEARING OFFICER COCHRAN: Oh, you can't see the

screen.

MR. SARVEY: Let me -- let me check it.

HEARING OFFICER COCHRAN: Data center application.

MR. SARVEY: I can check it in just my testimony. Yeah. Yeah, that's the correct one.

HEARING OFFICER COCHRAN: Thank you. And what was your question to Mr. Kolnowski?

MR. SARVEY: What was my question to him?

HEARING OFFICER COCHRAN: Regarding this table, yes.

MR. SARVEY: Yeah, is SVP going to meet its GHG reduction for 2030 with that kind of impact coming in from these data centers?

MR. KOLNOWSKI: I'm not positive where those values are from. Are those from the electricity or are those from the standby operation of the generators?

MR. SARVEY: Those are GHG emissions from electricity used at the five data centers.

MR. KOLNOWSKI: So, again, as we talker earlier is we currently have 112 new megawatts of renewable power coming on that will take our total mix up to 1,390 some megawatts. Of that, 70 percent is renewable. We are marching to a renewable portfolio.

MR. SARVEY: Uh-hum.

MR. KOLNOWSKI: And we are obligated to get there and we will get there. And whether it's via other projects that

we enter into on our data facilities, solar facilities, wind facilities, we'll do what it takes to get us to follow the requirements of the RPS Standard.

And one other thing to add is even though these projects are listed at 99 megawatts, our history has shown they typically load approximately to 50 percent.

HEARING OFFICER COCHRAN: Mr. Kolnowski, could you repeat that again? I'm not sure I followed that.

MR. KOLNOWSKI: So, if you look at McLaren Data Center, McLaren Data Center shows 99 megawatts. This was approved. This is what we call the Parker Substation. It went operational one year ago. Today, that facility's operating at less than 2 megawatts one year after installation.

So, while these projects are designed for a certain capacity, our experience of what we have seen from them and where they load is approximately, somewhere between around 50 percent. I can't explain it and I don't have the answer as to why the data centers aren't loaded more, but that's what it is.

MR. SARVEY: Well, I appreciate your answers --

HEARING OFFICER COCHRAN: Thank you.

MR. SARVEY: -- Mr. Kolnowski. That's all I have, thank you.

HEARING OFFICER COCHRAN: Mr. Galati, did you have

any questions?

MR. GALATI: Yes, I do. Mr. Kolnowski, thank you for coming. This is Scott Galati, representing the Applicant.

A question that I have that you just talked about is you know that these data centers ramp up over time from a very low load to a large load, correct?

MR. KOLNOWSKI: That's correct.

MR. GALATI: And in your Integrated Resource Plan do you work with the data centers to understand what they might need 12 months from now, up to 60 months from now, do you take that into account?

MR. KOLNOWSKI: Yes, we do.

MR. GALATI: So, you work with these large users directly and then integrate that into your overall procurement plan, correct?

MR. KOLNOWSKI: Yes, we do. They give us a -- before they come online they give us a ramp schedule. And we meet with them yearly. And as long as they're working for us to find out where they are in their ramp schedule. And like coming back to McLaren, they're currently at less than two megawatts.

MR. GALATI: Right. So, we're crossing the boundary between two subjects. I'm going to wait and ask you more about Energy Resources in a moment. But we're really talking about Utility Systems and sort of the infrastructure.

So, I want to focus you back on the substations and the South Loop Project figure. You don't have to put it up. I just want you to -- that you just testified to with -- that Mr. Sarvey asked you questions about.

MR. KOLNOWSKI: Okay.

MR. GALATI: The Laurelwood Substation, isn't that actually the substation that Walsh is going to connect to?

MR. KOLNOWSKI: I'll -- it may. I'll be honest, I'm not -- I get confused between what we call them and what they're called in the data center, so I'm not positive.

MR. GALATI: Okay. I think we can clarify that with another witness who will know the answer to that.

But isn't it true that the data centers that are interconnecting to those major substations you have on that figure are actually funding, or building, or both those substations?

MR. KOLNOWSKI: Yes.

MR. GALATI: And aren't they also funding their fair share of the South Loop upgrade?

MR. KOLNOWSKI: Yes.

MR. GALATI: So, from a -- would you then say that the new substations in the South Loop upgrade have no impact on Silicon Valley Power's resources? From an infrastructure perspective?

MR. KOLNOWSKI: Correct.

MR. GALATI: I don't -- Ms. Cochran, I'm having difficulty because we did cross the boundaries into Energy Resources. Since I don't want to hold this witness over is it okay for me to ask questions in that area as well?

HEARING OFFICER COCHRAN: Yes, please do. Because I think that we've already crossed into the realm of both. I mean I think when we started talking about the power mix label, et cetera we were getting into resources as opposed to just the system itself.

MR. GALATI: Okay. You just -- thank you. You described, Mr. Kolnowski, that in the Integrated Resource Plan you work with the data centers as you move forward, correct?

MR. KOLNOWSKI: Yes.

MR. GALATI: And that Integrated Resource Plan, you actually submit one at least every five years to the Energy Commission, is that correct?

MR. KOLNOWSKI: Yes.

MR. GALATI: And do you anticipate the next one you submit will be based on the best data you have then, including data centers?

MR. KOLNOWSKI: Yes.

MR. GALATI: I'm sorry?

HEARING OFFICER COCHRAN: What was that?

MS. LOPEZ: Hi, this is Liza. Abby Young, can you

please mute yourself?

HEARING OFFICER COCHRAN: Thank you.

MR. GALATI: Mr. Kolnowski, I'm going to ask that one again because I'm not sure whether they heard you or you heard me.

When you submit another Integrated Resource Plan and go through the Commission process, you will be addressing what the data centers have told you they need in the upcoming years, correct?

MR. KOLNOWSKI: Yes.

MR. GALATI: Okay. Can I also have Exhibit 30, please, put up on the screen?

HEARING OFFICER COCHRAN: Can you do that, please Liza? Thank you.

MR. GALATI: And I apologize, it's a -- I could only put it out in a very small font. It's Exhibit 30.

MS. LOPEZ: There is no Exhibit 30.

MR. GALATI: It probably hasn't been added, yet. I identified it later in response to something Mr. Sarvey was filing. I can give you the date and the transaction number.

MS. LOPEZ: Okay.

HEARING OFFICER COCHRAN: That would be helpful.

MR. GALATI: Okay, bear with me for a moment. My computer skills are not as good as they should be.

HEARING OFFICER COCHRAN: Is this -- were these

listed in your filing yesterday afternoon?

MR. GALATI: Correct. It was docketed at, let's see transaction number 233129. Docketed yesterday. It was admitted into evidence today with no objection.

And I apologize ahead of time because of the small nature of the way that this email printed out. But if we could zoom in to who the email -- who actually, from the very bottom there, there's a person there named Kathleen Hughes, who is the author of that email. Can you see that, Mr. Kolnowski?

MR. KOLNOWSKI: Yes.

MR. GALATI: Kathleen Hughes works for Silicon Valley Power?

MR. KOLNOWSKI: Yes. She is a Senior Division Manager in our Resources Group.

MR. GALATI: Okay. And do you see the table there? It looks like it's carbon intensity number projections from Silicon Valley Power. Are you familiar with that?

MR. KOLNOWSKI: Yes.

MR. GALATI: Would you say that that represents what you believe Silicon Valley Power's carbon intensity factor will be over time, what you're shooting for?

MR. KOLNOWSKI: Correct, yes.

MR. GALATI: Okay. Do you believe that you -- that Silicon Valley power will have any difficulty in procuring

additional resources, should it need them over time to supply increasing data center demand?

MR. KOLNOWSKI: We do not see an issue with doing the necessary procurement.

MR. GALATI: You've worked with data centers quite a bit, right --

MR. KOLNOWSKI: Yes.

MR. GALATI: -- over the last several years?

MR. KOLNOWSKI: Yes.

MR. GALATI: And you work directly with the planning department to determine when new data centers are being proposed, correct?

MR. KOLNOWSKI: Yes.

MR. GALATI: Does every data center that is proposed actually get constructed in the City of Santa Clara?

MR. KOLNOWSKI: No, it does not.

MR. GALATI: I have no further questions, thank you.

HEARING OFFICER COCHRAN: Thank you. Mr. Babula, did you have anything that you wanted to follow up on?

MR. BABULA: Yes, I just have one follow-up question. Mr. Kolnowski, that figure that Mr. Sarvey had you look at, 3-4, that showed the timeline of different projects that you went over, project-by-project, were most of those -- or, let me rephrase that. Were all those projects and all those upgrades in the process prior to 2019 when the Walsh Project

was filed?

MR. KOLNOWSKI: Yes.

MR. BABULA: Okay. Thank you, I have nothing further.

HEARING OFFICER COCHRAN: Okay. So, I know that we have sort of mixed Utilities and Service Systems and Energy Resources together towards the end. I don't want to foreclose anyone. I want to make sure, have all of the questions you want to ask in both of those topic areas been asked? Mr. Babula?

MR. BABULA: Yes, I've completed those.

HEARING OFFICER COCHRAN: Mr. Galati?

MR. GALATI: Something came up that I would like to swear in one of my witnesses that they can answer.

HEARING OFFICER COCHRAN: Okay. And who is that?

MR. GALATI: That is Joe Hubbard.

HEARING OFFICER COCHRAN: Mr. Hubbard, are you online and unmuted? Okay, my screen shows that you are unmuted, Mr. Hubbard.

MR. GALATI: Joe, could you unmute your phone?

HEARING OFFICER COCHRAN: Mr. Hubbard?

MR. GALATI: If you would allow me to -- if you would allow me to come back to Mr. Hubbard on that topic, I will make sure that he's available then.

HEARING OFFICER COCHRAN: Okay. Well, let's do this.

I do have a question right now that I think fits into this. And it concerns the PUE for the project. Does everyone understand what I mean by the PUE?

MR. BABULA: Yes. This is Jarod.

MR. GALATI: Yes, we do. And I need probably Mr. Hubbard on the phone to answer that.

HEARING OFFICER COCHRAN: Oh, okay. Then I'll just continue to hold my question.

MR. GALATI: So, I have nothing else on this, other than with Mr. Hubbard. I'm going to take a second and try to reach him on the telephone. Maybe he's having difficulties.

(Pause)

MR. GALATI: Ms. Cochran, I talked to Mr. Hubbard. He can hear everything. He couldn't speak. Everything's unmuted on his end and it looks like it's unmuted here. He's going to hang up and call in again.

HEARING OFFICER COCHRAN: Okay, thank you.

MR. GALATI: Ms. Cochran, I have some direct evidence that if I could ask him about, it would also -- it might answer your PUE question.

HEARING OFFICER COCHRAN: Okay.

(Pause)

MR. HUBBARD: All right, Joe Hubbard on. Can you hear me?

MR. GALATI: Yes.

HEARING OFFICER COCHRAN: Yes, thank you, Mr. Hubbard. You would not have been sworn. Can you raise your right hand?

MR. HUBBARD: Yes, ma'am.

HEARING OFFICER COCHRAN: Do you swear or affirm that the testimony you're about to give in this proceeding is the truth, the whole truth, and nothing but the truth.

MR. HUBBARD: I do.

HEARING OFFICER COCHRAN: Thank you.

Mr. Galati, please proceed.

MR. GALATI: Yes, Mr. Hubbard, can you please describe for the court reporter who you work for?

MR. HUBBARD: I am the Senior Design Director for Digital Realty, for the Central and West Regions.

MR. GALATI: Okay. Did you hear the description that Mr. Kolnowski in his testimony described of data centers don't typically use the maximum amount of electricity that they're designed for?

MR. HUBBARD: Yes, I did.

MR. GALATI: And do you agree that in your experience, in Digital Realty's experience is that data centers are typically in the 60 to 70 percent of that design maximum?

MR. HUBBARD: I would. That is typically what we see, historically.

MR. GALATI: Is that because tenants don't typically use all the electricity that is available to them?

MR. HUBBARD: It is.

MR. GALATI: So, you could have a building that was completely leased out and occupied, but it would -- it's not likely that it would use the maximum electricity?

MR. HUBBARD: That is very correct.

MR. GALATI: Could you also describe the project's further design and the PUE?

MR. HUBBARD: Yes, we've continued to do the design and further refine the design for Walsh Data Center. And the original estimated of expected PUE that we applied to the application has been revised to be downwards of 1.8 to 1.23. And which is for this market. And so, it's in our interest, financial interest to keep the PUE as low as possible because that results in a direct cost to us.

MR. GALATI: I guess I'll just ask you this question because Mr. Sarvey asked it to Mr. Kolnowski. Do you plan on doing, after the facility is built and occupied, a pull-the-plug test?

MR. HUBBARD: We do not.

MR. GALATI: I don't have any further questions for Mr. Hubbard.

HEARING OFFICER COCHRAN: Mr. Babula, do you have any questions?

MR. BABULA: Yeah, I was muted. I just have one question. You've described how your PUE is coming down. Is your rack rate still the same as initially proposed or is that reduced as well?

MR. HUBBARD: No, the same rack rates, just refinement in the efficiencies of our mechanical systems.

MR. BABULA: And then one other question. On the pull-the-plug test, can you explain what that is and why you're not going to be doing it?

MR. HUBBARD: What typically a pull-the-plug test is you pull the main fuse on a switch gear and the whole building goes dark, and you see the whole building go to generator. We don't do that typically because our customers, once they're online, and once the going is online are not acceptable to that. It's just --

MR. BABULA: Thank you, I have no further questions. Oh, sorry.

MR. HUBBARD: No, no, no, I was done. Thank you.

MR. BABULA: Okay, thanks. I have no further questions.

HEARING OFFICER COCHRAN: Thank you. Mr. Sarvey, do you have any questions for Mr. Hubbard?

MR. SARVEY: I believe I do, but it could be another witness, but it's definitely the Applicant's witness.

So, you explained that your PUE is going to be

revised downward. Could you tell us what the design changes are?

MR. HUBBARD: Well, originally, we had not selected the equipment at the time of application for our cooling systems. We were in design at the time with the site and shell and had projected what our mechanical systems were going to be. We have been in full design, now, and working with different manufacturers on chiller technology, compressor technology, and we have run our own studies to show that we're -- you know, based on the efficiency of these units that the projected 1.3 is going to come down to the 1.8, 1.23 area.

MR. SARVEY: Has CEC staff been made aware of these design changes, i.e. perhaps your criteria pollutants will go up or more electricity use will occur? Have you consulted with the CEC on these design changes?

MR. HUBBARD: We have not.

MR. SARVEY: Okay. Is the Applicant willing to accept a condition limiting the expected PUE to 1.8 to 1.23?

MR. HUBBARD: Yes.

MR. SARVEY: They are, awesome. Thank you.

MR. HUBBARD: I'm sorry what was your question again? Can you repeat the question? Sorry.

MR. SARVEY: I said is the Applicant willing to accept the condition limiting the expected PUE to 1.18 to

1.23?

MR. HUBBARD: Limiting the condition that we will not go over that at all? I mean that's our projection. I don't know if I'm understanding the question.

MR. SARVEY: What I'm asking is would you guys accept a condition limiting you to that range?

MR. HUBBARD: I'm not the authority to be able to speak on behalf of the company to limit us in that condition. That's just -- again, this is a design correct area that we're heading towards, that we'd be using.

MR. GALATI: I would also object to the characterization that a limitation of a PUE is necessary to mitigate a significant impact. And so, therefore, on behalf of the company I will say we will not accept a condition like that.

MR. SARVEY: Okay, thank you, Mr. Galati on behalf of the company.

Would the Applicant be willing to accept the condition that they would require the maximum amount of solar generation feasible on the site if it was acceptable to the City of Santa Clara?

MR. HUBBARD: We haven't looked into solar generation, so I can't really speak to that.

MR. SARVEY: Okay. Thank you, that's all I have.

HEARING OFFICER COCHRAN: So, I have a question. I'm

not sure if this is the appropriate time. But if it's for a different panel that would be fine.

When the backup generators are operated for testing and maintenance what happens to the power generated during those operations?

MR. HUBBARD: Well, it depends on the situation. Typically, when they're tested monthly it is without load. So, we would still be on SVP power, Silicon Valley Power at that time. Typically, they're tested without the building load, so it's just more for run time to keep them -- to make sure everything's working efficiently and when we do lose SVP power that they will be available.

HEARING OFFICER COCHRAN: Okay, thank you for that. Does anybody have a follow-up question?

MR. SARVEY: May I have a follow-up question on that, please?

HEARING OFFICER COCHRAN: Yes, you may.

MR. SARVEY: Okay, I'm sorry. This is Bob Sarvey. Is it possible to store the energy from the testing of the generators in a battery energy system?

MR. HUBBARD: Possibly. I'm not familiar of one from a diesel energy stored energy system that's compatible with our engines. It may be out there, but we haven't looked into it.

MR. SARVEY: Okay, thank you. That's all I have.

HEARING OFFICER COCHRAN: Anything else on either Utilities and Service Systems or Energy Resource?

MR. GALATI: Is Mr. Sarvey going to testify on Energy Resources? I have cross-examination in that area. I haven't heard his direct testimony.

HEARING OFFICER COCHRAN: Could you -- Mr. Sarvey?

MR. SARVEY: My direct testimony would just be in writing. If you have some questions, please ask.

HEARING OFFICER COCHRAN: Mr. Galati, please ask your questions.

MR. GALATI: After hearing Mr. Kolnowski's testimony and going through the Integrated Resources Plan and hearing how they work with data centers do you still contend -- and hearing that the data centers have ramp over time, do you still contend that Silicon Valley Power will not have enough resources to supply the Walsh Data Center or other data centers?

MR. SARVEY: I'm not saying they won't have the resources, I'm saying they're going to have to add a lot of resources. And when you look at the resources and you talk about 1,200 megawatts, you have to look at the net qualifying capacity of those resources. And if it's all renewable, your net qualifying capacity is much lower than what he's quoting.

Now, if you look at the Integrated Resource Plan, the amount of resources that Silicon Valley claims for 2019 is

somewhere in the 800 range, whereas the numbers we're hearing now that Silicon Valley has 1,200 megawatts of resources. But when you take the net qualifying capacity, yeah, I say you're still short.

MR. GALATI: You believe that CEQA requires Silicon Valley Power to purchase all of these resources now to supply every data center, even though they're not built?

MR. SARVEY: No, absolutely not. What I'm saying is the 650 megawatts that these data centers are projected to use is more than the maximum capacity of the system right now when you add it to the existing -- when you add it to the existing annual usage of somewhere around 587 megawatts is their peak capacity. So, yeah, I say that's true.

MR. GALATI: And you understand that it's unlikely the data centers together, even if they're all built, would ever reach that peak capacity, correct?

MR. SARVEY: Oh, I understand from what your witness said it would be 70 percent. But I've also read that many of these data centers are already sold out, like the Vantage Data Center is already at maximum capacity and I expect the other ones will be with the tremendous growth in data centers and how everybody's using all of this data. Particularly right now, when everybody's at home. So, yeah, I expect that it will outpace it.

MR. GALATI: I have no further questions.

HEARING OFFICER COCHRAN: Okay. Last call for Utilities and Service Systems and Energy Resources. Anyone else?

MR. BABULA: This is Jared Babula. So, I do have one cross question for Mr. Sarvey, since Mr. Galati asked a couple of my other ones.

HEARING OFFICER COCHRAN: Thank you, Mr. Babula, please proceed.

MR. BABULA: Okay. So, in various -- Mr. Sarvey, in various places in your filing, such as Exhibit 500, pages 1 and 2, and 501, page 4, you describe the data centers as being approved or permitted by the Energy Commission. Is your contention that the Commission approved the construction and operation of the McLaren and Laurelwood Data Centers and the Walsh facility is now pending such approval?

MR. SARVEY: Well, yeah, they did approve those two data centers. Yeah, I believe that. And I believe they'll approve this one. I believe they'll approve the rest of them.

MR. BABULA: And that's approve the construction and operation of those data centers?

MR. SARVEY: Absolutely. I think the Energy Commission will approve all of these data centers. I have no question in my mind that they will.

MR. BABULA: Okay, thank you. That's the only

question I have.

MR. SARVEY: Okay.

HEARING OFFICER COCHRAN: Okay. Mr. Sarvey, did you have anything you wanted to say to sum up?

MR. SARVEY: No, I'll save that for my closing argument. Thank you.

HEARING OFFICER COCHRAN: Okay. So, with that we have concluded Utilities and Service Systems, and Energy Resources.

Are we ready, now, to proceed to Air Quality, Public Health and Greenhouse Gases?

MR. BABULA: This is Jared Babula for staff. Yes.

HEARING OFFICER COCHRAN: Mr. Galati?

MR. GALATI: Yes, we're ready.

HEARING OFFICER COCHRAN: Mr. Sarvey?

MR. SARVEY: Yes, I'm ready.

HEARING OFFICER COCHRAN: Okay. For the witnesses who are about to testify for Air Quality, Public Health and Greenhouse Gases. Staff, can you identify your witnesses please?

MR. BABULA: Yes, that would be Dr. Tao Jiang and Dr. Ann Chu.

HEARING OFFICER COCHRAN: As well as Mr. Kolnowski and Mr. Hilken from Bay Area Air Quality Management District?

MR. BABULA: Right. Well, so, let me just also --

so, for who's going to provide from staff, who will have an opening statement, that would be Dr. Tao Jiang and Dr. Ann Chu.

We also have available to address cross questions, depending on the nature of the question, Dr. Wenjun Qian and Brewster Birdsall from staff.

And then, from the Bay Area Air Quality Management District there's Mr. Henry Hilken.

HEARING OFFICER COCHRAN: Thank you. Okay, from Applicant, who are you planning to either have direct or cross-examination of?

MR. GALATI: So, for direct and an opening statement we have Mr. Greg Darvin. I guess I'll go ahead and have Mr. Michael Lisenbee sworn just in case there's any crossover with Greenhouse Gas Emissions. And Mr. Hubbard is already sworn. Those are my three witnesses, should he be needed. But Mr. Darvin is the only one that will make an opening statement in Air Quality and Public Health.

HEARING OFFICER COCHRAN: Okay. And Mr. Sarvey, are you -- is there anyone else?

MR. SARVEY: There's just me.

HEARING OFFICER COCHRAN: Okay. So, if I could have Mr. Hilken, Dr. Jiang, Dr. Chu, Dr. Qian, Mr. Birdsall, Mr. Darvin and Mr. Lisenbee please raise your right hand. And then what I'm going to have you do is I'm going to have each

of you then respond orally that you have accepted the oath.

Do you swear or affirm that the testimony that you're about to give in this proceeding is the truth, the whole truth, and nothing but the truth?

Mr. Hilken?

MR. HILKEN: Yes.

HEARING OFFICER COCHRAN: Dr. Jiang?

DR. JIANG: Yes.

HEARING OFFICER COCHRAN: Dr. Chu?

DR. CHU: Yes.

HEARING OFFICER COCHRAN: Dr. Qian?

DR. QIAN: Yes.

HEARING OFFICER COCHRAN: Mr. Birdsall? Mr. Birdsall?

MR. BIRDSALL: Yes.

HEARING OFFICER COCHRAN: Mr. Darvin? I've unmuted you, Mr. Darvin, if that was the issue.

MR. DARVIN: Yes.

HEARING OFFICER COCHRAN: And finally, Mr. Lisenbee?

MR. LISENBEE: Yes.

HEARING OFFICER COCHRAN: Okay. Let the record reflect that all the witnesses have been sworn.

Mr. Galati, would you like to go first?

MR. GALATI: Yes, please.

HEARING OFFICER COCHRAN: Please proceed.

MR. GALATI: All right. For Mr. Darvin and Mr. Lisenbee, would you please just state your name for the record and just a brief description of what you're doing for the project? I'll have Mr. Lisenbee go first.

MR. LISENBEE: This is Mike Lisenbee. I'm a Senior Project Manager at David J. Powers & Associates, which is a CEQA consulting firm in San Jose. I've been a CEQA practitioner at David J. Powers & Associates for 13 years. And my typical role is to prepare legally defensible CEQA documents on behalf of lead agency staff.

For this project, my role was to prepare the SPPE application on behalf of the project Applicant.

MR. GALATI: Mr. Lisenbee, we'll come back to you in case there's any questions.

But Mr. Darvin, could you go ahead?

MR. DARVIN: Sure. My name is Greg Darvin and I'm the Air Quality Consultant who prepared the Air Quality and Public Health sections of the small power plant exemption on behalf of the Applicant. I'm the Senior Meteorologist for Atmospheric Dynamics. And I've been actively involved in CEC proceedings in both Air Quality and Public Health over the past 20 years.

MR. GALATI: Mr. Darvin, could you please summarize your testimony, really focusing on the questions that the Committee had asked us to address in this hearing?

MR. DARVIN: Yes. Specifically, I believe that's with the cumulative health risk impacts that we prepared, which we followed the Bay Area CEQA guidelines, and which includes looking at sources out to 1,000 feet. And based on comments we received from the CEC, we actually expanded that radius to include the San Jose Airport.

Using that cumulative analysis we found, with San Jose Airport and other background sources, we had found that cumulative impacts from all background projects following the Bay Area CEQA guidelines for doing the cumulative analysis showed that all impacts were less than significance.

You know, one comment I want to add to that, too, is that typically the Bay Area CEQA guidelines have us just look at sensitive receptors within 1,000 feet of the project site, and there are no sensitive receptors within that prescribed distance.

MR. GALATI: And Mr. Darvin --

MR. DARVIN: Initially -- sorry, go ahead, Scott.

MR. GALATI: Did you review Mr. Sarvey's testimony?

MR. DARVIN: Yes, I did.

MR. GALATI: Do you have any comments or additional information you'd like to add that you think might be helpful for the Committee?

MR. DARVIN: At this time not really, just other than the methods that he -- or some of the impacts that he cited

using screening modeling results from past projects probably are not the best approach to look at these types of projects. But realistically, you know, all the analyses that we did following the guidelines have shown insignificant impact. So, no additional comments on Mr. Sarvey's testimony.

MR. GALATI: And can you describe -- the project is using diesel particulate filters, correct?

MR. DARVIN: That is correct.

MR. GALATI: And what do they actually do?

MR. DARVIN: They actually reduce the emissions of diesel particulate matter by up to 90 percent. They're a type of filter, basically, that reduce the overall emissions of particular matter. Applying DPFs to these types of projects significantly reduce the risk, the modeled risk impacts, and the associated health risk impacts associated with these types of projects.

The typical standard Tier 2 emission factor that we often use for diesel engines is about .15 grams per brake horsepower hour of diesel particular matter. These diesel particulate filters proposed for the project would drop the DPF emissions by over 90 percent to .01 grams per brake horsepower hour. So, a sizeable drop in emissions.

MR. GALATI: Can you please briefly describe for the difference of a diesel engine such as this versus maybe the traditional power plant that the Commission is aware of?

MR. DARVIN: Sure. What we found on most reciprocating engines or diesel engines is that a lot of the impact's due to the type of the source, namely reciprocating engine has a small amount of plume rise based on both momentum and exit temperature. As compared to let's say a turbine, which is what we call a mass machine, which typically has high volumes of mass or air going through it, resulting in much higher plume rise and often a higher temperature.

But what we've found typically with smaller engines or smaller sources, such as diesel reciprocating engines in the 3 megawatt range, most of the modeled impacts are immediately adjacent to the property fence line. Whereas turbines, often the impacts extend out some distance.

MR. GALATI: Thank you, Mr. Darvin. I don't have any more direct questions.

HEARING OFFICER COCHRAN: All right, thank you. Staff, do you have your direct information ready?

MR. BABULA: Yes. So, I'd like to start, then, with Mr. Henry Hilken from the Bay Area Air Quality Management District.

HEARING OFFICER COCHRAN: Go ahead.

MR. BABULA: Okay, Mr. Hilken, can you just provide your name and your title?

MR. HILKEN: Yes, Henry Hilken, H-I-L-K-E-N. I'm the

Director of Planning and Climate at the Bay Area Air Quality Management District.

MR. BABULA: And what are your responsibilities there?

MR. HILKEN: I oversee a couple of teams. I oversee an air quality planning team that prepares local and regional air quality plans. It also does a lot of our CEQA work and other work with cities and counties. And I also oversee a climate protection group that coordinates many of the Air District's climate activities.

MR. BABULA: Are you aware that the District submitted comments on the CEC staff's initial study for the Walsh Data Center Project?

MR. HILKEN: Yes.

MR. BABULA: And that based on the direction of the Committee overseeing the Walsh proceeding, CEC staff developed additional analysis to address comments made by the District related to public health and GHGs. Have you reviewed CEC staff's additional analysis?

MR. HILKEN: Yes.

MR. BABULA: In the area of Public Health did CEC's cumulative HRA, or health risk assessment analysis address the concerns raised by the District in its comments on initial study?

MR. HILKEN: Yes, they did.

MR. BABULA: Do you agree with CEC staff's cumulative health risk assessment analysis conclusion that the project's contribution to PM 2.5 of .00006 micrograms per meter squared is not cumulatively considerable?

MR. HILKEN: I agree that that's a very, very small increment that's added to other sources within that radius that was modeled. Certainly much more significant are freeways, and roadways, and railways. Mobile sources for the most part are much more significant a contribution from this project.

MR. BABULA: In the area of GHG did staff's supplemental information regarding the product's consistency with long-term state GHG reduction goals address the concerns raised by the District in its comments on the initial study?

MR. HILKEN: Well, the staff responses were very responsive. The CEC staff added additional language regarding state programs, regulatory programs, and executive orders that do speak to long range greenhouse gas reduction statewide. So, that was very responsive.

And there was a discussion of the indirect emissions resulting from the power plant -- or the electricity to power the data center. And aligning with the state's Renewable Portfolio Standard and Silicon Valley Power's green energy mix and further improvements in the future, I think we would still like to work further with CEC staff on the question of

diesel generators. You know, we are concerned about fossil diesel use. It's a policy objective of ours to eliminate diesel fossil use. And so, that's something we would like to continue to work with the CEC on and how our respective agencies can move towards eliminating fossil diesel over the long term.

MR. BABULA: So, do you agree that CEC staff's conclusion that the project's indirect GHG commissions would be consistent with long-term GHG reduction goals based on the decreasing GHG associated with SVP's grid power?

MR. HILKEN: Yes.

MR. BABULA: And then, finally, for permitting do you agree with CEC staff that air quality impacts -- emergency generator operation during emergencies are typically not evaluated during facility permitting by the District?

MR. HILKEN: Could you repeat that?

MR. BABULA: Yes, sure. So, for permitting, do you agree with CEC staff that air quality impacts of emergency generator operation during emergencies, so the emergency operations of the backup generators are typically not evaluated during facility permitting by the Air District?

MR. HILKEN: I believe our permitting mainly looks at the maintenance and testing emissions, only. But I would also invite my colleague from our Engineering Division to respond to how our permit engineers do that evaluation.

MR. BABULA: Okay, thank you. I have no further questions for this witness. And I could -- Hearing Officer Cochran, do you want this witness available for questions by the other parties or should I go on to the other direct witnesses I have.

HEARING OFFICER COCHRAN: What I thought is that we would complete all of the direct information and then allow cross-examination. So, go ahead with your next witness for direct.

MR. BABULA: Okay, thank you. This is Dr. Tao Jiang, who will do an opening statement summarizing the testimony and responding to some of the issues brought up by the intervenors.

Go ahead, Dr. Jiang.

DR. JIANG: Hello, my name is Dr. Tao Jiang. So, can you hear me well?

MR. BABULA: Yes, we can, thanks.

HEARING OFFICER COCHRAN: Yes.

DR. JIANG: Okay. My name is Dr. Tao Jiang and my areas of expertise include air quality, chemical and engineering. I prepared the commentary on the Greenhouse Gas Emission sections of the initial study, responses to Bay Area AQMD comments, and the responses to the Committee questions which represent my written testimony. My declaration and the qualifications were previously filed in this proceeding.

In my written testimony covering Air Quality and the Greenhouse Gas Emissions that was in the initial study, responses to Bay Area AQMD comments, and the responses to the Committee questions, I concluded of my independent analysis that the project would not have any significant impacts in the area of Air Quality and the Greenhouse Gas Emissions.

Consistent with CEQA, my analysis of Air Quality and the Greenhouse Gas Emissions in the initial study, responses to Bay Area AQMD comments, and the responses to the Committee questions includes determining project impacts and assessing whether the impacts are significant.

My written testimony in the initial study, which is number 200, at page 5.3-1 to 5.3-7, 5.3-10 to 5.3-22, 5.3-31 to 5.3-39, 5.8-1 to 5.8-16 support the analysis in detail.

I want to highlight the following key points from the initial study. The emissions during the demolition and construction, and extent by generator readiness testing and maintenance are all below the thresholds of significance from the Bay Area AQMD CEQA guidelines. The project would also not to be expected to result in a cumulative and considerable increase of criteria pollutants during the demolition/construction, and the readiness testing and maintenance. These impacts would be less than significant.

The indirect GHG emissions are estimated at 109,164 metric tons CO2 equivalent per year. Since the majority of

these indirect emissions comes from the electricity generation provided by SVP, increasing the percentage of carbon-free power procured by SVP will be the most impactful GHG reduction measure.

SVP's GHG emissions are trending down due to its low and decreasing carbon intensity for emissions factor and comprised with renewable and low carbon energy requirements. Because staff determined that the project would not cause significant impacts, mitigation beyond SVP's GHG reduction efforts is not required.

I also reviewed the filings of Mr. Sarvey and would like to address a few points he raised. In Exhibit 500, page 1, Mr. Sarvey asserts that the project is not eligible to use the Santa Clara Climate Action Plan to determine significance of project GHG emission found in the CEQA because the plan only goes to 2020. And even if the project would use the CAP, its emissions levels are not consistent with the CAP.

The City of Santa Clara CAP, adopted in 2013, provides a comprehensive emissions reduction strategy that will allow the City to achieve its fair share of statewide emissions reductions through 2020, consistent with AB 32.

The consistency with CAP framework is relevant consideration in the analysis of significance of the project's GHG impacts because many of the policies are expected to be carried forward by the City to address the

post-2020 emission in its next CAP update.

GHG impacts from all project emissions also would be considered less than significant if a project is consistent not only with the City Climate Action Plan, but also applicable regulatory programs, and the policies adopted by the California Air Resource Board, AB 32, SB 350, SB 100 and the executive orders. All of these various law and policies drive a reduction in GHG emissions and the increases in the use of renewable electricity.

Since the RPS increase to 60 percent by 2030, defined by SB 100, the carbon intensity of California's electricity supply and the GHG emissions generated to serve the project's electricity demand will continue to drop.

On page 2 of Exhibit 500, Mr. Sarvey claims that the GHG emissions from the project erase all the emission reduction gains made under the CAP. This is not the case.

Mr. Sarvey simplistically assumed that the SVP GHG footprint is fixed for all future years. We know that this will not be the case as they are already making significant progress toward their GHG goals. With more and more renewables entering the market, GHG emissions from the SVP grid will reduce and the project's GHG emissions will also reduce accordingly.

And on page 3 of Exhibit 500, Mr. Sarvey claims that the project is not consistent with the Diesel-Free by '33

initiative. The City of Santa Clara adopted a resolution to their 189-003 on August 9, 2018, endorsing the Bay Area AQMD's Diesel-Free by '33 Statement of Progress. This Statement of Progress does not create a legally binding obligation on the signatories. Bay Area AQMD leaves it to the signatories to develop their individual strategies to meet the goal of zero emissions from use of a petroleum derived diesel fuel within their communities. I'm not aware of any regulations implemented at this time by the City to implement the Statement of Purpose.

If any such regulations are applying to existing data centers in the future, the facility would have to comply and deploy the complying technology.

On page 4 of Exhibit 500, Mr. Sarvey contends that in calculating the amount of GHG resulting from the project staff either used an older power content label or used the residential power mix product from the power content label, and not the known residential product mix.

The analysis I used to determine the GHG emissions related to the use of grid electricity was not based on the 2017 SVP overall power mix, nor the 2018 power label. To calculate the emissions set forth in Table 5.8-4 of the initial study, I multiplied the carbon intensity value by the maximum annual energy used at the facility to estimate the project's maximum expected GHG emissions.

This carbon intensity value was obtained from SVP. As indicated by SVP, the carbon intensity is derived from the Cal-ISO's carbon number, including the heat rate, and the emissions record of all power plants dispatched into the grid in a given hour.

So, the PCL, as referred by Mr. Sarvey is not designed to capture the actual GHG impact of a load serving entity's demand portfolio in correlation with the (indiscernible) resources and the market dispatch. And the PCL does not account for cost and concession GHG impacts to the electric grid, nor does it account for the hourly GHG impacts of resources dispatched. So, the PCL is not an accurate measure of validating GHG compliance with the state's target.

In Exhibit 500, page 8 to 11, Mr. Sarvey argues staff's analysis is inadequate because air quality impacts from emergency operations of the standby generators has not been analyzed. This broad statement is misleading. The initial study goes into great detail, on page 5.3-31 to 39, on why attempting to model emissions is speculative and why federal, state, and local air quality guidelines and rules, including those from Bay Area AQMD does not require emissions analysis for emergency operations of standby generators.

CEC staff in the Laurelwood Data Center case performed some limited modeling of air quality impacts of the

project in two emergency operation mode scenarios. Mr. Sarvey infers that by not performing similar model, the Walsh analysis is incomplete. The logic is incorrect because the modeling performed in Laurelwood was not required.

Bay Area AQMD attempted to evaluate emergency operations of Santa Clara Data Center. However, since Santa Clara Data Center was reviewed, the USEPA provided guidance on the issue of emissions from backup generators, emphasizing that there is sufficient discretion within the existing guidelines for reviewing authorities to not include intermittent emissions from emergency generators in compliance demonstrations.

The Bay Area AQMD also does not currently model emissions from equipment during emergencies.

In preparation for my AQ analysis, and to ensure environmental documents that provide comprehensive, yet clear information, I, along with others working on the team, including Dr. Chu, Dr. Qian, and Mr. Birdsall in consultation with other air districts revisited the Laurelwood modeling and whether going forward with such extended analysis is appropriate and should be included in the Walsh analysis.

Given the probabilistic nature of the emergency event and the layers of assumptions, I concurred with my colleagues that such an analysis was not required, not helpful, subject to misinterpretation, and the results are speculative.

Staff's approach in this analysis is consistent with the approach used by California's local air district on emergency use on equipment. Emergency operations would be infrequent, uncontrolled, unpredictable, and therefor unplanned circumstances beyond the control of the project owner. CEQA provides that lead agency may find that environmental impacts is too speculative for evaluation. And CEQA requires that we look at reasonably foreseeable impacts. Accordingly, I and my colleagues concluded that the modeling of the air quality impacts during emergency operations is not warranted.

In Exhibit 500, page 13, Mr. Sarvey states that the initial study fails to perform a cumulative air quality impact analysis. The initial study sets forth, at page 5.3-16 to 5.3-22, a discussion of cumulative impacts to air quality, which is Air Quality checklist Item B. And describes the project's emissions and concludes that the project would not result in cumulatively considerable net increase of any criteria pollutant.

The initial study, Table 5.3-4, presents the Bay Area AQMD's thresholds of significance for criteria air pollutants and GHG emissions in units of pounds per day, averaged over a month, and pounds per year.

This represents the levels at which the Bay Area AQMD has determined that a project's emissions of criteria air

pollutants or precursors would result in accumulatively considerable contribution to the San Francisco Bay Area Air Basin's existing air quality conditions. If they daily average or annual emissions of operational related criteria air pollutants or precursors would exceed any applicable thresholds of significance listed in the Table 5.3-4, the project would result in a cumulatively significant impact.

However, as shown in Table 5.3-6, the project would not exceed any applicable Bay Area AQMD's thresholds of significance. Therefore, staff concludes that the project would not result in a cumulatively significant impact.

And with this, concludes my opening statement.

MR. BABULA: Thank you. Let's move on to a shorter opening statement. Dr. Ann Chu, can you go ahead and present yours. Thank you.

DR. CHU: Hi. Can you hear me good?

MR. BABULA: Yes.

HEARING OFFICER COCHRAN: Yes, thank you.

DR. CHU: My name is Dr. Huei-An, Ann, Chu. My areas of expertise include Human Health Risk Assessment, Biostatistics, and Environmental Epidemiology. I prepared the Public Health Analysis within the Air Quality section of the initial study, and responses to the Committee questions, which represents my written testimony. My declaration and qualifications were previously filed in this proceeding.

In my written testimony covering public health impacts from toxic air contaminant (indiscernible) in the initial study and responses to the Committee questions, we concluded after independent analysis that the project would not have any significant impacts in the area of Air Quality and Public Health.

Consistent with CEQA, my analysis of toxic air contaminants in the initial study includes determining project's impacts and assessing if the impacts are significant.

My written testimony in the initial study from pages 5.3-8 to 5.3-10 and page 5.3-28 to 5.3-31 sets forth this analysis in detail. I reviewed Applicant Health Risk Assessment for project construction and project readiness testing and maintenances. The Health Risk Assessment measures the incremental risk from the project's air emissions, including three key area of health effects; cancer, chronic lung cancer, and acute non-cancer health effects. In this project there is no assessment for acute non-cancer because there is no acute reference exposure level for diesel particulate matter. And diesel particulate matter is the only toxic air contaminants we evaluated.

The Health Risk Assessment was based on a very conservative assumptions to over-estimate the risk due to the (indiscernible) and the variability of the Health Risk

Assessment. The (indiscernible) of these conservative assumptions include, first, the duration of construction was assumed to be two years. Even so, the real construction period is expected to be 21 months.

Second, for readiness testing and maintenance it was assumed that the generator testing would reach the 50-hour maximum every year per engine. Even so, the Applicant has indicated testing would be less than 50 hours per year.

Third, the analysis assumed the generators are tested at full power, 100 percent load scenario. While as indicated in the initial study, at page 5.3-21 most of the testing time would be between 2 percent and 30 percent of full load.

Fourth, for the potential exposure it was assumed a 30-year exposure duration, starting with exposure during the third trimester of pregnancy.

Five, for offsite worker exposure it was assumed a 25-year exposure from age 16 to 40.

Besides these conservative assumptions looked into the health risk assessment, the impacts for both the project construction and project readiness testing and maintenance will be less than significant.

Staff has an a errata to the initial study. In the standby generator emergency operation health risk assessment, HRA section, on page 5.3-39. The second paragraph shall be struck out for the following reason. As mentioned

previously, since there is no acute reference exposure label for diesel particulate matter, a check hazard index is not normally calculated. This is why there's no value for acute non-cancer hazard index in Table 5.3-10. See response to data request 58, in TN number 229543 for more details.

But this won't change staff conclusions. As mentioned previously, the health risk assessment of cancer risk and chronic non-cancer hazard index were evaluating assuming a total of 50 hours of operation per year for all three -- for all 33 generators, operating simultaneously. In the Health Risk Assessment results are all below the significance threshold.

The section on page 5.3-39 will read as follows: Standby generator emergency operation health risk assessment, HRA. This assessment also addresses the health impacts of toxic air contaminants emitted as a result of emergency operations. As described above, the health risk assessment of cancer risk, and chronic non-cancer risk were evaluated assuming a total of 50 hours of operation per year for all 33 generators operating simultaneous.

The chronic health risk determined for project construction, and readiness testing, and maintenance shown in Table 5.3-10 are substantially below the significant threshold. And no reasonable emergency operation scenario would change the finding, therefore, the project would also

have less than significant chronic health risk.

My detailed responses to the Committees' questions is from page 1 to 9, Public Health 1 and Public Health 2 of the staff's responses, in Exhibit 203.

CEC staff normally doesn't conduct cumulative health risk assessment, but focuses on incremental risk only, especially for cancer. The reasons are the following: First, staff relies on regulations, such as Proposition 65, California Code of Regulations, Title 22, Air Toxic Hot Spots, AB 2588, and BAQ CEQA for guidance in establishing significant threshold for incremental risk.

Staff's approach and thresholds are consistent with these regulations and programs.

Second, according to OHHEA, they say the incremental risk posed by a given exposure to a carcinogen does not depend on the individual's background exposure to that or any other carcinogen. Therefore, if the incremental risk is below the significance threshold, it is not necessary to take background exposure into account.

Third, this is important to note that the background lifetime cancer risk is already high. Therefore, it's not useful or informative to the cumulative health risk assessment and attempt to separate out the contribution of other sources.

Staff's health assessment in the initial study seeks

to comply with OHHEA's guidance the BAQ CEQA guidance based on our usual practice. But because BAAQMD suggested more analysis, we accommodated their recommendation and conducted a cumulative health risk assessment.

I and my colleague, Dr. Wenjun Qian, conducted the cumulative health risk assessment based on BAAQMD's comments. The result of cumulative health risk assessment, which again used the (indiscernible) assumptions I just stated, show that the cumulative risks are below BAAQMD's threshold of significance for cancer and chronic non-cancer risk.

The cumulative PM 2.5 impacts are over the threshold, but Walsh contribution is essentially zero.

I want to focus your attention on Table 3, on page 8, of Exhibit 203. If you look at the total cumulative sources row, you will see two variables, 1.12 and 1.37. There is the .8 microgram per cubic meter significance threshold. Where there are exceedance, we can see the background concentration has already exceeded the threshold. And the concentration of Walsh project to the total risk is minimal. The modeled numbers show that with total risk of 1.12 and 1.37, Walsh only aided .00006 micrograms per cubic meter in each receptor. .00006 micrograms per cubic meter in most cases is not physically measurable.

Since the project contribution is essentially zero, staff concluded that the project won't result in a cumulative

considerable contribution. Therefore, the project does not cause cumulative considerable impacts.

Staff's supplemental analysis also shows that the standard approach used to perform a health risk assessment in the initial study is adequate and a cumulative analysis does not change our results and conclusions.

Mr. Sarvey reiterates the BBAQMD's comments, suggesting a supplemental cumulative health risk assessment that is spread out to include portion of the San Jose Airport. Our supplemental health risk assessment is include in the response to Committee's questions and addresses the issues raised by the BAAQMD and Mr. Sarvey.

This concludes my opening statement.

MR. BABULA: Thank you, Dr. Chu. I have nothing further for these two witnesses and they're available for questions from other parties. Thank you.

HEARING OFFICER COCHRAN: Okay, thank you.

Mr. Sarvey, did you have anything on direct from yourself?

MR. SARVEY: Yeah, a little bit of direct. It's more rebuttal than direct though, so I don't know if you want to take it now or later.

HEARING OFFICER COCHRAN: Okay, so let's do that later.

Commissioner Douglas, do you think it's time to maybe

take a brief 5- to 10-minute break so people can get up and stretch? We've been going for about two hours, now.

PRESIDING MEMBER DOUGLAS: Yes, I think that's a good idea. Now, let me just look, what time is it? It's 12:19.

HEARING OFFICER COCHRAN: Yeah. Do you want to take --

PRESIDING MEMBER DOUGLAS: Can we make it 15 to 20 minutes.

HEARING OFFICER COCHRAN: Okay.

PRESIDING MEMBER DOUGLAS: We're in our homes for the most part, right, so if anyone needs to grab a bit to eat or something, it should be pretty convenient and quick to do so.

HEARING OFFICER COCHRAN: Okay. Why don't we then recess for 15 minutes. Everyone be back by 20 to 1:00. And at that time we'll venture into cross-examination and rebuttal.

(Off the record at 12:20 p.m.)

(On the record at 12:41 p.m.)

HEARING OFFICER COCHRAN: So, we have just, I believe, finished the direct and opening on the topic of Air Quality, Public Health, and Greenhouse Gases.

Before we move to the questions that the parties have, I believe that Commissioner Monahan has some questions on this topic. Commissioner Monahan?

ASSOCIATE MEMBER MONAHAN: Yes, I think this may be a

question for Ann Chu. And this relates to the particles, the fine particle analysis that you were doing. If I can only open up my -- there we go.

So, I was curious about the share of fine particles that were assumed in the diesel PM value. And I wonder if you could -- and this also could -- it could be that this is more of a question for the Bay Area. But you had written or staff had written that the permit evaluation staff from the Bay Area Air Quality Management District informed CEC staff that similar facilities have been tested which show that PM 2.5 is 30 percent of total particulate matter. And that struck me as just very low, actually, because especially with the filter -- well, the filter should trap out the large particles and it should leave the small particles.

So, can you tell me more about this assumption?

DR. CHU: This is Ann Chu. So, the 30 percent you mentioned comes from the response to Committee's questions?

ASSOCIATE MEMBER MONAHAN: Uh-hum.

DR. CHU: Oh.

ASSOCIATE MEMBER MONAHAN: But it came from -- can you tell -- I mean it came from the permit evaluation staff, right?

DR. CHU: I'm not quite familiar with the permitting part. But if this -- if you are talking about --

ASSOCIATE MEMBER MONAHAN: Yeah, if you need the

specific, I have the staff responses to Committee questions, and it's on page 8. So, it's related to Table 3, the PM 2.5 impacts to cumulative forces.

DR. CHU: Uh-hum, right. We got this information from the District because the original number is quite high. It's what, it's like 21, around 21. And we reached the BAAQMD and they say there's a facility called Mission Trail Waste Systems and they give us the -- they look up the information of this facility and say the most of the emission from this facility actually is the total particulate matter. And they suggest not to use 30 percent for PM 2.5. So, we got this information from BAAQMD.

ASSOCIATE MEMBER MONAHAN: And this may be a harder question for you to respond to. But let's say the total particulate matter was actually closer to the actual amount of the -- of PM 2.5, so that the PPM and PM 2.5 were fairly close, say, I don't know, 90 percent or even 100 percent. Would that change your evaluation of the maximally exposed individual worker analysis significantly?

DR. CHU: I think this is hard to say. The result, the total cumulative health risk assessment will still like -- will still above the threshold. But you can see from Table 3, it's the background risk. So, even we change the ratio, it's actually proved the existing background risk is very high. But the contribution of this project is quite

minimum.

ASSOCIATE MEMBER MONAHAN: Well, I'm looking -- I see what you're saying when it comes to the -- in the ISR and the MEIR. It's the MEIW where I'm curious.

DR. CHU: Oh, I mean I thought you --

ASSOCIATE MEMBER MONAHAN: Uh-hum. Because the numbers from Walsh and McLaren are nontrivial compared to the highway, the surrounding numbers. And if you were to assume that most of the diesel particulate matter was actually fine, would that significantly increase the Walsh, Sequoia and McLaren project contributions to the PP 2.5 for MEIW calculations?

DR. CHU: Back to your questions to MEIW. These three points each are quite far from each other.

ASSOCIATE MEMBER MONAHAN: Uh-hum.

DR. CHU: So, this facility according to my memory is not close to MEIW. This facility, the Mission Trail Waste Systems is not close to the MEIW. That's why the existing station resources for MEIW is low.

ASSOCIATE MEMBER MONAHAN: Yeah, I have the table in front of me and it said the total for cumulative sources was .73 and the significance threshold is .8. And the contribution from Walsh, Sequoia and McLaren are about -- well, are .11 of the .73 from cumulative sources. So, maybe that's 15 percent. And if you assumed the higher level of

2.5 from the total particulate matter, is that just a ratio? So, if we instead of .3 it was closer to 100 percent, or 90 percent we would just multiple the Walsh project annual diesel particulate matter by 3?

DR. QIAN: This is Wenjun Qian.

ASSOCIATE MEMBER MONAHAN: Or is it a more complicated calculation?

DR. QIAN: This is Wenjun Qian. I think we need to clarify that for the data center projects we assume all the particulate matters are 100 percent PPM. So, we didn't use the 30 percent for the data center projects. Is that your question?

ASSOCIATE MEMBER MONAHAN: Oh, okay, that's not what it says in the footnote. But maybe I'm misinterpreting the footnote.

DR. CHU: Oh, this footnote is especially for one new sources, not the --

ASSOCIATE MEMBER MONAHAN: I see, so it's only for existing stationary sources. It's not for the Walsh project stationary sources.

DR. CHU: No, it's the stationary resources around the project.

ASSOCIATE MEMBER MONAHAN: Ah, that makes more sense. Okay.

DR. CHU: Yeah, they may be like the (indiscernible)

or like the laundry shop, or the waste systems.

ASSOCIATE MEMBER MONAHAN: Ah, that makes more sense. Okay, thank you so much. That clarifies my question.

DR. CHU: Okay.

HEARING OFFICER COCHRAN: Did you have any other questions, Commissioner Monahan?

ASSOCIATE MEMBER MONAHAN: Just my one last one is the fact that the analysis went to 1,000 feet and the cumulative impacts assessment was only, you know, with that boundary. And I'm curious, is there some data around this 1,000-foot boundary that you're relying on to interact with the Bay Area Air Quality Management District does? Is that like a standard across the country or is that a district-by-district based set boundary?

HEARING OFFICER COCHRAN: Mr. Hilken, are you still on the line? That might be a question that you could answer.

MR. HILKEN: Yes, I'm on the line. So, I wouldn't -- so, that 1,000-foot radius comes from our CEQA guidelines. We, for many years, have had a guidance document to assist local lead agencies, in this case the CEC. It's usually cities and counties. But it's a guidance document to help CEQA lead agencies conduct environmental reviews.

And so, for this particular impact for localized risk and hazards, we recommend that a cumulative analysis look at all sources within the 1,000-foot radiance of the source.

And the reason is that it's not exactly background. Earlier, a speaker referred to background and it's not exactly background. What it is, because background would be emissions from sources all over the Bay Area. But, really, the intent of this guidance is to look at what's happening locally, within 1,000 feet of a project what are the localized sources that altogether, collectively, cumulatively result in a localized exposure.

So, I don't know if that's standardized across the country. I can't speak to that. It certainly, it has been our guidance for at least ten years now as a way of estimating cumulative impacts from -- in a CEQA document.

ASSOCIATE MEMBER MONAHAN: Thank you. And that's all my questions.

HEARING OFFICER COCHRAN: Thank you, Commissioner Monahan.

Liza, could you pull up Exhibit 25 for me, please? Before I get to the parties I have some -- I have a question or two.

MR. BABULA: Hearing Officer Cochran, this is Jared Babula. Would you -- because Dr. Wenjun Qian jumped in there, would you like, just so the record has like introduction of her name and what she worked on? Would that be something you would want to have or --

HEARING OFFICER COCHRAN: Is that already contained

in her declaration attached to your opening testimony?

MR. BABULA: Yes, she had provided a declaration and resumes in our submittals.

HEARING OFFICER COCHRAN: Okay. That, then we can rely on that, thank you.

MR. BABULA: Okay, thanks.

HEARING OFFICER COCHRAN: The only thing I wanted -- I wanted that information for those folks who had not yet submitted any kind of, you know, title, qualifications, et cetera.

MS. LOPEZ: This is Liza. What number did you want me to pull up?

HEARING OFFICER COCHRAN: Exhibit 25.

MS. LOPEZ: 25.

HEARING OFFICER COCHRAN: That should be the 2017 BAAQMD CEQA guidelines. And now, I would like you to look for Section 2.1. It's pretty late in the document, but I would go down to probably page 150 at least in the PDF. And, of course, I'm blind. I have to get close to my screen to see how close you are.

I need from appendix -- Liza stop. Scroll back up. Scroll back up. I need Table D-1. Table D-1. And that's in Appendix D to this document. So, yeah, keep going.

MS. LOPEZ: I don't see --

HEARING OFFICER COCHRAN: Keep going. Stop.

MR. DARVIN: So, this is Greg Darvin. It should be on page D-1. She's there.

HEARING OFFICER COCHRAN: C-31?

MR. DARVIN: D as in dog, 31.

HEARING OFFICER COCHRAN: So, if you look at the bottom pages, Liza, the pages at the very bottom. Go back, back, back, back. Back, back, back. And just a little bit more. Stop. That table right there.

So, this is for anyone who can help me through this. So, it's my understanding that in studying and reviewing the emissions from the Walsh Data Center Project, and you'll remember that the project is the whole of the action. So, the data center, the backup generators, et cetera. That we had identified several different types of emissions.

But in comparing those emissions these were thresholds of significance that we used. Am I correct about that?

MR. BABULA: This is Jared Babula, staff counsel. I'll throw that to staff since they're the ones testifying. Dr. Jiang, can you respond?

DR. JIANG: Yes. This is the threshold we are using in the analysis. And in particular it's stationary sources, 10,000 metric tons of CO2 equivalent per year.

HEARING OFFICER COCHRAN: Okay. So, then on Table 5.8-4 of Exhibit 200 it details the greenhouse gas emissions

from energy use, mobile sources, area sources, water use, and waste generation during project operation. Are you familiar with that table?

DR. JIANG: Yes.

HEARING OFFICER COCHRAN: And that shows that energy use has 108,396 metric tons of CO2 equivalent per year.

DR. JIANG: Yes.

HEARING OFFICER COCHRAN: Okay. So, if we look at the threshold identified in the BAAQMD CEQA document and we look at the different classes of emissions listed in 5.8-4, which of the significance thresholds in table -- in this table, in Section 2.1 of the thresholds apply to which of the identified emission limits identified in the initial study, Preliminary Mitigated Neg Dec? For each source, which threshold of significance applies?

DR. JIANG: Yes, so in this table we are using the 10,000 metric tons CO2 equivalent per year. We compared the direct GHG emissions to this thresholds. By direct emissions --

HEARING OFFICER COCHRAN: And what about the indirect?

DR. JIANG: Indirect emissions and we know it's from the greenhouse gas emissions by the SVP power grid, by the electricity use. And for this part, we compare it with the eligible state and local greenhouse gas reduction strategies.

So, as long as they used the qualified greenhouse gas reduction strategies and we determine it's in compliance.

HEARING OFFICER COCHRAN: Okay.

DR. JIANG: And we're not compare the indirect GHG emissions with this threshold.

HEARING OFFICER COCHRAN: Why not?

DR. JIANG: It's not -- here is stationary sources and it means the direct emissions. That's staff's understanding. And I believe maybe the representative from Bay Area District can also give more details.

HEARING OFFICER COCHRAN: Okay.

MR. GALATI: Ms. Cochran, this is Scott Galati. I have a witness that can answer your question.

HEARING OFFICER COCHRAN: Okay.

MR. GALATI: Mr. Lisenbee, are you still on the line?

MR. LISENBEE: Yes, I'm on the line.

MR. GALATI: Okay. So, the question has to do with the threshold that is identified for nonstationary sources in the Bay Area guidance. Can you explain why we didn't use that?

MR. LISENBEE: Right. So, the threshold on the screen right now, 1,100 metric tons of CO2 equivalent per year, or 4.6 metric tons of CO2 equivalent per service population per year, that was developed by BAAQMD in relation to the state's 2020 greenhouse gas emissions target. So,

that threshold is specific to emissions up to the year 2020. So, for a project like this project that won't become operational until after the year 2020, this threshold is no longer applicable.

HEARING OFFICER COCHRAN: Where is that deadline of 2020?

MR. LISENBEE: So, elsewhere in these CEQA guidelines there is discussion about how these thresholds were developed. And the 1,100 metric tons and 4.6 metric tons were developed in the context of meeting AB 32's 2020 GHG emission goals statewide.

HEARING OFFICER COCHRAN: Okay.

MR. GALATI: Ms. Cochran, may I ask a follow-up question that might provide a little more guidance?

HEARING OFFICER COCHRAN: Sure.

MR. GALATI: Mr. Lisenbee, is it your opinion that if we had followed the treatment of indirect electricity emissions according to the methodology here, we would vastly have underestimated those electricity emissions?

MR. LISENBEE: Can you rephrase that question? I'm not quite sure what you're asking.

MR. GALATI: If we had followed the methodology to look at the land use development source and used the modeling, compared it to other buildings, would we have come up with an underestimation of the indirect emissions from

electricity because this is a data center?

MR. LISENBEE: So, I believe what you're referring to is there's methodology outlined in these BAAQAMD guidelines recommending the use of modeling for estimating GHG emissions, including emissions from indirect sources, like electricity use. Those models, in the guidelines it refers to an older model called URMEBIS that has now been replaced by a model called CalEEMod, the California Emissions Estimator Model.

Those models don't have data for data center uses, which use large amounts of electricity. So, using those modeling techniques to estimate a data center's emissions would have underestimated the project's emissions because the electricity use factors of the land uses included in those models don't account for the high electricity use of data centers.

So, the manual calculation of data center emissions completed by staff in the ISMND is a more accurate way of estimating the project's emissions.

MR. GALATI: And so, how did you determine -- how did you evaluate whether or not those were significant?

MR. LISENBEE: Similar to what staff was saying that the indirect emissions from electricity use were discussed in the context of the utility provider, SVP's compliance with statewide goals for reducing GHG emissions from an

electricity provider.

MR. GALATI: So, there is not a significant -- there is not a numerical threshold for the indirect emissions from electricity, correct?

MR. LISENBEE: That's correct. The Bay Area Air Quality Management District has not released an updated threshold that addresses emissions beyond 2020. So, the emissions thresholds in this document, which discuss 2020, lists 1,100 metric tons emissions threshold can no longer be relied upon. And no updated emissions threshold has been released.

MR. SARVEY: Can I respond to that, please? Bob Sarvey.

HEARING OFFICER COCHRAN: Go ahead, Mr. Sarvey.

MR. SARVEY: If that's the case, then none of these thresholds are applicable to this project, so why are we using the BAAQMD regulations? It doesn't make any sense. If this all expires in 2020, none of these thresholds of significance are valid. So, I believe that argument is just full of holes.

MR. GALATI: I can clarify, if you'd like, Commissioner?

HEARING OFFICER COCHRAN: Just please go ahead.

MR. HILKEN: So, it is correct that the greenhouse gas thresholds are based on AB 32 2020 targets. So, this

table --

HEARING OFFICER COCHRAN: Who's speaking right now?

MR. HILKEN: I'm sorry, Henry Hilken from the Air District.

HEARING OFFICER COCHRAN: Please go ahead, Mr. Hilken.

MR. HILKEN: So, it is the case that these thresholds we're looking at right now in Table 2.1, the greenhouse gas thresholds, are indeed, it is correct that those are based on AB 32 goals for 2020, which are obviously outdated now. And as the prior speaker indicated we are -- the District is in the process of updating those thresholds to help -- to provide that guidance for how lead agencies should evaluate these sorts of impacts in the future.

And this is, indeed, one of the points in our comment letter was it is not adequate to just use these 2020 thresholds. In our comment letter we recommended a longer range -- an evaluation based on longer-term compliance with statewide goals and regulatory programs. And that's the text that CEC staff -- a more qualitative approach that staff included in the final report.

However, all of the other thresholds, for instance the other air pollution thresholds are still very much in effect. The just regular air pollution thresholds that we talked about earlier are not based on 2020 and those have not

been -- those are still applicable for use and we recommend their use until we have an update.

HEARING OFFICER COCHRAN: Okay. So --

MR. BABULA: Hearing Officer Cochran, this is Jared. I've got a staff person that also has some information that would be helpful in addressing your question.

HEARING OFFICER COCHRAN: And who's that?

MR. BABULA: That would be Mr. Birdsall.

HEARING OFFICER COCHRAN: Okay, Mr. Birdsall, you were previously sworn, correct?

MR. BIRDSALL: Hello, can you hear me?

MR. BABULA: Yes.

HEARING OFFICER COCHRAN: Yes. You were previously sworn, is that correct?

MR. BIRDSALL: That's right, yes, I have been.

HEARING OFFICER COCHRAN: Okay, please proceed.

MR. BIRDSALL: Okay. And just to clarify, you had on the screen the threshold in the chapter D -- or, rather the Appendix B of the BAAQMD guidelines. There is some interpretation or methodology explanation in those guidelines a little bit further down on some surrounding pages. And just to be concise, I will point you to page D-27, where it explains that when a lead agency is dealing with a stationary source that goes through the Air District permitting process, for the GHG emissions from electricity use, and water

delivery, and mobile sources would not -- would not be subject to that stationary source threshold.

And then, a little bit further down, on page D-29 of the same guidelines, it also -- the guidelines also explain that the AB 32 Scoping Plan measures, which have been updated and incorporated in ARB's current Scoping Plan update, these have been kept up to date to go beyond 2020 goals, including the Cap & Trade Program. Those Scoping Plan measures provide the necessary emission reductions from the stationary source specter to achieve the AB 32 2020 goals.

And so, I think the answer to your question, Hearing Officer, is that really the electricity component is compared to a qualified climate reduction -- or greenhouse gas emission reduction plan. And that plan is really the AB 32 and then followed up by the SB 32 Scoping Plan update that includes the entire regulatory framework for reducing GHG from the electricity sector.

HEARING OFFICER COCHRAN: Okay. So, when I look at the chart that's here on the screen, it seems to me that the indirect emissions are not the stationary source that we're concerned about here. The stationary source for the Walsh project are the backup generators. Am I correct in that characterization?

MR. BIRDSALL: Yes.

HEARING OFFICER COCHRAN: Then what we're talking

about now are the indirect emissions caused by use of power by the data center, which is part of the CEQA project that the Energy Commission is reviewing. Is that correct?

MR. BIRDSALL: Actually, could you repeat that question? And I might -- I was just being distracted for a moment.

HEARING OFFICER COCHRAN: That's okay. Let me ask it a different way. If we were assuming that this chart before us, from Appendix D of the BAAQMD CEQA guidelines from 2017 was not stalemated because of the passage of time, in other words because we're not past 2020, where would indirect emissions be compared in terms of what the threshold of significance is? Is it a stationary source or is it a project other than a stationary source? The indirect emissions from power use?

MR. BIRDSALL: I'll provide my answer, and then I will also --

HEARING OFFICER COCHRAN: Sure.

MR. BIRDSALL: -- ask Dr. Jiang, Dr. Tao Jiang to confirm because we've been working together in the topics of Air Quality and GHG over time.

And the indirect emissions -- first of all, to answer your first part, I believe that the thresholds here are not stale. I believe that these thresholds are relevant to our project, they remain relevant. And it is true that the Air

District is working to update the thresholds. However, as lead agencies use these guidelines we have really no better thresholds than these, and these are quite good, I think.

For the indirect emissions that you're asking about, I would categorize those as projects other than stationary sources, meaning that those emissions are compared to qualified greenhouse gas reduction strategy. So, compliance with a qualified greenhouse gas reduction strategy is our test.

And I would like for Dr. Tao Jiang to reaffirm that. Because I believe this is what's appearing in our initial study, but maybe not totally explicit. And then, it also appears in staffs responses to the Committee questions. So, Dr. Jiang can you help me out with that and confirm.

DR. JIANG: Yes. Thanks for the explanation from my colleague Mr. Birdsall. And I agree with what he said. In this case, the indirect GHG emissions we should characterize it as projects other than stationary sources because they are not directly from, thus different sources from this data center project. Therefore, we use compliance with a qualified greenhouse gas reduction strategies to determine the compliance, instead of using the threshold.

HEARING OFFICER COCHRAN: Okay. So, now, let's then turn our attention to qualified greenhouse gas reduction strategies. And the CEQA guidelines, at Section 15183.5

define for us what a qualified greenhouse gas reduction strategy is. And in the ISPMND and in the testimony today we've listed a number of documents. So, which of those satisfies the definition contained in 15183.5 of a qualified greenhouse gas reduction strategy?

DR. JIANG: This is Tao Jiang again. And I think the plan we referred to is the City of Santa Clara Climate Action Plan adopted in 2013.

HEARING OFFICER COCHRAN: That ends in 2020.

DR. JIANG: We have explained in the response to Committee questions and we believe the consistency with this CAP framework will be carried forward by the City to address the post-2020 emissions in its next CAP update. And we know that the district -- I mean, the City will continue to keep the consistency.

HEARING OFFICER COCHRAN: But at this point that document indicates that it's for projects through 2020 and this project will not be built by 2020. So, that's the qualified greenhouse gas reduction strategy or plan that you're using is the City of Santa Clara General Plan, Climate Action Plan, the CAP?

DR. JIANG: Yes. And also, since the majority of the GHG emissions is from the indirect use -- of the indirect emissions from the electricity use, and as explained by the representative from SVP at the beginning of this hearing, and

they do have their strategies to reduce the greenhouse gas emissions to up to 2050.

So, we also rely on the SVP's GHG reduction efforts and we don't require any other additional mitigations.

HEARING OFFICER COCHRAN: Okay, thank you.

Would anyone else want to provide any more information for me on my question?

MR. GALATI: Yes, Ms. Cochran, this is Scott Galati. I'd like Michael Lisenbee to provide some additional information that's also outlined in our Exhibit 24, in your responses. Mr. Lisenbee, can you describe sort of the three ways that would be stationary threshold, the role of the Climate Action Plan, and then the role of indirect emissions, and other regulatory schemes? Mr. Lisenbee?

MR. LISENBEE: I'm sorry, could you please repeat the question?

MR. GALATI: Yeah. Could you please describe the role of the stationary source threshold, the role of the Climate Action Plan, and the role of SVP's compliance with other regulatory structures for greenhouse gas emissions and how those were used to evaluate impacts?

MR. LISENBEE: Sure. So, this is admittedly complicated when it comes to analyzing GHG emissions, and that's probably why there's some confusion around this topic. So, we compare GHG emissions to different thresholds

depending on the type of emission it is. So, for stationary sources, they are considered on their own and they have their own threshold. And that's what we're looking at on the screen right now is this 10,000 metric tons of CO2 per year. And that threshold was developed by BAAQMD to capture essentially large sources of GHG emissions from stationary sources.

So, essentially, BAAQMD determined that any stationary source with less than 10,000 metric tons per year would be insignificant when it comes to GHG emissions. And that 10,000 metric tons per year was established to capture roughly 95 percent of GHG emissions from stationary sources in the Bay Area. So, that's one threshold and that's the threshold that's used for stationary sources, which in the case of this project is the backup generators.

Then we have the language about qualified greenhouse gas reduction strategy. So, the Santa Clara Climate Action Plan is a qualified greenhouse gas reduction strategy. It analyzed the City's method of reaching the 2020 state target under AB 32, and provided CEQA clearance for subsequent projects to tier from that document.

However, tiering from a document is a little different than being consistent with the plan. So, in the case of this project neither the SPPE application or the initial study tiered from and under CEQA, meaning that we

didn't rely on the conclusions of the Climate Action Plan to determine a less than significant impact based on the Climate Action plan itself finding of CEQA impact.

Instead, we analyzed the project's consistency with measures included in the Action Plan, or the project's consistency in general with a qualified greenhouse gas reduction strategy.

So, it wasn't that the project relied on the finding of a Climate Action Plan that only looked out to 2020, it was more was it consistent with this plan that's in place to reduce greenhouse gas emissions in the City of Santa Clara.

This is similar to the analysis of the indirect emissions from electricity uses. The emissions from electricity uses, basically the project's indirect emissions from that were discussed in the context of SVP's overall ability to meet statewide goals and targets under adopted plans and policies by the state. And the application and initial study determined that because SVP would be meeting all regulatory requirements and reducing the air emissions as they relate to state goals, then the project's indirect emissions associated with their electricity use from SVP would by definition meet those same targets and goals.

So, as I said it's complicated. When it comes to GHG emissions, we compare to multiple different thresholds and targets. But in general, the approach from staff and the

approach in our SVP application is the same approach used by the City of Santa Clara, and is adequate under CEQA and follows CEQA guidelines 15064.4. And although it does not rely on Section 15083, it's consistent -- 15183.5, sorry, that allows projects to tier from prior CEQA documents. The Climate Action Plan under Santa Clara was a qualified greenhouse gas reduction strategy under Section 15183.5 of the CEQA guidelines.

HEARING OFFICER COCHRAN: So, I have a question regarding the Silicon Valley Power greenhouse gas reduction strategy. Is it a qualified greenhouse gas reduction strategy under 15183.5?

MR. SARVEY: No.

HEARING OFFICER COCHRAN: Thank you, Mr. Sarvey. Does anyone else have an answer to that question?

MR. LISENBEE: This is Mr. Lisenbee. There is no SVP Climate Action Plan. There was a City of Santa Clara Climate Action Plan.

HEARING OFFICER COCHRAN: Right.

MR. LISENBEE: SVP, as a utility provider, has its own state regulations that it has to comply with. And the representative from SVP would be able to speak to that more than I would.

HEARING OFFICER COCHRAN: Mr. Kolnowski, do you know whether the greenhouse gas reduction strategy that is used by

SVP has, for example, been adopted in a public process following environmental review?

MR. KOLNOWSKI: I know we fall under the City of Santa Clara's Climate Action Plan since we are a department of the City. The Integrated Resource Plan was adopted by counsel for -- it was presented to counsel and we did a follow up after it was accepted by the Energy Commission, so they're aware of it. And I can't remember if we asked them to approve it or just to accept it.

HEARING OFFICER COCHRAN: Do you know whether there was any type of CEQA compliance for the SVP IRP? Did you do a negative dec? Did you do an exemption? Or, was there any kind of environmental review for the SVP IRP?

MR. KOLNOWSKI: I would have to check.

HEARING OFFICER COCHRAN: Okay.

MR. KOLNOWSKI: I'll try -- I don't think I can do it while I'm on the WebEx though, because of my internet connection.

HEARING OFFICER COCHRAN: Okay, that's fine.

MR. KOLNOWSKI: And I'll ask the question.

HEARING OFFICER COCHRAN: That would be great, thank you.

Another question, we've talked a lot about RPS. Does anyone have an opinion of whether that meets the requirements of 15183.5 as a greenhouse gas reduction -- a qualified

greenhouse gas reduction strategy?

MR. GALATI: This is Scott Galati. I just wanted to correct something. I think that we wanted to make sure it's very clear we're not tiering off and we're not using 15183.5. And, therefore, it doesn't have to be -- tiering off it is very different than comparing to regular regulatory programs that are there.

Remember, the Walsh Data Center can do one thing. It can meet and reduce its use of electricity, which we have, and that complies with all of the terms of the Santa Clara Plan. And so, it is fair to look at indirect emissions separately and we did not tier off the Santa Clara Plan or any other plan and saying that plan says we're okay, all we have to be is consistent with that plan.

What we did show you is that greenhouse gas emissions are reducing over time from Silicon Valley and this project does nothing to impede that.

HEARING OFFICER COCHRAN: Okay. So --

MR. SARVEY: I'd like to object to that as testimony.

MR. GALATI: You can ask Mr. Lisenbee, that's definitely argument and I just wanted to clarify.

MR. SARVEY: Well, let it come from Mr. Lisenbee, please.

HEARING OFFICER COCHRAN: So, I'm confused. On the one hand, under 15064.4, for purposes of the plans that we're

relying on, we're saying we're looking at the 2017 BAAQMD CEQA guidelines. But then, when we come to indirect you're saying that we're not looking at them. We're looking at something else. But what I'm also hearing is that there's no numerical threshold to compare the indirect emissions against. Am I understanding the testimony thus far?

MR. GALATI: That is exactly correct and we made it clear, and so did staff, that there is no numerical threshold for indirect emissions from electricity.

MR. BABULA: Yeah, this is Jared Babula from staff. That was the fundamental component that was put into the response to Committee questions was to try to clarify that for the SVP-related indirect emissions there is no numerical threshold. And so, it came down to the whole entire suite of state policies, executive orders, and laws that are pushing SVP to have a lower GHG emissions profile. And so, that's what staff relied on, and the staff has testified about.

The only thing where there's a numerical threshold would be for the generators themselves. And for construction there's a best practices component. And so, really, for the bulk of the emissions it's the SVP and that's why we spent a lot of time with SVP's representative to lay out what they're working on and how their achieving the objections and requirements that they're mandated to do.

HEARING OFFICER COCHRAN: Okay. So, as I'm looking

at the BAAQMD CEQA guidelines, and I'm looking specifically at Appendix D, Section 2.1 of Exhibit 25, the chart that's currently on the screen being displayed in WebEx. For projects other than stationary sources, which I've understood the testimony to be that that's what we are categorizing the indirect emissions as being. I'm being told that I can't use the numerical thresholds in that chart. So, instead, what we're then left with is the qualified greenhouse gas reduction strategy. Is that correct?

MR. GALATI: No, that is not correct.

HEARING OFFICER COCHRAN: Okay, what is correct? And I want -- instead of arguments from the attorneys, I'd like to hear from one of the expert witnesses on this.

MR. GALATI: Mr. Lisenbee, could you try to explain that?

MR. LISENBEE: Can you please repeat the question?

HEARING OFFICER COCHRAN: If there are minimal thresholds from Appendix D because those numerical thresholds were only through the horizon for AB 32 of 2020, does that leave only a qualified greenhouse gas reduction strategy as threshold against which to compare the indirect impact of the project based on energy usage?

MR. LISENBEE: Sorry, I was waiting for the background noise to go down a little bit. It's not exactly right. So, it's correct that the numeric thresholds for

projects other than stationary sources, as were shown on the screen, cannot be relied upon for a determination of a CEQA impact because they only address the ability to --

MS. LOPEZ: This is Liza, the host. Whoever is SK, can you mute yourself?

Susan, you can actually mute them. It's SK. Thank you.

(Whereupon the court reporter interrupts)

HEARING OFFICER COCHRAN: Yeah, Mr. Lisenbee.

MR. LISENBEE: This is Mr. Lisenbee, yes. All right, so the numeric thresholds shown in the table on the screen for projects other stationary sources only were designed to address emissions through the year 2020. So, relying on them would not show any compliance with the state's targets beyond 2020. And since this project will be constructed after 2020 it does not -- comparing to this threshold does not determine any type of significance of the project's emissions because we're already past the year that those thresholds were designed to analyze.

So, in terms of that text, compliance with a qualified greenhouse gas reduction strategy, that's very specific in what it means. And that means a greenhouse gas reduction strategy adopted under the CEQA guidelines 15183.5. And that is when we're talking about tiering, that's what that's referring to. So, that was what the Santa Clara's

Climate Action Plan was. It was designed as a tiering document so that future projects would not have to essentially do individual greenhouse gas analysis for every project. You could just show that we are consistent with the assumptions that went into this greenhouse gas reduction strategy. We're going to implement all the measures. And, therefore, the findings of this greenhouse gas reduction strategy that was adopted and had CEQA review can be conferred upon the proposed project because it is tiering from that.

We can no longer rely on the City's CAP for tiering. We can discuss our project's consistency with it since it's still an adopted plan, adopted to reduce greenhouse gas emissions. And if you look at the language of the CEQA guidelines, not the BAAQMD guidelines, that's the question is whether we're consistent with plans and policies adopted to reduce greenhouse gas emissions. Not whether we're consistent with a specifically-adopted greenhouse gas reduction strategy under 15183.5.

So, the approach this project took for the indirect emissions for projects other than the stationary sources was a discussion of every relevant plan and policy, local, regional or statewide that was adopted to reduce greenhouse gas emissions in the context of the state's overall goals in this legislation and any other relevant local and regional

policies.

So, those don't necessarily have to be qualified greenhouse gas reduction strategies under 15183.5. Those are plans and policies adopted as the language in the CEQA guideline says, that we are analyzing our consistency of the project with.

HEARING OFFICER COCHRAN: Okay, thank you. I think that I'm going to leave this for now. Why don't we allow the parties to go forth with their questions, starting with staff.

MR. BABULA: Okay, thank you. So, I don't have any -- you're talking about for cross-examination?

HEARING OFFICER COCHRAN: Yes.

MR. BABULA: Okay. I just wanted to make sure. So, I have a question for -- this is for Mr. Sarvey. So, do you agree the majority of the GHG emissions from the project are the indirect emissions associated with use of the grid electricity? Are you able to hear me, Mr. Sarvey?

HEARING OFFICER COCHRAN: Mr. Sarvey, are you there?

MR. SARVEY: Yes, I'm here.

HEARING OFFICER COCHRAN: Did you hear Mr. Babula's question?

MR. SARVEY: Do you want to repeat the question there, please?

MR. BABULA: Sure.

MR. SARVEY: Repeat the question, please?

MR. BABULA: Sure, no problem. Do you agree the majority of the GHG emissions from the project are the indirect emissions associated with use of grid electricity?

MR. SARVEY: I agree that the emissions from the project represent 14 percent of Santa Clara's current GHG emissions. And I also agree that the indirect emissions from electricity are the majority of that, yes.

MR. BABULA: So, would you agree, then, that the primary factor in reducing project GHG emissions is decreasing the carbon intensity of SVP's electricity supply and increasing its percent of renewables?

MR. SARVEY: I believe that that would be an acceptable approach, except for the fact that SVP is going to increase their megawatt hours produced. So, when you take the emission factor from the production of their increase in megawatt hours, I believe that their CO2 will be even higher than it is currently. And I have numbers for that. I'll give you those later, if you want to hear about it.

MR. BABULA: Well, can you point to any evidence in your filings or in the record that show SVP is not meeting its current and future GHG and RPS obligations under SB 100 and SB 32?

MR. SARVEY: Sure. Let me go through it with you. Silicon Valley Power's Utility Fact Sheet, Exhibit 512, shows

that SVP sold 3,593,758 megawatt hours in 2019 with a carbon intensity by SVP of 341 pounds of GHG emissions per megawatt hour.

Under SVP's method of calculating GHG emissions that would produce approximately 556,000 metric tons of CO2. SVC estimates their carbon intensity for 2030 to be only 219 pounds of CO2 per megawatt.

On Exhibit 28, page 4.5, SVP's IRP estimates that SVP will consume 5,281,000 megawatt hours. Using SVP's 2030 projected carbon intensity times its projected retail sales of 5,281 megawatt hours it would produce 553,000 metric tons of CO2 per year. That's almost exactly what they're emitting now.

Now, if you take their high -- assuming their high load growth of 7 million megawatt hours forecasted in SVP IRB on page 4-6, the GHG emissions from SVP's retail sales would be about 20 percent higher than the 2020 GHG emissions, instead of 20 percent lower.

So, let's look at the facts and let's not speculate whether SVP is going to meet these carbon intensity factors. Let's look at the numbers that are in the IRP that's in the evidence in this proceeding. And the evidence in this proceeding shows there's no way they're going to make a 20 percent reduction from 2020, in my view.

MR. BABULA: Isn't the RPS a percentage, so it's a

requirement based on percent, not direct, like not straight megawatts; isn't that correct?

MR. SARVEY: I'm talking about the carbon intensity of their particular megawatt hour times the number of megawatt hours that are produced. And if you run the numbers, you'll see there's no way they're going to make it, no matter what their IRP says.

MR. BABULA: Okay. So, despite what --

MR. GALATI: At this point -- I apologize. I'd like to break in and object for us waiting for when this would happen.

Mr. Sarvey had an opportunity to file all of that in prewritten testimony and was directed to do so. And he filed a bunch of exhibits afterwards, not for the purpose of cross-examination, but for supporting arguments that he knew and should have filed ahead of time so that neither staff nor I, and the Applicant is being surprised by the way he has just done that calculation. There's no way I can follow it.

So, I would -- rather than have a delay in the hearing, I would move that that be all considered to be comment because, again, it violates the rules set out to make it fair for everybody. This should have been his testimony.

MR. SARVEY: Is it my turn?

MR. BABULA: I have -- well, I want the -- does the Committee want to address Scott's objection?

MR. SARVEY: Do I get an opportunity to respond to it first?

HEARING OFFICER COCHRAN: I think that we are going to admit the testimony and we will give it the weight that it deserves based on whether it is testimony or comment. And we will make that -- and that's the ruling. So, it's admitted.

MR. SARVEY: I would still like to respond, please.

HEARING OFFICER COCHRAN: Please, go ahead.

MR. SARVEY: Okay. Staff and Applicant filed, both filed response to the Committee questions. There was no opportunity to respond to that. Most of this information I've give you is already in my testimony. Most of the exhibits that I filed is already referenced in my testimony. This is rebuttal testimony to what they're saying. They're saying the IRP is not a qualified GHG reduction plan. The Santa Clara CAP is expired. The only thing we have is to look at the numbers in this proceeding.

Now, if you want to get your calculator out, I'll read the stuff back and you can follow me, Mr. Galati. But that's rebuttal testimony. That's what it's called, okay.

HEARING OFFICER COCHRAN: And I think that I agree with that. You'll remember when we were at the prehearing conference we said that we would be allowing reply and rebuttal to the testimony that was offered on the Committee question. And so, today is the day for that. Mr. Sarvey did

refile his exhibits in much the same way that you added additional exhibits, Mr. Galati.

So, again, we will give it -- we will give Mr. Sarvey's testimony the weight that it deserved. Are there any other --

MR. BABULA: I just have one more question.

HEARING OFFICER COCHRAN: Sure, Mr. Babula.

MR. BABULA: Yeah, thank you. This is Jared Babula again for the staff.

Does the Supplemental Health Risk Assessment, which included the airport and other sources of toxic air contaminants performed by Drs. Chu -- or that were testified to by Dr. Chu, and filed in response to Committee questions address your concerns regarding the cumulative health risk assessment?

MR. SARVEY: No, it does not because it did not include several projects that are actually even on the list of projects that are within 1,000 feet of the project. And one of them is -- one of them is -- let me look it up. Give me a second, please.

(Pause)

MR. SARVEY: One of the projects is the 2805 Lafayette Street Data Center is not included in your analysis. And also, the 1150 (indiscernible) Avenue Data Center is also not included in your analysis. So, you're

supposed to be looking at reasonably foreseeable projects, as well as the projects that exist, and that's the way the BAAQMD regulations read, and that's the way it's required. Reasonably foreseeable, you didn't include any reasonable foreseeable projects. You have quite a few of them in there, and they weren't in there. So, no, I'm not satisfied with that analysis. And I also believe --

DR. CHU: This is --

MR. SARVEY: I also believe the fact that you have -- that your analysis determined that the impacts were above the .8 micrograms per cubic meter for PM 2.5 doesn't specify that it's at a specific receptor. And I think just the fact that it exceeds it, it exceeds the BAAQMD threshold.

DR. CHU: This is --

MR. BABULA: It sounds like -- hold on, Dr. Chu. It looks like I have a staff witness who would like to use a little redirect. Is that okay?

HEARING OFFICER COCHRAN: Well, let's finish your questions for Mr. Sarvey, first.

MR. BABULA: That's my last question for him.

HEARING OFFICER COCHRAN: Oka.

MR. BABULA: Go ahead, Dr. Chu.

HEARING OFFICER COCHRAN: Well, wait, wait. Mr. Sarvey, have I given you an opportunity to do your cross?

MR. SARVEY: No.

HEARING OFFICER COCHRAN: Mr. Sarvey, it's now your time to do cross-examination.

MR. SARVEY: I would like to cross the BAAQMD witness first, if I could, please.

HEARING OFFICER COCHRAN: Okay, Mr. Hilken are you available, still?

MR. HILKEN: Yes, I'm here.

HEARING OFFICER COCHRAN: And I would like to express on behalf of the Committee our thanks for your participating today. I think it's been very helpful, especially because we are so reliant on guidance from BAAQMD in addressing these issues. So, thank you for taking the time today.

MR. HILKEN: Sure, you're welcome.

HEARING OFFICER COCHRAN: Mr. Sarvey, please go ahead with your questions.

MR. SARVEY: Oh, okay. What issues does BAAQMD still have with the ISMND Air Quality and Greenhouse Gas analysis?

MR. HILKEN: I'm sorry, could you say that again, Mr. Sarvey, please?

MR. SARVEY: Well, when you originally spoke, you said you still had a couple of issues with the greenhouse gas analysis and also the use of diesel engines. Can you go over what shortcomings you still identify in the ISMND from BAAQMD's perspective?

MR. HILKEN: Well, what I was speaking to is that,

you know, we have policy initiatives to reduce and eliminate use of fossil diesel. There was reference earlier to a Diesel Free by '33 Campaign. And it's a campaign that our Air District launched a couple years go to reduce and eliminate or encourage local governments and firms to reduce and eliminate use of diesel fuel for a couple reasons. One for climate reasons because the combustion CO2 emissions and black carbon emissions contribute to global climate change, and because the particle emissions from that combustion are hazardous to health.

And so, what I was expressing earlier is that separate from these individual proceedings the Air District, we've spoken with other air districts, we would very much like to continue a dialogue with the CEC and see how air districts throughout the state, certainly ours, working with state agencies like the CEC can move us away from using fossil diesel. That's beyond the scope of an individual project perhaps. It's a campaign we're interested in, we're embarked on, and we would like to work with the CEC in the months and years ahead to make progress in that direction.

MR. SARVEY: And you also said you had an issue with some portion of their greenhouse gas analysis. Could you expand on that?

MR. HILKEN: Well, I think what I expressed was that in our original letter we had expressed concerns about it.

And some of the previous speakers and the discussion we had right after lunch spoke to that. The additional text that staff included in the final report that pointed to those statewide programs, SB 100 specifically, that lays out very aggressive goals for decarbonizing the electrical grid, the Regional Portfolio Standard, and others, and align -- so, to achieve, so implementing those state regulatory programs to achieve those long-term statewide GHG reduction goals as expressed in a series of different governor executive orders.

MR. SARVEY: So, the 1,000, or 1,100 metric ton threshold for projects, land use projects is expired. Has BAAQMD proposed another one? And do you expect it to be a lower threshold?

MR. HILKEN: We have not -- we have not established a new one, nor have we even proposed a draft. We are working on that internally right now. And I can't speculate on what it will be.

MR. SARVEY: CEC staff claims natural gas generators cannot start fast enough to back up the data center. Is it your opinion that natural gas generators would be able to start fast enough to back up the data center?

MR. HILKEN: I'm not expert enough in that technology to respond to that.

MR. SARVEY: Okay. Would biodiesel be a possible fuel source for the diesel generators?

MR. HILKEN: Renewable diesel is one option, yes.

MR. SARVEY: Would that satisfy your no diesel initiative in '33?

MR. HILKEN: Yes. Yes, we would find renewable diesel would be consistent with that, yes.

MR. SARVEY: And would fuel cells also be a possibility for that purpose?

MR. HILKEN: Certainly. Absolutely.

MR. SARVEY: Okay, great. When performing the cumulative HRA does the impact have to be tied to a specific location or is any cumulative PM 2 point impact of .8 micrograms per cubic meter impact significant?

MR. HILKEN: Well, I mean typically we're looking at sensitive receptors such as residential areas, schools, childcare, health facilities and so forth. What would be the impact in those sensitive land uses? I don't think it's really worthwhile speculating, you know, a receptor point in a parking lot. I mean we're interested in receptors, existing sensitive receptors.

MR. SARVEY: Okay. Now, the BAAQMD CEQA guidelines state accumulative impact occurs if the annual average PM 2 point impact is .8 micrograms per cubic meter. If that entire impact is diesel particulate, in your opinion would that be even more of a significant impact?

MR. HILKEN: Well, in addition to that PM 2.5

threshold, we also have a cancer risk threshold that was referenced earlier in the hearing. And so, typically, we see both of those analysis. As was presented here, there specifically would be an analysis of toxic cancer risk and, in addition, a PM 2.5. Both of them are bad for your health. Diesel PM is bad for you, PM 2.5 wherever it comes from is bad for your health. And, typically, both of those analyses are presented.

MR. SARVEY: Thanks for your participation. Appreciate you being on the line. Thank you.

MR. HILKEN: Right.

HEARING OFFICER COCHRAN: Mr. Sarvey, do you have any other questions of any of the other witnesses from staff or applicant?

MR. SARVEY: I have a few questions for the staff.

HEARING OFFICER COCHRAN: Please proceed.

MR. SARVEY: Okay. So, no, a lot of this stuff's already been covered. You want the GHG questions as well?

HEARING OFFICER COCHRAN: Yes, please.

MR. SARVEY: Okay. I want to ask staff if they had reviewed SVP's Integrated Resource Plan, docketed as Exhibit 28 by the Applicant.

DR. JIANG: Yes, this is Dr. Tao Jiang from the staff.

MR. SARVEY: Okay.

DR. JIANG: Yes, we did review that IRP.

MR. SARVEY: Okay. On page 1.1 of the Integrated Resource plans it states: Meeting the GHG targets assumes that only SVP-owned resources count towards the emissions target. SVP finds that the generic emissions rate of .428 metric tons per CO2 per megawatt hour for spot market purchases per CEC guideline would be too high. If this rate is applied, SVP's portfolio emissions will exceed the GHG target.

To your knowledge, has the CEC provided another generic emission rate for spot market purchases?

DR. JIANG: I am the staff doing the Air Content analysis specifically for Walsh's project. And when you refer this document to CEC staff, I believe it's to another division of the CEC. So, I'm not the person who can answer you this question.

MR. SARVEY: Okay. So, your knowledge is that there is no other generic emission rate for spot market purchases?

DR. JIANG: I personally do not have this knowledge and I don't believe it's related to my initial study. So, today I'm only sponsoring what I wrote in my analysis regarding to this project specifically.

MR. SARVEY: Okay. According to your testimony in Exhibit 203, page 14, you state that the CEQA guidelines, Section 15183.5 allows an agency performing a project-

specific environmental analysis to rely on an EIR containing a programmatic analysis of greenhouse gas emissions. Typically, the referenced document would cover a general plan or other long-range city or county development plan.

Well, in this case Exhibit 505, the Santa Clara General Plan EIR states on page 11: The city's projected 2035 GHG emissions would constitute a cumulatively considerable contribution to global climate change by exceeding the average carbon efficiency standard necessary to maintain a trajectory to meet statewide 2050 goals as established by EOS305 significant impact.

Did you know that the Santa Clara General Plan had made the determination that GHG impacts were significant and unavoidable for 2035?

MR. BABULA: I'm going to object to that question because it's not directly on his -- I'm not sure how it relates to Dr. Jiang's testimony that he has either stated orally or written.

MR. SARVEY: I just asked him if he had read the Santa Clara General Plan and he said he did. So, I was asking him if he knew that and did he consider it.

MR. BABULA: But this is a different document you're referencing.

MR. SARVEY: I'm referencing the Santa Clara General Plan EIR. Asked him had he looked at it and he said he did.

HEARING OFFICER COCHRAN: I'm going to overrule the objection. Dr. Jiang have you read -- are you familiar with that document?

DR. JIANG: I read this document only to the extent to finish my analysis. And I didn't read the entire document. So, I don't think I can answer all the questions in that document. We do have the representative from Santa Clara -- I mean from the SVP. And if you want to ask the question, I think they are the best person to answer.

MR. SARVEY: Okay, thank you. That's all I have.

HEARING OFFICER COCHRAN: Okay, so you're through with your cross-examination, Mr. Sarvey?

MR. SARVEY: Yes, I am.

HEARING OFFICER COCHRAN: Okay. Mr. Galati, I understand that you wanted an opportunity to cross-examine Mr. Sarvey?

MR. GALATI: Yes. I'm assuming Mr. Sarvey is done with his direct testimony on Air Quality and Greenhouse Gases, is that correct?

MR. SARVEY: Yes, I am, Mr. Galati.

HEARING OFFICER COCHRAN: Please proceed.

MR. GALATI: All right. Mr. Sarvey, at page 4-5 of Exhibit 200, which is the ISMND, the project (indiscernible) -- by the South Loop System is served by two electrical feeders. Do you recall that?

MR. SARVEY: Could you repeat that? You really broke up when you were asking that question. I'm sorry.

MR. GALATI: Page 4-5 of Exhibit 200, which is the ISMND, the project description describes how the South Loop System is served by two electrical feeders, each of which could support the South Loop System. Are you familiar with that?

MR. SARVEY: Yes, I'm familiar with that.

MR. GALATI: You don't disagree with that conclusion?

MR. SARVEY: I disagree that it's that much protected. Because unless the second loop is connected to a different substation, if one substation goes down you can have two feeders. It won't matter, the project still goes down.

MR. GALATI: Describes that (indiscernible) -- substation. Are you familiar with that?

MR. SARVEY: I'm sorry, I can't hear you, Mr. Galati.

MR. GALATI: It describes that it comes from two separate substations. There are two feeders into the double loop system. Do you agree with that?

MR. SARVEY: That's not my understanding. But go ahead, ask your question.

MR. GALATI: You also point to a Washington Department of Ecology analysis for the CyrusOne project, but you didn't include that as an exhibit in this case. Are you

withdrawing that testimony?

MR. SARVEY: No, not at all.

MR. GALATI: So, you're still pointing to that analysis as an analysis that shows emergency modeling of data centers at the same time, is that correct?

MR. SARVEY: Well, actually, what I'm saying is a response to staff's testimony that air districts don't normally model emergency operation. And what I was saying is that most air districts do not have data centers with 100 megawatts of backup diesel generation. And the only ones I'm familiar with are the Bay Area and Washington State. Washington State in fact does model every single data center for emergency operation. And the only data center I've aware of that BAAQMD has ever reviewed is the Santa Clara Data Center, and they did an evaluation of emergency operation there. So, that's what I'm referring to in my testimony.

MR. GALATI: Do you have an example of a CEQA project for CEQA purposes, not permitting purposes, but for CEQA purposes where that emergency modeling was done, other than Laurelwood?

MR. SARVEY: Other than Laurelwood?

MR. GALATI: Correct.

MR. SARVEY: I think I just told you that the Bay Area did the Santa Clara CAP -- I mean, did the Santa Clara project. They analyzed emergency operations from that. And

as far as I know, that's the only emergency operations that's been evaluated by BAAQMD and any -- it's the only permit that's been evaluated by BAAQMD, to my knowledge.

MR. GALATI: And that was done for permitting purposes, not for CEQA compliance, correct?

MR. SARVEY: No, that was done for CEQA compliance and permitting purposes. That was the whole --

MR. GALATI: So, it was BAAQMD that did the CEQA for that project?

MR. SARVEY: -- reason -- the fact we did it was for CEQA compliance.

MR. GALATI: So, BAAQMD did CEQA compliance for that Santa Clara project. Is that your contention?

MR. SARVEY: Yes, it is my contention. They did that before the Energy Commission ever became involved.

MR. GALATI: Your testimony states -- cites from the ATC, in the ATC analysis, that's the authority to construct, correct?

MR. SARVEY: Correct.

MR. GALATI: Mr. Sarvey, have you ever performed an air quality modeling analysis and submitted it to any agency?

MR. SARVEY: I've evaluated quite a few. I've never done one of my own, no.

MR. GALATI: Do you know if the Department of Ecology Analysis that you refer to, whether or not that section was

considered with the reason that that modeling was done was because it's on one electrical feeder. Would that surprise you?

MR. SARVEY: No, I don't believe the reason that they did the modeling was to make sure that the PM 2.5 and NO2 impacts specifically wouldn't exceed air quality standards, and that was the reason they did it.

MR. GALATI: Is it because that what you just said is contradicted, is that why you did not put that permit and that health risk assessment as an exhibit in this proceeding?

MR. SARVEY: No, not at all. Didn't think that I was required to put in stuff that you wanted put in. I put in the stuff that I wanted to put on.

MR. GALATI: You rely on it, but you don't provide the documents.

MR. SARVEY: Yeah, I mentioned it in my testimony and you've seen it before in other proceedings, so it should be no surprise to you.

MR. GALATI: And I just wonder why you don't want the Committee to see it?

MR. SARVEY: I'd be happy to docket it, if you want it.

MR. GALATI: That would be great.

MR. SARVEY: Sure, no problem. But I doubt the Committee's going to accept it at this late date. But if

they do, I'll docket it. No problem.

MR. GALATI: You also refer to Exhibit 500, which is -- you refer in -- at pages 8 and 9 in your testimony, which is Exhibit 500, you refer to publicly reported outages for 2019 from the Uptime Institute. Do you remember that?

MR. SARVEY: Yeah. Yeah, I remember something like that, uh-huh.

MR. GALATI: And you say that power outages only account for 25 percent of data center outages.

MR. SARVEY: I've seen different numbers. I've heard it's been 30 percent and I've also heard that UPS failures is the leading cause at 31 percent. I've heard a lot of different numbers from a lot of different areas, including the Uptime Institute's had several different numbers that they've issued over the years. So, I'm not sure exactly which one's correct, but they're all ball park.

MR. GALATI: When you read those reports do you think that outage means no electrical support?

MR. SARVEY: No. No, absolutely not. An outage could be something like a UPS failure where -- particularly, I have one in Exhibit -- the Friendster outage, where they had a UPS failure and they had to rely on their backup generators for many hours due to complications from the UPS failure.

Now, they get a lot of different -- you've got human

error could be an issue for the generators coming on. It could be, you know, a lot of different reasons. And that's why I'm saying relying on just power outages from SVP reported is not an accurate way to determine the frequency of the use of the backup generators.

MR. GALATI: So, you don't believe that the word outage in that report refers to the data center losing internet connectivity?

MR. SARVEY: In some cases the outage could refer to a power outage. There's a lot of different outages reported in those reports. And I've read quite a few of them. I can't say I've read specifically the one that you docket. But the other ones I've read, yeah, they list a lot of different reasons for power outages and that could mean the data center could go offline. Maybe it isn't, maybe it goes on backup power.

MR. GALATI: So, what I'm trying to say here or I'm trying to understand is you think every time they're talking about a data center outage the backup generators come on, correct?

MR. SARVEY: No. No, that's not what I'm saying at all.

MR. GALATI: So, there are outages that --

MR. SARVEY: That's what you're saying, not me.

MR. GALATI: -- that are unrelated to power outages.

There are outages unrelated to power outages that don't necessarily use the backup generators.

MR. SARVEY: There are reasons for the -- there's reasons for the backup generators to come on, other than a disconnection from SVP is what I'm saying.

MR. GALATI: I have no further questions.

MR. SARVEY: Thank you.

HEARING OFFICER COCHRAN: Okay, Mr. Babula, I believe you indicated you have some redirect you wanted to conduct?

MR. BABULA: Yes, thank you.

Dr. Ann Chu, can you explain regarding Mr. Sarvey's comment on what sources you used in your health risk assessment?

DR. CHU: Yes. I would like to clarify our cumulative health risk assessment. Actually, we did include 2845 Lafayette and 2808 Lafayette in our cumulative health risk assessment.

And we used the receptors as the center of the 100-foot radius. So, as for the 2845 Lafayette, it's beyond the 1,000-foot from all those three receptors we used in the cumulative health assessment.

And as for 2805 Lafayette, it's about 500 feet to a receptor of MEIW, but far from the other two receptors. So, it was included in the cumulative health risk assessment of MEIW.

MR. BABULA: Thank you. And then I do -- if Mr. Kolnowski is still on the phone, I would like to give him an opportunity to respond to some of the things Mr. Sarvey brought up regarding SVP, specifically, if he's available.

HEARING OFFICER COCHRAN: Mr. Kolnowski, are you still available?

MR. KOLNOWSKI: I am here. And first off, I want to let you know I did find out that our Integrated Resource Plan was adopted by the City Council on November -- one second here, November 27, 2018. So, it did go to Council, they did adopt it and it's the document that we have.

HEARING OFFICER COCHRAN: Okay. So, Mr. Kolnowski, again on behalf of the Committee I would like to thank you for your participate today. I know it's been a long day so far and you've been very patient with us. So, again, our appreciation for being here and participating in our process.

Mr. Babula, please go ahead.

MR. BABULA: Yeah, Mr. Kolnowski, did you hear Mr. Sarvey's response to my questions of him?

MR. KOLNOWSKI: Yes.

MR. BABULA: And in his response he detailed his view on why Silicon Valley Power's GHG emissions will go up or won't be -- are questionable. So, I just want to give you an opportunity to respond to any of his comments that he made.

MR. KOLNOWSKI: I believe he's oversimplifying the

situation. And again, we're a department of the City of Santa Clara. We take our directions from City Council. City Council's intent is that we meet the laws that are established by the State of California and they direct us to seek new generation sources to meet the GHG standards that are currently law for 2030 and 2045. And our City is committed to doing that.

And we take that target very serious and our mission is to acquire the correct resources to meet the needs of the City.

One comment I'd like to make in regards to there was a discussion starting to talk about a feeder, and so forth, that the way the South Loop is configured -- I'm trying to locate my drawing here, but I can't find it right now -- is each end of the loop is coming from a separate substation. And at each substation there are multiple transformers that feed that loop. This is one thing that Santa Clara has done throughout its history is to build in the redundancy to ensure reliability. So, not one substation is on a single feeder. So, I just wanted to make that comment.

MR. BABULA: Thank you. I have nothing further.

HEARING OFFICER COCHRAN: Okay. Does anyone have any further cross-examination, reply, rebuttal, et cetera, on the topics of Air Quality, Health Risk Assessment, and Greenhouse Gases? Going once, going twice, okay.

Following the prehearing conference we had indicated that we were going to allow the parties to have up to 10 minutes to present a summary of the evidence presented today at closing statement.

Applicant, are you ready to proceed with your closing statement?

MR. GALATI: Yes, I am.

HEARING OFFICER COCHRAN: Please proceed.

MR. GALATI: As the Committee is aware, WP and staff are in complete agreement on the findings, conclusion and mitigation, including the new and modified mitigation measures, and concurrent opinion that the evidence conclusively proves that the project can make the findings necessary for an SPPE.

I'd remind the Committee that there's been no members of the public that have been interested in this project or others. It's only, really, Mr. Sarvey. And Mr. Sarvey has been given -- this is his third time to give his arguments that have happened -- that he has been able to make in the past. There are some new ones and we'll continue to address those.

But the bottom line is all of his claims and arguments don't really rise to the level of a clear argument because many of them, in fact all, are not supported by expert opinion or facts. They're supported by his argument.

In addition, unlike a normal CEQA process, he's had the opportunity to have all of those adjudicated at this evidentiary hearing.

You heard from Mr. Hubbard, who describes for you that it is not appropriate to take the maximum emissions, both for electricity production, and assume that on day one of the project that that's what's going to be served. You've heard that his experience is that even when it's fully leased, it's 60 to 70 percent of the peak electrical demand.

You've also learned that there's a couple of things that the project is doing, both Exhibit 1, as well as in Exhibit 200, describe all of the efficiency measures that the Walsh Data Center building is -- it has been incorporating into the design. And that those efficiency measures actually comply with the recommendations in the Santa Clara Action Plan.

You also know that the project is using very little water, which is also a greenhouse reduction strategy.

What you also know that the project has diesel particulate filters which reduces diesel particulate of 80 to 95 -- actually, it's an 85 to 90 percent reduction.

The project is doing everything it can to reduce impacts. The area's electrical consumption, it is meeting a low RAP power rating. You'll see that in Exhibit 26, the industry average PUE for 2019, according to an annual survey

by Uptime Institute, of 1,600 participants, is that that PUE is 1.67. You heard Mr. Hubbard describe the PUE and working hard to make it lower, between 1.18 and 1.23.

So, the project is extremely efficient. Even though it does consume electricity, it consumes a lot less than many, many other projects, and certainly the average data center.

You've learned that emergencies are unexpected and speculative. I think that we've -- well, I'm not going to spend any more time on that because we didn't today in hearing, but I urge you to read our responses and to rely on Laurelwood.

As far as cumulative air quality modeling, we didn't talk about that today as well, but if you would please read our responses.

We did talk about public health. And what we did talk about is that the project has gone beyond, and the staff assessment has gone beyond what the Bay Area Air Quality Management District recommends in writing, and that the Bay Area Air Quality Management District representative testified they were satisfied with that.

So, we're left with greenhouse gas emissions and we're left with where is there a threshold? And the bottom line is there is no threshold for indirect emissions for electricity. So, does that mean that there isn't a numerical

threshold that no large electricity user can actually comply with CEQA? We have to use some common sense here. The best thing that we can do is what was done in this project.

And as Mr. Lisenbee testified, it's what other cities and counties do. What they do is they look at the indirect emissions and they ask themselves where are they coming from? And in this case, where they're coming from is Silicon Valley Power. And they ask themselves, is Silicon Valley Power on track to meet its goals? That's the best we can do.

But the second question we've asked as well, does the data center itself actually prevent Silicon Valley Power from meeting the goals necessary to reduce greenhouse gas emissions? There's no evidence of that. And all we can say is that large power users, if they're using electricity efficiently, they're doing their part.

The other option would be to say that data centers can't be above a certain size, or we can't build them. Clearly, greenhouse reduction strategies were not intended to halt all development. In fact, as we pointed out in Exhibit 24, it's quite common when there is a new user that that new user's large electricity demand allows the utility to actually go out and purchase much more cleaner energy because it now has a demand for some additional power.

So, remember what our job is here. And that is to determine if there are significant impacts, and as well as to

provide a document upon which the City can ultimately determine whether it would like to issue a permit for a data center.

I think that Mr. Sarvey has made a lot of arguments. I don't think any of those arguments are necessary to include in a CEQA analysis. And that's what we're doing here.

So, the last piece I wanted to point out, only because I don't want to leave it hanging, and that is you heard Mr. Kolnowski describe that, yes, a project such as the Walsh Data Center actually would cause some expansion to the utility system. That expansion is covered in your ISMND. I think you will look at page 4-4 through 4-5 and you will find out that the Laurelwood Substation is in fact the substation being built on the Walsh Data Center property. That is described. It's on the maps. And it's discussed in the ISMND, as is the transmission lines. Although they're not final design, the routes, and the typical pole configuration, and the estimation of the number of poles is also identified. So, there's no impact to the utility system. You even heard Mr. Kolnowski agree that the data center funds its fair share. And these expansion plans are in the works prior to these data centers, and the data centers are helping to build them.

We're happy to answer any questions on the closing statement.

HEARING OFFICER COCHRAN: Is that -- are you done, Mr. Galati?

MR. GALATI: Yes, I'm done.

HEARING OFFICER COCHRAN: Okay, so I just dropped off suddenly, so I didn't know if we were still -- if you were still with us. Okay.

MR. GALATI: No, I apologize. I said I could answer any questions that the Committee might have on the closing statement.

HEARING OFFICER COCHRAN: Okay. I don't believe we have any.

So, I will now ask staff for its closing statement.

MR. BABULA: Great, thank you. This is Jared Babula. So, evidentiary hearings never turn out as clean and scripted event as I envision. But that's okay because we are dealing with complex topics. So, to stay the course our compass needs to be purpose. What is the purpose of this proceeding?

Under the Public Resources Code, the purpose if very limited and focused. It is determine whether the proposed project should be exempted from the Commission's licensing jurisdiction or subject to it. That is it.

The proceeding is not a forum to approve the project, design a new project, develop policy, deploy demonstration technology or update city plans. But how do we determine where jurisdiction should reside?

The answer in this case comes down to impacts. Under Public Resources Code, the Commission may exempt the project from its jurisdiction if the Commission finds that no substantial adverse impact on the environment or energy resources will result from the construction or operation of the proposed facility.

Technical staff's singular focus in evaluating the proposed project is to identify potential impacts and determine whether those impacts are substantial or significant. Only if significant impacts are identified can mitigation be proposed. Stakeholders raise concerns in the areas of energy resources, air quality, public health, and GHG emissions.

Energy resources were addressed by Mr. Kevin Kolnowski, the CEO of SVP, who was clear that SVP has been planning for the electrical load required by various data centers for years, and that SVP has the energy resources now and into the future to meet demand.

There is no contrary evidence in the record supporting any notion that SVP would not have adequate energy resources to meet future growth in demand from all sources. Therefore, staff correctly found no significant impacts and no mitigation necessary.

For Air Quality related to criteria pollutants, Dr. Jiang testified there were no significant impacts. These

findings are based on low levels of criteria pollutants generated from the testing of the backup generators and are crystalized in Tables 5.3-5 and 5.3-6 of the initial study.

The emission numbers contained in these tables are uncontested and support staff's finding of no significant impacts and no mitigation being necessary.

For Public Health related to criteria pollutants and toxic air contaminants, Dr. Jiang and Dr. Chu testified there were no significant impacts. Tables 5.3-7, -8, -9, and -10 of the initial study and Tables 1 through 3 of the response to Committee questions support this conclusion, showing impacts are below thresholds of significance were not cumulatively considerable.

All the data contained in these tables are also uncontested in the record. Without a significance finding, no mitigation is necessary.

For GHG emissions, the backup diesel generators are a minor source of GHG, emitting well below the threshold of significance of 10,000 metric tons CO2 equivalent per year, as shown in Table 5.82 in the initial study.

As Dr. Jiang testified, the bulk of the project's GHG emissions are indirect emissions from the use of grid electricity. A determination of whether the project's GHG emissions are significant lies not with the backup generators, but with SVP's grid power. If SVP's GHG

emissions are consistent with state long-term GHG reduction targets, then the project's indirect GHG emissions will also be consistent and, therefore, no significant.

As Drs. Jiang testified, Chu, and Mr. Kolnowski confirmed, SVP's carbon intensity is trending down, while their RPS is increasing. Specifically, SVP stated they're on track to meet long-term GHG and RPH requirements mandated under state law, such as SB 100.

Critically, Mr. Kolnowski stated that the data centers, such as Walsh, do not impede this progress and the expectation is that most future procurement by SVP will be from renewable and zero carbon resources.

These facts showing SVP's consistency with long-term state GHG targets are uncontested in the record and support staff's finding that the project's GHG emissions would not be significant, obviating any need for mitigation.

The fact that staff found no significant impacts is not an endorsement that diesel generators should be installed, or that they will not be phased out by other laws and programs in the future, only that there are no significant impacts with the project as planned.

The uncontested facts, data and modeling results support staff's conclusion that the project as planned will not have any substantial or significant impacts on the environment or energy resources.

Therefore, with no impacts, the question this proceeding was created to answer, where should jurisdiction reside can be answered. The Commission may grant the exemption.

Thank you. And I'm available if there's any questions.

HEARING OFFICER COCHRAN: Thank you, Mr. Babula.

And finally, Mr. Sarvey, are you ready for your closing statement?

MR. SARVEY: Yes, I am.

HEARING OFFICER COCHRAN: Please proceed.

MR. SARVEY: Staff and the Applicant are relying on SVP's ability to meet their GHG reduction targets and we have a lot of speculation on whether they'll meet them or not. The numbers in the evidence show they won't.

The evidence shows the GHG emissions from the Walsh Data Center will be individually and cumulatively a significant impact.

Exhibit 505, the City of Santa Clara's General Plan EIR, page 24 of 594 states: The City's projected 2035 GHG emissions would constitute cumulatively considerable contribution to global climate change by exceeding the average carbon efficiency standard necessary to make the statewide 2050 goals as established by EOS3-05, which is a significant impact.

The City's General Plan, which staff and Applicant both said should be relied on, states that the project will not meet the climate goals expressed in EOS3-05.

The evidence shows that SVP will not reduce its GHG emissions enough to meet the 2030 targets required by state goals. Silicon Valley Power's load growth will cause Silicon Valley Power's overall GHG emissions to increase or stay steady, even with the lower carbon intensity of its resources.

Exhibit 28, page A-11 shows SVP's GHG emissions from just its natural gas-fired generation increases from 227,243 metric tons per year in 2019 to 312,958 metric tons a year in 2030. That does not include the GHG emissions from its unspecified market purchases, which the Integrated Resource Plan admits will cause SVP to miss its 2030 GHG targets.

As stated in Exhibit 28, Silicon Valley Power's Integrated Resource Plan, on page 1.1, meeting the GHG targets assumes that only SVP-owned resources count towards the emission targets. SVP finds that its emission rate of .428 metric tons of CO2 per megawatt hour for spot market purchases per CEC guidelines will cause them to exceed their GHG target.

Now, if you assume the high load growth forecasted in the Integrated Resource Plan on page 4-6, up to 7 million megawatt hours, the GHG emissions from SVP's retail sales

would be about 20 percent higher than the 2020 emissions, using their emission factors.

Staff claims that no air quality impacts from emergency operations evaluation is necessary because SVP experienced no impacts from the 2019 PSPS shutoffs. Staff is wrong. As Exhibit 508 and 509 demonstrate that SVP lost access to both geothermal resources and small hydro resources during two PSPS shutoffs in 2019.

Wildfires are expected to increase and be more severe. So, a PSPS shutoff for SVP or curtailment of some of their resources is reasonably foreseeable.

Staff relies exclusively on power curtailment by SVP to determine the probability of the backup generators operating. There are other reasons why backup generators operate in emergency mode at data centers. Events like UPS failures, human error, weather impacts, and other emergency conditions lead to emergency operation of generation at data centers.

An analysis of emergency operation centers' air quality impacts must be performed to see if emergency operations cause an air quality or public health impact. Without this analysis, the Applicant has not met the burden of proof that the project will not cause or contribute substantially to an air quality exceedance or a health risk from toxic air contaminants when the project operates in

emergency mode. That is the purpose of the project.

And that's all I have, thank you.

HEARING OFFICER COCHRAN: Thank you, Mr. Sarvey.

We will now turn to public comment. And I'm going to unmute everyone. The lines are open. If you're making a lot of noise, I will probably mute you. So, if you want to mute yourself if you have no public comment, please do so now.

Is there anybody on the line who would like to make a public comment on the Application for a Small Power Plant Exemption for the Walsh Backup Generating System?

I am not seeing any hands raised. I have no chat. Anybody? Okay.

At this time, the Committee will now adjourn to a closed session in accordance with California Government Code Section 11126(c)(3), which allows a state body to hold a closed session to deliberate on a decision to be reached in a proceeding the state body was required by law to conduct.

We anticipate we will return from closed session in approximately one hour. We would like to ask the parties to stay as there may be reportable action out of closed session.

So, with that we are now in closed session.

(Convene Closed Session at 2:26 p.m.)

(Reconvene Open Session at 3:49 p.m.

HEARING OFFICER COCHRAN: And I'm looking for Commissioner Douglas.

PRESIDING MEMBER DOUGLAS: Oh, I'm here. I just joined by phone. So, as Susan had said, we're back from closed session. And I will turn this over to here and make a report, and then I will close this up.

HEARING OFFICER COCHRAN: Thank you. So, there is reportable action from closed session. The Committee makes the following report. There will be a subsequent notice and order concerning some of these deadlines for the parties. The Committee will be looking for legal briefing from the parties. That legal briefing will be due seven business days after the transcript is posted on the proceedings docket.

In the April 30, 2020 Notice of the Evidentiary Hearing, we had established that we would have a consideration of the Committee Proposed Decision on the July Business meeting. At this time, the Committee believes that the consideration of the Committee Proposed Decision will actually be on the August Business meeting.

That is the end of the reportable action from closed session. As I said, there will be a follow up in writing of these dates and deadlines.

PRESIDING MEMBER DOUGLAS: All right, and with that then the hearing is finished and we're adjourned. Thanks everyone.

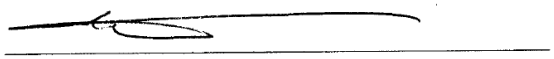
(Thereupon, the Hearing was adjourned at 3:51 p.m.)

REPORTER'S CERTIFICATE

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

And I further certify that I am not of counsel or attorney for either or any of the parties to said hearing nor in any way interested in the outcome of the cause named in said caption.

IN WITNESS WHEREOF, I have hereunto set my hand this 2nd day of June, 2020.



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I do hereby certify that the testimony in the foregoing hearing was taken at the time and place therein stated; that the testimony of said witnesses were transcribed by me, a certified transcriber.

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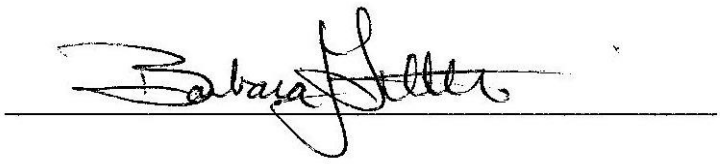

Barbara Little
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