BEFORE THE ARIZONA POWER PLANT AND TRANSMISSION LINE SITING COMMITTEE

LS-344

IN THE MATTER OF THE APPLICATION OF UNS ELECTRIC, INC. IN CONFORMANCE WITH THE REQUIREMENTS OF A.R.S. 40-360, ET SEQ., FOR A DISCLAIMER OF JURISDICTION, OR, IN THE ALTERNATIVE, A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AUTHORIZING THE EXPANSION OF BLACK MOUNTAIN GENERATING STATION, A NATURAL GAS-FIRED, COMBUSTION TURBINE POWER PLANT NEAR KINGMAN, ARIZONA IN MOHAVE COUNTY.	DOCKET NO. L-00000F-24-0056-00230 EVIDENTIARY HEARING

At: Phoenix, Arizona

Date: April 24, 2024

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REPORTER'S TRANSCRIPT OF PROCEEDINGS

(Pages 1 through 259)

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VOLUME I April 24, 2024 Pages 1 to 259

VOLUME II April 25, 2024 Pages 260 to 465

INDEX TO PROCEEDINGS

INDEX (Continued):

INDEX TO EXAMINATIONS

INDEX (Continued):

INDEX TO EXHIBITS

INDEX (Continued):

INDEX TO EXHIBITS

NO.	DESCRIPTION	IDENTIFIED	ADMITTED
UNSE-15	UNSE 2023 IRP	144	18
UNSE-16	U.S. Energy Information Administration Glossary Definitions	334	18
UNSE-17	Joint Stipulation of Admission of Facts	32	18
UNSE-18	BMGS Unit Operation Statistics (2017-2023)	271	272
SC-1	UNS Response to SC DR 1.3 (including supplemental response)	--	19
SC-2	Attachment to UNS Response to SC DR 1.3 titled "26-SC 1.3 Equipment File.xlsx"	149	19
SC-3	Attachment to UNS Response to SC DR 1.3 titled "27-SC 1.3 General Arrangement Schematic and Site Layout.pdf"	148	19
SC-4	UNS Response to SC DR 1.12	--	19
SC-5	UNS Response to SC DR 1.13 (including supplemental response)	179	19
SC-6	UNS Response to SC DR 1.15 (including supplemental response)	--	19
SC-7	UNS Response to SC DR 1.17	--	19
SC-8	UNS Response to SC DR 1.19	--	19
SC-9	UNS Response to SC DR 1.20 (including attached Form EIA-860s from 2018-2022)	195	19

INDEX (Continued):

INDEX TO EXHIBITS

NO.	DESCRIPTION	IDENTIFIED	ADMITTED
SC-10	Attachment to UNS Response to SC DR 1.20 titled "SC 1.20 UNS 2023 EIA 860 Annual Report - Black Mtn"	195	19
SC-11	UNS Response to SC DR 2.2	--	19
SC-12	UNS Response to SC DR 2.3	202	19
SC-13	UNS Response to SC DR 3.6	172	19
SC-14	U.S. Energy Information Administration Instructions for Form EIA-860 (2023)	310	19
SC-15	Coolidge Expansion Project CEC - SRP - Decision No. 79020 (2023) (Excerpt)	--	19
SC-16	Coolidge Generating Station Original CEC - Decision No. 70636 (2008) (Excerpt)	--	19
SC-17	Sundance Expansion CEC - APS - Decision No. 79189 (2023)	--	19
SC-18	Sundance CEC Modification - APS - Decision 67504 (2005)	--	19
SC-19	Original Sundance CEC - APS - Decision 63863 (2001) (Excerpt)	--	19
SC-20	TEP Sundt/Irvington RICE Units - Decision 76638 (2018) (Excerpt)	--	19
SC-21	2023 BMGS Air Permit No. 96392 (Excerpt)	194	19

INDEX (Continued):

INDEX TO EXHIBITS

NO.	DESCRIPTION	IDENTIFIED	ADMITTED
SC-22	2022 BMGS Air Permit Application (Excerpt)	193	19
SC-23	CV of Cara Fogler	--	19
SC-24	Meghan Grabel and Elias Ancharski, It's Time to Review Utility Siting Committee, AZ Capitol Times (April 25, 2022)	--	19
SC-25	U.S. Energy Information Administration Glossary (Excerpts)	369	19
SC-26	UNSE 2023 IRP (Excerpt)	196	19
SC-27	Presentation from TEP 2014 IRP (Excerpt)	--	19
SC-28	UNS Annual Resource Planning Compliance Report (Apr. 1, 2024)	--	19
SC-29	ACC Decision No. 70186 (Feb. 27, 2008)	238	19
SC-30	ACC Decision No. 71914 (Sept. 30, 2010) (Excerpt)	241	19
SC-31	ACC Decision No. 72213 (Mar. 3, 2011)	241	19
SC-32	2022 Form EIA-860 Data (Excerpt)	311	19
SC-33	ACC Decision No. 70108 (December 21, 2007)(Excerpt)	272	273
SC-34	Docket No. L-00000FF-07-0134-00133, Staff Brief on Jurisdiction and Need (Oct. 3, 2007)	272	273

INDEX (Continued):

INDEX TO EXHIBITS

NO.	DESCRIPTION	IDENTIFIED	ADMITTED
AriSEIA-1	ADEQ Air Permit for BMGS	234	19
AriSEIA-2	UNSE Supplemental Response To AriSEIA DR 1	217	19
AriSEIA-3	UNSE Response to AriSEIA DR 2	--	19
AriSEIA-4	UNSE Response to AriSEIA DR 3	--	19
AriSEIA-5	UNSE Response to AriSEIA DR 4.1	--	19
WRA-1	IEEE Standard 762-2023	348	19
S-1	Letter to Adam Stafford (April 24, 2024)	394	19
S-2	Letter from Commissioner Tovar (March 29, 2024)	--	19

BE IT REMEMBERED that the above-entitled and numbered matter came on regularly to be heard before the Arizona Power Plant and Transmission Line Siting Committee at 1200 West Washington Street, Phoenix, Arizona, commencing at 10:00 a.m. on April 24, 2024.

BEFORE: ADAM STAFFORD, Chairman

LEONARD C. DRAGO, Department of Environmental Quality
ROMAN FONTES, Counties
DAVID FRENCH, Arizona Department of Water Resources
JON H. GOLD, General Public
NICOLE HILL, Governor's Office of Energy Policy
R. DAVID KRYDER, Agriculture Interests
MARGARET "TOBY" LITTLE, General Public
GABRIELA SAUCEDO MERCER, Arizona Corporation Commission
DAVE RICHINS, General Public
SCOTT SOMERS, Incorporated Cities and Towns
(Via Videoconference)

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CHMN STAFFORD: Now's the time set for the hearing on the application for a disclaimer of jurisdiction for UNSE Docket Number L-00000F-24-0056-00230 or Line Siting Case 230.

Start by taking role of the Committee members.

Member Fontes.

MEMBER FONTES: Present, representing the counties of Arizona.

CHMN STAFFORD: Member Hill.

MEMBER HILL: Present, representing the governor's officer.

CHMN STAFFORD: Member Drago.

MEMBER DRAGO: Present, representing Arizona Department of Environmental Quality.

CHMN STAFFORD: Member French.

MEMBER FRENCH: Present, director's designee for the Department of Water Resources.

CHMN STAFFORD: Member Richins.

MEMBER RICHINS: Present, representing the general public.

CHMN STAFFORD: Member Gold.

MEMBER GOLD: Present, representing the people of Arizona.

CHMN STAFFORD: Member Mercer.

MEMBER MERCER: Present; I'm the designee of the Arizona Corporation Commission Chairman.

CHMN STAFFORD: Member Kryder.

MEMBER KRYDER: Present, representing agriculture of Arizona.

CHMN STAFFORD: And Member Somers is with us virtually.

MEMBER SOMERS: Present.

CHMN STAFFORD: Thank you.

I just wanted to let the members know this is a hearing on -- it's limited to the disclaimer, the request for disclaimer of jurisdiction. There will be -- initially we'll set out -- the parties will lay out what the facts are, and then at the conclusion instead of voting on whether to issue a CEC or not, we'll decide whether or not the statute applies to the project. So this is not an environmental review. We won't be doing a tour. There won't be -- we won't be looking at the impacts of it. This is just more of a theoretical exercise of whether the process applies to this project or not.

And the ex-parte rule is in effect, and I would like to admonish the public and all the parties that they are not to communicate with the Committee members about the merits of the case off the record.

Now let's take appearances of the parties, starting with the applicant.

MS. GRABEL: Thank you, Mr. Chairman, Committee members, Meghan Grabel from the law firm Osborne Maledon, on behalf of UNS Electric. With me at counsel table is UNSE's in-house counsel, Megan Hill and its assistant general counsel, Mr. Brad Carroll.

CHMN STAFFORD: Thank you. Sierra Club.

MR. WOOLSEY: Good morning, Mr. Chairman. Can you hear me?

CHMN STAFFORD: Yes.

MR. WOOLSEY: Patrick Woolsey, appearing on behalf of Sierra Club, and with me is my colleague, Nihal Shrinath.

CHMN STAFFORD: AriSEIA.

MS. JOHNSON: Good morning, Chairman and members, Autumn Johnson on behalf of the Arizona Solar Energy Industries Association or AriSEIA.

CHMN STAFFORD: Western Resource Advocates.

MS. DOERFLER: Good morning, Emily Doerfler on behalf of Western Resource Advocates or WRA.

CHMN STAFFORD: SWEEP.

MS. REYES: Good morning. Chanele Reyes, from the Arizona Center for Law in the Public Interest, on behalf of the Southwest Energy Efficiency Project or

SWEEP.

CHMN STAFFORD: And Commission Staff.

MS. SCOTT: Good morning, Chairman Stafford and members of the Line Siting Committee, Maureen Scott and Samantha Egan, on behalf of the Commission Staff in this proceeding.

CHMN STAFFORD: Thank you.

Now, Members, we have a number of parties that have applied for intervention. Several are parties as a matter of right under the statute. And that is the applicant and that is the Commission Staff and AriSEIA. I don't believe the applicant objects to any participation of any of these parties.

MS. GRABEL: Thank you, Mr. Chairman. We do not object to the participation of these parties.

CHMN STAFFORD: But you did draw -- make a point that while Staff is a party pursuant to 360.05(A)(2), and AriSEIA is (A)(3), Sierra Club, WRA, and SWEEP need to be designated parties by the Committee, because they're -- that's pursuant to (A)(4), correct?

MS. GRABEL: That is correct, Mr. Chairman, yes. But we would not oppose them being admitted under that rule.

CHMN STAFFORD: Okay. So, Members, if I could get a motion to allow Sierra Club, WRA, and SWEEP

status as intervenors.

MEMBER RICHINS: So moved.

MEMBER GOLD: Second.

CHMN STAFFORD: All in favor say aye.

(A chorus of "ayes.")

CHMN STAFFORD: Opposed?

(No response.)

CHMN STAFFORD: Hearing none, so Sierra Club, WRA, and SWEEP are now parties to this case.

All right. Now, all the parties have exchanged exhibits and provided copies of their exhibits to the members, correct?

MS. GRABEL: Correct, yes.

MR. WOOLSEY: Mr. Chairman, I did want to ask, I gather that Member Somers is participating remotely. We hadn't realized that one of the members would be appearing remotely. Would it be appropriate for us to e-mail a copy of the exhibits to Member Somers?

CHMN STAFFORD: You can get it to Tod at -- my assistant, and he can get it to Member Somers.

MR. WOOLSEY: Thank you.

CHMN STAFFORD: I assume the other parties have similar concerns?

AriSEIA?

MS. JOHNSON: I can e-mail Tod now. Thank

you.

CHMN STAFFORD: Okay, thank you.

And SWEEP, you didn't have any exhibits. WRA?

MS. DOERFLER: I'll do the same.

CHMN STAFFORD: And Commission Staff, I believe yours are already in the docket.

MS. SCOTT: Yes, I believe they are.

CHMN STAFFORD: Okay. All right. And I understand all the parties have stipulated to the admission of all their exhibits. There's none that are being contested, correct?

MS. GRABEL: Mr. Chairman, that was true as of the date of the prehearing conference. I believe that since then Staff has submitted some exhibits that some of the other parties object to. So I'll let them speak to their own objections, but the Company's fine stipulating to the admission of all exhibits with the note that we may object to them, but that will go to the weight of the evidence, as opposed to its admission.

CHMN STAFFORD: And Sierra Club?

MR. WOOLSEY: Thank you, Mr. Chairman. So as Ms. Grabel mentioned, the parties did discuss some late-disclosed exhibits that Staff offered, including a letter in response to Commissioner Tovar's letter. And

Sierra Club, and I believe a number of other intervenors, have simply raised the point that because that letter contains legal argument, we didn't believe that it should be considered an evidentiary exhibit, but that said, we don't have an objection to that letter being considered as part of the record.

CHMN STAFFORD: All right. So you have no -- no objection to the admission of all the exhibits?

MR. WOOLSEY: We -- we do not object to any of the other exhibits' admission. As to that letter offered by Staff, we believe that should not be considered an exhibit, and we would reserve the option to object at the appropriate time.

CHMN STAFFORD: All right.

WRA?

MS. DOERFLER: I would echo Sierra Club's objection or, I guess, non-objection, but point.

CHMN STAFFORD: Okay.

SWEEP?

MS. REYES: I agree with WRA and Sierra Club on the matter.

CHMN STAFFORD: AriSEIA?

MS. JOHNSON: Chairman and Members, we will stand by the stipulation of all of the factual exhibits, all of which I believe were submitted in advance of the

prehearing conference. We would also agree that any legal arguments are appropriate for a response, but are not appropriately factual exhibits.

CHMN STAFFORD: And Commission Staff?

MS. SCOTT: Chairman and Committee Members, we believe it is appropriate to admit that exhibit, because that letter -- those letters that the Chairman requests in cases have typically been made an exhibit and part of the record, so we believe this is no different, and that this letter should be treated as other letters have been in the past.

CHMN STAFFORD: Thank you.

All right. So we have -- the applicant has 17 exhibits?

MS. GRABEL: Yes, Mr. Chairman.

CHMN STAFFORD: All right. Those are admitted.

(Exhibits UNS-1 through UNS-17 were admitted into evidence.)

CHMN STAFFORD: Sierra Club, you have 34 exhibits?

MR. WOOLSEY: I have 32 exhibits, Mr. Chairman.

CHMN STAFFORD: 32. All right. Those are admitted.

(Exhibits SC-1 through SC-32 were admitted into evidence.)

CHMN STAFFORD: AriSEIA?

MS. JOHNSON: We had 10 exhibits, but to reduce redundancy, because Sierra Club is doing their cross-examination before us, immediately before us is my understanding, we removed any exhibits that were duplicative. And so now we have five.

CHMN STAFFORD: All right. Those are admitted.

(Exhibits AriSEIA-1 through AriSEIA-5 were admitted into evidence.)

CHMN STAFFORD: WRA?

MS. DOERFLER: WRA has one exhibit.

CHMN STAFFORD: All right. It is admitted.

(Exhibit WRA-1 was admitted into evidence.)

CHMN STAFFORD: And Commission Staff, you have two exhibits?

MS. SCOTT: Yes, that's correct.

CHMN STAFFORD: All right. The Staff letters are always an exhibit in these proceedings, so both of Staff's exhibits are admitted.

(Exhibits S-1 through S-2 were admitted into evidence.)

CHMN STAFFORD: And SWEEP, you had none, correct?

MS. REYES: Correct. No exhibits.

CHMN STAFFORD: And we are not consolidating the parties, you've managed to narrow the scope of the parties. I think we have a handle on it, I don't believe it's necessary.

I do believe we have some people wanting to make public comment. There is a sign-in sheet in the back of the room. If you are present and wish to make public comment, please fill it out. And then we will use that to call on you.

Let's begin with the opening statements, starting with the applicant.

MS. GRABEL: Thank you, Mr. Chairman. I believe we need to load a PowerPoint onto the screen.

Excellent.

Again, thank you, Mr. Chairman, Members of the Committee. Meghan Grabel of the law firm Osborn Maledon on behalf of UNS Electric.

My opening will briefly walk you through the disclaimer process and then present the facts underlying UNSE's application which will be presented in greater detail by our witnesses later this morning. These facts focus on the existing Black Mountain

Generating Station, and the proposed new generating units. I will then conclude with an introduction of our witnesses.

So just real quickly, talking about the disclaimer process. UNSE has been accused by some of the intervenors of trying to evade the Committee's jurisdiction, which is precisely the opposite of what we are trying to do here today. We believe that the statute is clear, but because entities have voluntarily sought CECs in situations where they may not have had to under the statute, we opted to file for a disclaimer of jurisdiction from the Committee and the Commission to clarify whether a CEC is indeed needed. This process is expressly provided for in the rules.

As you'll see on the screen, the Commission's rules state that an application may be filed in the alternative in situations where the applicant is in doubt as to whether an application is required by law. In such instances, the application shall request a disclaimer of jurisdiction from the Committee, and that's what we are doing here today. This case is well-suited for a disclaimer because it presents a threshold question of statutory interpretation: Are the proposed new generating units at the Black Mountain Generation Station plants that require a CEC? I'm not going to argue the

law now; we'll be doing that later in closing. But what you see on the screen in front of you is the definition of "plant." Plant means each separate thermal electric generating unit with a nameplate rating of 100 megawatts or more. I read just the relevant parts for this proceeding. The question for the Committee is whether on the facts of this case, UNSE's proposed generating units meet this definition.

Again, I'm not going to argue the law yet, but the fact is that the Corporation Commission has defined the term "generating unit," as part of its resource planning rules. That rule is as follows: "Generating unit" means a specific device or set of devices that converts one form of energy, such as heat or solar energy, into electric energy, such as a turbine and generator or a set of photovoltaic cells. I'll refer both back to the statute and this rule in my closing argument, but for now let's turn to the facts.

The key facts in this case are undisputed. First is that the nameplate rating is the maximum-rated output of a generator, commonly expressed in megawatts, and is usually indicated on a nameplate that is physically connected to the generator. That rating does not change, it is what it is, and you can physically see it etched on a placard that is embedded on the generator.

Second, there is no dispute that the nameplate rating for each of the new generators to be added to the Black Mountain Generation Station will be under 100 megawatts. If they are higher than that, any disclaimer of jurisdiction that this Committee will say will not apply and the Company will apply for a CEC.

The new units are expected to be similar to the existing Black Mountain Generating Station units, so it is helpful to look at those in order to put this question in context. The picture on the screen shows the existing Black Mountain Generating Station, it is comprised -- oh, sorry. Thank you -- it is comprised of two units, Unit 1 and Unit 2. Each unit has a separate nameplate rating of 61 megawatts.

These units provide peaking capacity and reliability services for UNSE service area in Lake Havasu and Kingman, Arizona. These small, single-cycle plants are needed, because they supply flexible, dispatchable, fast-ramping generation that can balance the intermittency of the growing renewable generation on the UNSE system. The new units are intended to serve the same purpose.

This is a picture of the Unit 2 generator. As you can see, the nameplate circled in very poor computer penmanship, I'm afraid, is physically affixed to

the generator. Zooming in, you can see that the nameplate tells us a lot about the generator. Relevant for our purposes are two things: First, the output; and second, the power factor. While a nameplate rating is typically expressed in megawatts, at Black Mountain the units' capacity's expressed in kilovolt-amperes, or kVAs, and is demonstrated on the output line.

Because the nameplate rating is expressed in kVA, we need to convert it to megawatts and both the fact that a conversion is needed, and the calculation to determine the nameplate ratings is a stipulated fact. The conversion to megawatts is accomplished by multiplying the kVA output by the power factor, divided by 10 to the power of 3.

Here, for Unit 2, the output is 71,176 kVA. The power factor is .85. Multiplying those two figures and dividing by 10 to the power of 3 gives you have a megawatt rating of 60.5 megawatts or we rounded that to 61 megawatts for ease. Both of the generators at Black Mountain Generating Station have identical nameplates, and each has a nameplate rating of 61 megawatts.

So now let's turn to the proposed units. This is the undisputed layout of the proposed units. All of the equipment that is required for the conversion of one form of energy into electricity, such as a turbine

and a generator, will be specific to each unit. The equipment that will be specific to each unit is shaded in blue. There will be some facilities that the four generating units will share. These are things like the cooling tower, the evaporation pond, and the generation tie line. Notably, the shared facilities are not required for the actual conversion of energy to electricity, the actual generation process. Instead, they provide support to the generating units to help meet regulatory requirements, make the production process more efficient, and catch the byproduct of generation, among other things.

While we could theoretically build individual ponds, towers, and gen-ties, it makes sense to size these shared items, such that UNSE and its ratepayers can save money by taking advantage of economies of scale. The shared facilities, which are colored in this gray in this schematic, do not physically connect the four units, nor do they make the units rely on one another for generation in any way. Each unit operates independent of the other. They are separately monitored, they are separately operated, they are separately dispatched, and they are separately maintained. All four units may run at the same time, but they will also likely run at different times, according

to system needs, which is the case with the two existing BMGS units. These are the facts on which our application for a disclaimer of jurisdiction is based.

The intervenors have presented what they call "disputed facts," which are really just mischaracterizations of how a power facility actually operates, in an attempt to force an argument that the four proposed generating units will not be, quote, separate from one another. They argue, for example, that the four units are connected or integrated, which is factually untrue. Rather, each generating unit, defined again to mean the turbine and generator and the limited auxiliary equipment needed to convert energy to electricity, are fully independent of one another. They are physically disconnected, and don't rely on one another to generate electricity.

Similarly, as discussed previously, the fact that the units will share certain facilities to benefit from economies of scale, does not connect them to one another or make them dependent on one another for generation of electricity. The generating units will be physically and operationally separate, despite sharing facilities for cost purposes.

Finally, the intervenors' attempt to equate a generating unit with a generation station, that attempt

is both inconsistent with governing regulations, which I'll explain in my closing, but it's also factually incorrect. A generation station does not have a nameplate. It is the site on which one or more generating units, together with the other equipment that supports those units exists. It's very common in the energy industry to reference a facility as "Unit 1 at the Valencia Generating Station," for example, when referring to the operation of that single unit. "Generating station" and "generating unit" are two different things. So please keep these realities in mind when hearing the presentations today.

Am I at the right screen? No. Okay. Okay, there we go.

By way of evidence, you will hear today from a panel of UNSE witnesses: Mr. Clark Bryner, who has come before this Committee before; and Mr. Dylan Bearce, who is the Company's senior director of energy resources operations. Mr. Bryner will walk you through a presentation that goes into greater factual detail about the existing and proposed BMGS units. Mr. Bearce will also sit on that panel to help any of the questions that you may have and to provide rebuttal testimony, if needed, after the intervenors put on their direct cases.

In the end, we hope you will see that the

salient facts are as follows: Each separate generating unit at the Black Mountain Station has a nameplate rating 61 megawatts. The four new generators at Black Mountain are also anticipated to have a nameplate rating of less than 100 megawatts. Both the existing and new generation units have nameplate ratings that are under the statutory threshold. Each new generation unit will be monitored, operated, and dispatched independently. Shared facilities do not physically connect each generating unit or require them to rely on another to generate electricity. The facilities are shared for economic reasons, not operational ones. They do not somehow combine these single units together as one.

Under these facts, the Company firmly believes that a CEC is not required prior to construction. Thank you very much.

CHMN STAFFORD: Thank you. Sierra Club.

MR. WOOLSEY: Good morning, Mr. Chairman and Committee Members.

Can you all hear me all right?

CHMN STAFFORD: Yes.

MR. WOOLSEY: Patrick Woolsey on behalf of Sierra Club. Thank you for the opportunity to speak today.

In UNS's application for disclaimer of

jurisdiction, the Company argues that it need not obtain a Certificate of Environmental Compatibility for a 200-megawatt, four-turbine expansion at Black Mountain Generating Station, because UNS asserts the project is actually four separate power plants. UNS's argument contradicts the factual evidence, which shows that the four units at Black Mountain would not be separate, and UNS's argument would violate the line siting statute, which requires applicants to obtain CECs for new power plants with nameplate capacities over 100 megawatts.

UNS is proposing a novel and self-serving interpretation of the siting statute that would improperly evade the CEC requirement by treating four interconnected units within a single power plant as four separate plans. UNS's requested disclaimer of jurisdiction would prevent the Committee from exercising its proper authority and defeat the purpose of the siting statute, which is to review environmental impacts of new plants.

Today you will see and hear factual evidence demonstrating that the proposed Black Mountain units would be part of one plant, as common sense dictates. You will see that the four proposed units would be located at the same site, that they would rely on numerous types of shared equipment and facilities on

the site, and that the units would have extensive physical connections to that shared equipment.

You will hear that the new Black Mountain units will be classified as a single plant for purposes of state air permitting and federal reporting. This is consistent with how UNS has described the existing plant. UNS has uniformly described the two existing Black Mountain units as part of the same plant, not two plants. The Commission routinely treats generating facilities with multiple units as single power plants, not separate plants. Since the line siting statute's enactment, utilities have repeatedly applied for CECs for power plants or plant expansions with total capacities over 100 megawatts, even where the capacity of individual generating turbines was under 100 megawatts, and the Commission has issued CECs for such plants, including for Coolidge Generating Station, Sundance Generating Station, and the RICE project at TEP's Sundt Generating Station.

Adopting UNS's interpretation of the line siting statute would defeat the legislature's intent and eliminate the Committee's power to assess environmental impacts of new thermal power plants, gutting the CEC review process. No matter how large a new power plant or expansion, a utility could evade a CEC review by mischaracterizing the project as a collection of

individual plants smaller than 100 megawatts. There would be no upper limit on the scope of future efforts to avoid a CEC review in this way. We encourage the Committee to keep these considerations in mind as UNS attempts to twist the line siting statute into something that it is not.

In sum, the evidence at this hearing will demonstrate that the proposed Black Mountain units are a single plant, not separate plants, and that the line siting statute requires UNS to obtain a CEC. The Committee should therefore reject UNS's application for a disclaimer of jurisdiction. Thank you.

CHMN STAFFORD: All right. AriSEIA.

MS. JOHNSON: Chairman and Members, Autumn Johnson on behalf of AriSEIA.

UNSE is here today to ask you to interpret Arizona law differently than you have been for the last 53 years, differently than you did when TEP was just here for its RICE project in 2018, and differently than you did when TEP -- or when SRP was just here for its Coolidge project in 2022. UNSE has not bothered to explain why, if this is indeed the plain meaning of the statute, no one, including it, has interpreted it this way at any other time. UNSE can't point to any other examples of this Committee disclaiming jurisdiction for

this reason, not one single example.

Not only would UNSE's interpretation directly contradict the legislature's own policy statement, but it contradicts common sense. Just in drafting the joint stipulated facts presented to you as UNSE-17, we had to change the name of generator sets three times, because UNSE wanted to make sure the Committee understood that generators and turbines are different. And yet their interpretation of the statute would render turbines, that's what a LM6000 is, it's a turbine, synonymous with power plants. We all know what a power plant is. No one is or has been confused about what a power plant is.

The legislature intended the line siting statute to apply to major new facilities, and they decided "major" was 100 megawatts. It is absurd to read the statute in a way that would render half of your work obsolete. It is absurd to read the statute in such a way that would eliminate any ACC review of any new gas peaker plants. It is absurd to read the statute in a way that would eliminate review of micronuclear plants. It is absurd to read the statute in a way that would require review of a project with one 100-megawatt turbine, but no review of a project with 10 99-megawatt turbines.

We are here fighting today over what a

power plant is, over what "separate" means, over what a "unit" means, and frankly, it isn't a good use of your valuable time. If the legislature meant what UNSE is asserting, it could have just said "turbine" instead of "plant." If the statute means what UNSE says it means, they would have named you the Arizona Turbine and Transmission Line Siting Committee. If the statute means what UNSE says it means, after today you could change your name to the Arizona Transmission Line Siting Committee, because you won't be reviewing power plants anymore.

As we can see from the applications of TEP, SRP, Saguaro Partners, and APS, everyone is building plants below 100 megawatts. And that's because that's how big peakers are. And even if someone wanted to build something other than a peaker, they won't, because why would you build something with environmental review when you could build something without it? If UNSE is correct, there will be no state-level review of the environmental impact of gas or small nuclear plants going forward. There will be no review of any of the factors outlined in ARS 40-360.06.

The legislature's interest in serving the public interest by minimizing adverse effects upon the environment and upon the quality of life of the people of

this state will be eliminated. The legislature's intent to provide a single forum that provides opportunity for individuals, groups, and local governments to participate in the decisions over locations of electric generating plants will be obsolete.

If UNSE and all of the other utilities of the state have essentially no regulatory review on new gas plants, you will see more of what you see from UNSE today. New gas projects proposed with no All-Source Requests for Proposal, no mention in the Integrated Resource Plan, and a lot more new gas likely instead of clean energy projects, such as renewables, which is specifically of concern to AriSEIA.

You've heard the Company in their opening statement make comments about the underlying need for the plant, and that is not at issue before you today. If they indeed need this plant, then they can apply for a CEC like everyone else. UNSE seeks an exception to a rule that will render the underlying rule moot.

I would submit to you that not only would that violate the legislature's intent in 53 years of practice, it would undermine the public interest. Thank you.

CHMN STAFFORD: Thank you.

WRA.

MS. DOERFLER: Greetings, Chairman, Ladies and Gentlemen of the Power Plant and Line Siting Committee, fellow counsel.

This case is both extraordinarily important and deceivingly simple. It is important because UNSE is asking you to create a new limitation on this Committee's jurisdiction. This limit would restrict your ability to perform your statutory obligation to review whether the construction of new electricity generation units pose unreasonable impacts to development plans, wildlife, noise pollution, recreation, or Arizona scenic areas or environment.

And at the same time, this case is also very simple. There is a single question before this Committee: Does UNSE's proposed project meet the definition of a plant, and thus require review? WRA will argue today that the answer is clearly yes, and thus, the disclaimer of jurisdiction must be denied.

In order to grant UNSE's petition, this Committee would need to determine that each of the four gas turbine generator sets within the proposed project is a separate generating unit. The case before you focuses on the interpretation of these two terms, "separate" and "generating unit." UNSE's suggested interpretation of each is fatally flawed and must be rejected.

First UNSE's proposed 200-megawatt project is a single generating unit, as that phrase is understood as a term of art in the electric utility industry. A generating unit includes all equipment associated with a project, from the resource supply system, here the natural gas pipelines, to the transformers that deliver the electricity to the grid. This is different from just a gas turbine generator set, which is another term for just "unit."

This Committee has traditionally adopted the interpretation and understood the term "generating unit" to mean the whole of the connected equipment to a plant, yet today, UNSE asks you to ignore this Committee's long-standing practice and adopt a novel and extreme legal interpretation that is at odds with how the term of art "generating unit" is used in the industry of electric engineering. To reject this interpretation is to contradict the statute, the intent of the legislature who enacted this statute, and the purpose of the Power Plant and Line Siting Committee. For these reasons alone, UNSE's argument must fail.

Second, UNSE's legal position is fatally flawed because its proposed project is not four separate generating units; rather, it is one single generating unit consisting of four generator turbine sets. As will

be established through factual witnesses, the project consists of four generator turbine sets connected through an array of shared equipment, including control modules, cooling towers, generator step-up transformers, and station service transformers.

UNSE's assertion that the generating turbine is separate from itself conflicts with the plain meaning of the word "separate." This again is contrary to 40-360.09, and necessitates rejecting UNSE's attempt to disclaim your jurisdiction over Black Mountain Generating Station.

In short, UNSE's petition must be rejected because the legal interpretation that underlies the request for a disclaimer of jurisdiction misinterprets these two critical pieces of the relevant definition. The proposed project meets the definition of "plant" because it is a single interconnected generating unit consisting of four connected units. This Committee, therefore, possesses jurisdiction and UNSE's petition must be denied.

CHMN STAFFORD: Thank you.

SWEEP.

MS. REYES: Good morning, Committee Members -- excuse me -- Mr. Chairman. Again, Chanele Reyes from the Arizona Center for the Law on Public

Interest, on behalf of SWEEP.

UNS's interpretation constitutes an unjustifiable departure from the standard application of the law that's been done in the state for many years. The public policy behind this proposed departure should not be ignored. SWEEP has interest in that the Line Siting Committee upholds its essential role in maintaining regulatory oversight over this expansion project and others to come in this state, providing critical cost and environmental oversight to protect ratepayers and the environment.

By erosion of the oversight process, UNS's proposal poses the risk of needlessly inflating electricity costs for UNS customers and the diversion of resources that could be allocated to more affordable alternatives. Ensuring adherence to the regulatory protocols is vital for the safeguarding of both consumer interests and the environmental well-being of the state for the long term. Thank you.

CHMN STAFFORD: Thank you.

Commission Staff.

MS. SCOTT: Good morning, Chairman and Members of the Line Siting Committee.

The Commission Staff filed two exhibits in this proceeding. The first is an April 16th, 2024,

letter, which was filed at the request of the Chairman, and which contains our preliminary position on the legal issue raised in this case.

Based upon the facts available at that time, we are of the opinion that the individual units fall under the threshold for Committee and Commission jurisdiction. However, because this hearing had not taken place yet, we wanted and may bring out facts that are important to the jurisdictional determination. We delayed our final position until the evidence was presented today.

Staff Exhibit 2 is a letter from Commissioner Tovar that was docketed on May 22nd, with a series of questions relating to the project and Commission jurisdiction. Our primary goal today will be to address any matters in response to the letter that need clarification or further development, and to ensure that the Chairman, Committee, and Commission have an adequate record on which to base their decision.

We look forward to working with the Chairman, Committee Members, and parties on this important issue.

CHMN STAFFORD: Thank you.

All right. Do we have any -- anyone present in the room today that signed up for public

comment? I believe there's a sign-in sheet in the back of the room.

Thank you. If you can bring that to me, I can call off the names of the people who have signed up to speak.

UNIDENTIFIED SPEAKER: Hi, I'm online, and I would like to speak, but there was no instructions on how to sign up if we want to speak from online.

CHMN STAFFORD: Yes. You'll have to wait for me to call on you. We're dealing with the people that are in the room, and then I will go to the phones after that, so everyone --

UNIDENTIFIED SPEAKER: Okay.

CHMN STAFFORD: -- on the phone please mute yourself until you're called upon.

UNIDENTIFIED SPEAKER: Thank you.

CHMN STAFFORD: Thanks.

First, we have Horst Schmidt.

Thank you. Right there at the podium is great.

MR. SCHMIDT: Thank you for allowing me to speak today --

CHMN STAFFORD: One second, please.

MS. GRABEL: My apologies, before, with the public speakers, would it be possible to hear where

they're from to see if they're in the location of the generating stations being proposed?

CHMN STAFFORD: All right.

Would you please identify yourself and tell us where you're from and then make your comments. I'll limit public comment to three minutes.

MR. SCHMIDT: All right. My name is Horst Schmidt. I'm a resident of Gilbert, Arizona. Is that sufficient?

CHMN STAFFORD: Yes.

MR. SCHMIDT: Okay. Thank you.

The question I would ask is why is UNSE afraid of environmental regulation? This is something I would ask the Committee to think about as we -- as you go through your deliberations.

As was stated earlier, just because -- sorry, I have to put my glasses on -- just because the USNE [sic] has plans to build four units over time at the same location, it should be considered as a 200-megawatt plant, as stated by Sierra Club. This is -- this I consider an example of a gimmick when utilities try to hide facts from their Committee -- from this Committee and, you know, finding out whether there are high levels of pollution from a methane gas plant. NSE's Electric [sic] proposed gimmick of avoiding public scrutiny does

not serve the public interest. The public interest is to reduce and eliminate air pollution created by methane gas plants.

Your Committee, the Power Plant and Line Siting Committee, would lose control of regulating power plant -- power plants, which are against the public interest, again, and of clean air. Upon further investigation, the Committee will -- sorry -- will -- will find that building renewable power plants will, one, cost less to build and maintain, reduce consumer utility costs, and reduce air pollution.

So why is UNSE against this? So I think we should leave the gimmicks to toy companies and to -- I think to deny the -- I ask that you deny the UNSE Electric's frivolous, dangerous, and unhealthy subversion of the Certificate of Environmental Compatibility process. Our citizens deserve nothing less.

Thank you.

CHMN STAFFORD: Thank you.

Next up we have Jennifer Cranston.

MS. CRANSTON: Good morning, Chairman Stafford and Committee members. My name is Jennifer Cranston, and I don't live anywhere near the potential generating station.

I'm an attorney for the law firm of

Gallagher & Kennedy, and I am here to speak on behalf of Arizona Electric Power Cooperative, Inc., or as you may know it, AEPCO. Thank you for the opportunity to provide public comment today. I don't normally appear before this group.

As indicated in a letter filed in the docket by AEPCO's CEO, Patrick Ledger, AEPCO supports UNSE's application for disclaimer of jurisdiction. UNSE's application, as well as legal division's initial analysis, articulate a number of compelling legal bases for disclaiming jurisdiction. Perhaps the strongest argument is found in the language of ARS 40-360 itself, which defines "plant" using very specific language and syntax.

First, the statute uses the singular term "unit" rather than referring to multiple units or units operating in conjunction with one another. Second, the statute adopts nameplate rating as the objective metric by which the 100-megawatt threshold should be determined. Based on the plain language of the statute, a unit with a nameplate rating of less than 100 megawatts does not qualify as a plant that would require a CEC approval, even if multiple units are to be constructed and those multiple units have a combined nameplate rating of 100 megawatts or more. I understand that in our everyday

vernacular we use the term "plant" to mean something different. That's -- that's not unusual, but when we're looking at what the statutory jurisdiction is, it's important to pay attention to the statutory definitions. And I would respectfully suggest that the concerns raised by the intervenors or some of the intervenors, I should say, in this matter, are better directed at the legislature to maybe reevaluate what the definition of "plant" should be.

While the pending application does not involve my client, the practical ramifications of this jurisdictional issue for these kinds of projects would impact all parties that appear before this Committee and would impact this Committee itself. As I'm sure you are all very well aware, the workload of this Committee has increased significantly since it was originally created in the 1970s. And that significant workload has resulted in extended timelines and a backlog of applications. Yet the statutes anticipate a prompt process for evaluating the environmental issues raised by power plants and transmission lines.

So not only is the disclaimer of jurisdiction the correct outcome from a legal perspective, but it is also the outcome that is the best outcome from a public policy perspective. I know you're

going to hear about public policy, but I submit that public policy actually favors a disclaimer, abiding the clear and unambiguous limitation set forth in the definition by statute of the term "plant" will avoid an additional increase in the Committee's workload, and allow the Committee to stay focused on its charge of evaluating applications in a prompt and orderly fashion.

Thank you again for giving me the opportunity to speak.

CHMN STAFFORD: Thank you. I'd like to let everyone know that there is no backlog before this Committee.

MS. CRANSTON: My apologies, Chairman.

CHMN STAFFORD: All right. Let's -- let's move to the phone. I'm going to call your name and then you can unmute yourself, and then you'll have three minutes to speak. And after that we'll move on to the next caller.

First we have Amy Dominguez. Do you wish to speak?

MS. DOMINGUEZ: I wish to listen in, thank you.

CHMN STAFFORD: All right. We have a Nile Bunger [phonetic].

MS. BUNGER: I'm just listening in, thank

you.

CHMN STAFFORD: All right. Now we have Maddie Lipscomb, that's just Sierra Club's paralegal. I assume she's not here for public comment?

MR. WOOLSEY: Correct, Mr. Chairman.

CHMN STAFFORD: Okay. We have a Steven Foster.

MR. FOSTER: Just listening in. Thank you.

CHMN STAFFORD: Tod Lichtes [phonetic].

MR. LICHTES: No public comment, thank you.

CHMN STAFFORD: Someone named Dan without a last name.

(No response.)

CHMN STAFFORD: All right. Josh Kitterman [phonetic].

MR. KITTERMAN: No public comment. Thank you.

CHMN STAFFORD: Scott Saline [phonetic].

MR. SALINE: Just listening in, thank you.

CHMN STAFFORD: All right. Magalito Chief [phonetic].

MR. CHIEF: Just listening in. Thank you.

CHMN STAFFORD: All right. Fragrance Free.

MS. DEMATOS: Hi, this is Larissa. I want to speak.

CHMN STAFFORD: Excuse me, I didn't hear that. What was your name?

MS. DEMATOS: Larissa.

CHMN STAFFORD: Louisa?

MS. DEMATOS: Larissa. It's okay.

CHMN STAFFORD: And what's your last name?

MS. DEMATOS: Dematos.

CHMN STAFFORD: Do you wish to speak?

MS. DEMATOS: Yes.

CHMN STAFFORD: Could you please spell your last name?

MS. DEMATOS: D-e, space, m-a-t, like tomato, o-s.

CHMN STAFFORD: I'm sorry, I didn't get that, D-e --

MS. DEMATOS: Space m-a-t, like tomato, o-s.

CHMN STAFFORD: And your first name again was?

MS. DEMATOS: L-a-r-i-s-s-a.

CHMN STAFFORD: Okay. Thank you. Please, you have three minutes. Oh, please tell us where you're from.

MS. DEMATOS: I'm in Chandler, but I travel a lot, and I go to Yuma -- I mean, Tucson sometimes.

CHMN STAFFORD: Okay.

MS. DEMATOS: I have MCS, multiple chemical sensitivities, and there is a lot of people that come to Arizona because they're too sick and they live in their cars, so it's just easier to be here, at least in the winter. So I'm just looking out for us that we already have a really hard time dealing with the air quality and we just don't need anything else to get worse. So, yeah, I just think we should -- we should know the facts on the environment and people. That's all.

CHMN STAFFORD: Thank you.

Thank you. Next up we have Alyssa Belpedio, do you wish to speak, Alyssa?

MS. BELPEDIO: I'm just listening in. Thank you.

CHMN STAFFORD: Hello?

MS. BELPEDIO: I'm just listening in.

CHMN STAFFORD: I can't hear what you're saying. Was that a -- did you wish to speak or not?

MS. MORALES SANCHEZ: They said they were listening in. It sounded a little bit muffled. So their mic might not be working properly.

CHMN STAFFORD: All right. And, let's see, Alondra Morales Sanchez.

MS. MORALES SANCHEZ: Yup, that's me, and I

do wish to speak.

CHMN STAFFORD: Please spell your last name for the court reporter and tell us where you're from.

MS. MORALES SANCHEZ: Morales Sanchez is M-o-r-a-l-e-s, and Sanchez is S-a-n-c-h-e-z, as in zebra.

Awesome. And I am in Phoenix, Arizona. I urge you to deny the petition from UNS Electric aimed at circumventing environmental reviews and scrutiny for large gas power plants siting. I know I am in Phoenix, so it seems like, yes, there's a big distance; however, just because it is further away from me doesn't mean that it's not going to affect me. It doesn't mean that it's not going to affect the air quality around me. As we know, air travels. It's not just going to sit there in a bubble.

So I really want to make sure that that point is loud and clear, that just because it's not around me, it does not mean that it won't affect me. I was born and raised in Phoenix, Arizona, so I have been here my entire life. And I have seen the air quality change throughout the years, and it has gotten worse. It's not getting better. And I can see that also when people talk about how the air quality is affecting them. So I truly think that these plants must undergo a thorough evaluation and obtain a Certificate of

Environmental Compatibility, with a careful assessment of the impact compared to the necessity for such facilities. I think granting this request would set a dangerous precedent potentially leading to a wave of gas plant sitings devoid of environmental assessment.

Arizona law has consistently upheld the requirement for a CEC, even for individual thermal generating units below 100 megawatts. There is no valid basis for departing from this precedent. If the UNS Electric succeeds, it could prompt other utilities like TEP, SRP, and APS to follow suit, stripping regulatory oversight from gas projects and limiting the authority of the AZ Siting Committee solely to transmission lines. Given the lack of legal justification for the UNS Electric's proposal, it should be dismissed.

The role of the AZ Power Plant and Line Siting Committee is crucial in evaluating the impacts of the power plants on various aspects, such as communities, land, water, and air quality. These plants contribute to air pollution, consume significant amounts of water, and have adverse effects on land, wildlife, public health, and climate, especially public health. We know that in these recent years the public health is becoming worse. We're seeing more heart disease. We're seeing more other issues, and these -- this pollution exacerbates those

issues in our elderly, in our populations that are vulnerable, in our unhoused folks. So I urge you to really put people's health over all of these things.

So, furthermore, they can generate noise pollution and disrupt our skies and concerns that they may not be addressed by other entities. So I think it is imperative that the Arizona Power Plant and Lining Committee [sic] actively work to mitigate these impacts and carefully weigh them against the necessity for such facilities. So, again, I urge you to vote against the UNSE request to create -- or to not undergo the evaluation for these power plants.

And thank you very much.

CHMN STAFFORD: Thank you. Thank you.

All right. Next up, we have Kate Bowman.

MS. BOWMAN: Good morning, I would like to speak.

CHMN STAFFORD: Please proceed. You have three minutes.

MS. BOWMAN: Thank you. Good morning, Chairman and Committee Members. My name is Kate Bowman and I'm the regulatory director for Vote Solar. Thank you for the opportunity to provide public comment today. Vote Solar is a 501(c)(3) nonprofit organization, working to realize a transition to clean energy that puts people

at its center, which is to say a transition that's not only clean, but affordable and reliable. I'm not an Arizona resident, but Vote Solar has over 6,000 members in Arizona.

We respectfully request that the Committee reject UNSE's application for a disclaimer of jurisdiction for the Black Mountain Expansion Project and require the project to file a Certificate of Environmental Compatibility and undergo the regular review process. The novel interpretation of ARS 40-360 side-steps the Committee's important role to balance the need for new power plants with reasonable considerations that protect the health and well-being of Arizonans.

The CEC review process is not just about environmental compatibility. The statute also requires the Committee to consider other important factors, like the impacts, not only the impacts on fish, wildlife, and plant life, but also factors like how a new power plant will impact other plans for development near the site, noise, recreational access, scenic and historic areas, and how the cost of the power plant will affect end user consumers of electricity.

The Black Mountain Expansion Project is capable of producing 200 megawatts of power, which is clearly above the 100-megawatt at which a CEC is

required. UNSE's interpretation undermines the intent of the statute and stands contrary to how it has been interpreted and applied in Arizona for decades. Growing energy demand is driving the need for new energy resources in Arizona, and power plants built today are likely to remain in use for decades. And so the CEC review process is more important now than ever, and we urge the Committee to require a CEC for this project. Thank you.

CHMN STAFFORD: Thank you.

Next up we have Riyla Robinson. Do you wish to speak?

(No response.)

CHMN STAFFORD: All right. Next up we have Jason Moyes.

(No response.)

CHMN STAFFORD: All right. Moving on to Amber Parker.

MS. PARKER: No public comment. Thank you.

CHMN STAFFORD: Next up, Michael Barrio. Do you wish to speak?

MR. BARRIO: Good afternoon. My name is Michael Barrio, and I'm here today to testify on behalf of Advanced Energy United.

Advanced Energy United strongly urges the

Commission to reject UNSE's legal argument that they do not need to undergo a CEC review. Our organization represents over 100 companies across the energy landscape, many of which have made significant investments in Arizona. Their continued ability to expand and contribute to the state's economic growth relies on a consistent and predictable regulatory environment. They claim that they can bypass the CEC review by dividing their project into four individual units directly contradicts ARS 40-360.03, which clearly states that every utility planning to construct a plant, transmission line, or both, in Arizona shall first file with the Commission an application for a Certificate of Environmental Compatibility.

Approving that argument would set a dangerous precedent, allowing utilities to circumvent statutorily required reviews in the future, which defeats the intent of ARS 40-360.03, and creates an unpredictable regulatory environment for all stakeholders. So we strongly urge the Commission to vote no on UNSE's request regarding the CEC review. By doing so, we believe that you'll protect ratepayers' interests, maintain the integrity of the regulatory environment, and promoting transparency in Arizona.

Thank you for your time and consideration.

CHMN STAFFORD: Thank you.

Next up we have David Robinson.

MR. ROBINSON: Yes, hello. I would like to make comments. My name is David Robinson. I live and work in Tucson. I am the director of advocacy and education for the Tucson Audubon Society, which is a 501(c)(3) nonprofit organization dedicated to inspiring people to enjoy and protect birds and their habitats through recreation, education, wildlife conservation, advocacy, and protection and preservation of the environment on which we all depend.

I'm speaking on behalf of the organization and our more than 3200 members in Southeast Arizona and elsewhere around the state. We strongly urge the Committee to reject UNSE's legal argument. Tucson Audubon is extremely concerned about the precedent that approval of UNSE's argument would set, and the likelihood that Tucson Electric Power and other power companies would follow in UNSE's footsteps.

As in other states, power companies in Arizona profess to serve the public interest, but too often put their own profits above the public interest. This attempt by UNSE to evade environmental review is yet another instance of such behavior.

Arizonans need affordable energy, of

course, as well as clean air, water, and land. And Arizona's wildlife need clean air, water, and land as well. Power plants too often pollute our air, use significant amounts of water, a very scarce resource, and negatively affect our land, wildlife, health, and climate.

Tucson Audubon is especially concerned about climate, because of its impact on both people and wildlife, and we're very concerned about the huge impact that methane has on climate change. Like some other speakers today, Tucson Audubon Society urges the Committee to vote no on the UNSE request to create a loophole in the siting of larger power plants.

Thank you for the opportunity to submit these comments.

CHMN STAFFORD: Thank you.

Up next we have Stephen Cook. Do you wish to make comment?

MR. COOK: Thank you. I'm Stephen Cook, S-t-e-p-h-e-n, C-o-o-k. I live in Prescott. I wish to speak.

CHMN STAFFORD: Please proceed.

MR. COOK: I have a master's degree in physics from UCLA, but let's forget all credentials, but one, common sense. Suppose we show a child two identical

pizzas, one of which we cut into four pieces. We ask the child does the cut-up pizza have more or less pizza than the whole one? We applaud the kid for saying both have the same.

Likewise, common sense tells us that the cumulative fossil fuel-based energy generation is what environmentally matters, and 200 megawatts of electrical power has roughly the same environmental impact whether it comes from one 200-megawatt unit or four 50-megawatt gas-fired generators. Cumulative power rating matters, not the separate size of the individual units.

Can we apply this to Arizona law relevant to us today? Yes, to the extent that common sense matters. But I want to raise another environmentally based legal concern and introduce some dispute, where earlier it was suggested there was none. Specifically, given the key definition of a plant in Arizona 40-360 written in 1971, that uses thermal electric, to name a generating unit type. Because of this we can't be sure what the 100-megawatt also sited there means. Does it mean megawatts thermal power or megawatts electric power? I repeat, does it mean megawatts thermal power or megawatts electrical power. In environmental terms, I'd say knowing the plant's total power input that is its megawatt thermal power is more important than its output.

Of course, these terms are related by the energy conversion efficiency, a term nowhere to be found in UNS Electric's 149-page application. Based on data it provides there for proposed 50-megawatt units, I calculate the efficiency to be 38 percent. With 38 percent to get 50 megawatts electric out, we must put in 132 megawatts thermal. To get the proposed 60 megawatts mentioned earlier today, to get 60 megawatts out, we have to put 158 megawatts thermal in. Both these numbers exceed the stipulated 100 megawatts, and this muddies the legal waters.

The relevant Arizona law should have been written differently. But because of its ambiguity we can nonetheless interpret it in the most environmentally responsible way. That interpretation says that UNS Electric's proposed either 132-megawatt gas -- I'm sorry, 132-megawatt thermal or 158-megawatt thermal, either 50 megawatts electric, 60 megawatts electric, the thermal megawatts exceed the 100 megawatts stipulated in law. Therefore, they should be legal -- UNS Electric should be legally required to apply for a Certificate of Environmental Compatibility.

Thank you.

CHMN STAFFORD: Thank you.

All right. Riyla Robinson.

(No response.)

MS. ROBINSON: Can you hear me?

CHMN STAFFORD: Yes.

MS. ROBINSON: Thank you. My name is Riyla Robinson. I am a resident in Maricopa, Arizona. I'm a small business owner and a planet activist.

I urge you to reject UNSE's legal argument. The proposed legal loophole by UNS alleges to bypass environmental reviews for large gas power plants in Arizona is not supported by state statute. Preventing this request is crucial to prevent potential negative impacts on the environment. It is essential for these larger plants to undergo a thorough evaluation and obtain a Certificate of Environmental Compatibility to assess their impacts against the necessity for such facilities.

Allowing this loophole to set a dangerous precedent leading to an influx of gas plants sitting without power invites scrutiny. UNSE's argument that individual thermal generating units under 100 megawatts do not require a CEC goes against established Arizona law and should not be entertained. If successful, other major utilities, like APS, SRP, and TEP may follow suit.

Stepping away regulatory oversight and limiting the authority of the Arizona Line Siting Community [sic] is clearly UNSE's request lacks legal

basis and should be dismissed to protect Arizona's environment and regulatory structure.

I'm asking you to protect consumers and reject UNSE's legal attempt to circumvent oversight of their resources decision where the impacts of projects are considered and require a SEC [sic] for this project.

Thank you.

CHMN STAFFORD: Thank you.

Is there anyone else online that wishes to make public comment that hasn't already spoken? Please raise your hand.

(No response.)

CHMN STAFFORD: Seeing none, that concludes public comment.

Before we move to the applicant's presentation of its case in chief, let's go ahead and take a short recess for about 10 minutes.

We stand in recess.

(Recessed from 11:16 a.m. until 11:31 a.m.)

CHMN STAFFORD: Ms. Grabel, is the applicant ready to present its direct case?

MS. GRABEL: We are, your Honor -- or Mr. Chairman. Thank you.

CHMN STAFFORD: Please call your witnesses.

MS. GRABEL: All right. Thank you very

much. I call Mr. Clark Bryner and Mr. Dylan Bearce.

CHMN STAFFORD: Mr. Bryner, would you prefer an oath or affirmation?

MR. BRYNER: An oath.

(Clark Bryner was duly sworn by the Chairman.)

CHMN STAFFORD: Mr. Bearce, an oath or affirmation?

MR. BEARCE: An oath.

(Dylan Bearce was duly sworn by the Chairman.)

CHMN STAFFORD: Thank you.

Ms. Grabel, please proceed.

MS. GRABEL: Thank you, Mr. Chairman.

CLARK BRYNER AND DYLAN BEARCE,

called as witnesses as a panel on behalf of Applicant, having been previously affirmed or sworn by the Chairman to speak the truth and nothing but the truth, were examined and testified as follows:

D I R E C T E X A M I N A T I O N

BY MS. GRABEL:

Q. Mr. Bryner, please state your name and business address for the record.

A. (MR. BRYNER) My name is Clark Bryner. My business address is 88 East Broadway, Tucson, Arizona.

Q. By whom are you employed and in what capacity?

A. (MR. BRYNER) I'm employed by Tucson Electric Power and UNS Electric as the manager of siting, outreach, and engagement.

Q. And I won't ask you to go through your qualifications now, because I know you talk to them on a PowerPoint presentation you'll be giving momentarily, but what is your role in this matter?

A. (MR. BRYNER) For this particular project, my role has been to oversee the filing of our request for a disclaimer of jurisdiction from the Arizona Power Plant and Transmission Line Siting Committee, as well as to oversee the preparation of the accompanying Certificate -- the application of a Certificate of Environmental Compatibility and the supporting exhibits.

Q. Thank you. And, Mr. Bearce, turning to you, would you please state your name and business address for the record.

A. (MR. BEARCE) Yes, ma'am. Dylan Bearce. I work for Tucson Electric Power and UNS Electric. And my business address is 88 East Broadway, Tucson, Arizona.

Q. Thank you. By whom are you employed and in what capacity?

A. Tucson Electric Power and UNS Electric, and I am the senior director of energy resources operations.

Q. What is your role in this matter?

A. My role is as technical expert and project lead for the development and diligence of this project.

Q. Thank you. And we won't have the opportunity to have you present your qualifications on a slide, so if you would, can you please talk a little bit about your background. How long have you been involved in power plant operations?

A. (MR. BEARCE) Sure. So I'm approaching 25 years, and I've worked at various capacities. I started my career at two 790-megawatt coal-fired super critical power plants, so more of a traditional steam turbine facility. I started off as a high-voltage maintenance electrician working on everything from generators, excitation systems, motor control centers, program logic, a lot of technical stuff, but electrical everything in the plant was really my job.

Then moved on to be a journeyman mechanic and catch gnats in a hearing -- apologize for that -- moved on to becoming a journeyman of maintenance mechanic, it was called a power plant mechanic A, but it involved welding certificates where I was doing pressure vessel work, I had to do machining, you know, on lathes and

mills and then essentially managing and repairing all mechanical components of a power plant.

I then changed roles and moved in to be a power plant mechanic, and so then I moved into operating facilities of the same facility. So spent numerous years there. In 2006 I then moved over to Tucson Electric Power, moved into Tucson at the Sundt Generating Station, and performed numerous functions there -- I'll stay high level, you can ask questions if you want clarification. But I moved into plant operations, was then a control room operator, a shift supervisor, I oversaw is a NERC compliance program. I was responsible for all technical and soft skills training for our entire fossil fleet. I did all of our aptitude testing program and a lot of other technical things there.

In parallel with that role I was an adjunct faculty at Pima Community College and working as a national consortium with a lot of the neighboring utilities building a pipe plan recruitment and a set of technical skills to recruit people in the utility sector.

Later, I then was promoted to the director of Tucson Power production, where I oversaw five power plants, three of which were Tucson Electric Power, two are UNS Electric. I oversaw 13 simple cycles, four steam turbine gensets, and 10 RICE engines. I have been

responsible for numerous things, including all the engineering maintenance, business, finance, regulatory compliance, environmental, responsible official, you name it.

A couple years ago, I then moved into the role I'm in today as senior director. I'm now responsible for all of our wind, solar, bulk energy storage, wholly owned and operated, as well as our thermal resources, except for coal. So our joint-owned units, as well as our wholly owned and operated facilities is my current role.

I also have got some extra credentials I think that are germane to this is I'm a train the trainer with TapRooT Root Cause Analysis protocols and investigations, as well as predictive maintenance protocols, but I think that's a high level of my qualifications. And I'm certified through NCCER, through a number of curriculum that I think are relative to the technical components of this discussion.

Q. Thank you very much, Mr. Bearce.

Turning back to you, Mr. Bryner, you heard AriSEIA's counsel during her opening statement describe a LM6000 as a, quote, turbine.

Do you agree with that characterization?

A. (MR. BRYNER) I wouldn't agree with that. An LM6000 is a generating unit, comprised of both the

turbine and the generator.

Q. Thank you. And you perhaps heard counsel from Western Resource Advocates say during her opening statement that without a CEC process, there would be no environmental review associated with the new units.

Do you agree with that statement?

A. So no, I don't. Typical to any development project there's a number of permits that are required, so the CEC is potentially one, you know, in regulatory approval. But apart from that, you've got different triggers that might trigger other things. I wrote down a few, this is certainly not all-encompassing, but you've got local ordinances, things like zoning, different plans that might trigger other things. You've got an air permit that you would need to secure under the Clean Air Act. You've got a storm water pollution prevention plan that you would need, due to the grading. Potential Clean Water Act permits 404 or 401 water quality certification. Dust control permits aquifer protection permits. Any of these might trigger. Potential Endangered Species Act. Compliance.

So there's, again, not exhaustive, but there are a number of environmental oversights and permits that are still required.

Q. Thank you very much.

And with that, if you would turn to Exhibit UNSE-4, which is your PowerPoint presentation.

And, Mr. Chairman, I'm not laying foundation for the exhibits, correct, they've already been admitted?

CHMN STAFFORD: They've all been admitted. They've been stipulated to and admitted. Thank you.

MS. GRABEL: Excellent.

Q. Then let's just go ahead and walk through your PowerPoint presentation, Mr. Bryner.

A. (MR. BRYNER) Thank you. Can we pull up -- there we go.

MS. GRABEL: And, Mr. Chairman, if I would, I would note for the record that there's one difference between the presentation that's being displayed on the screen and UNSE-4 is that we've added page numbers just to help us follow. But other than that it's identical.

CHMN STAFFORD: I'll allow it. Please proceed.

MR. BRYNER: One moment. I've got a technical issue.

All right. Maybe -- there we go. I wanted to make sure I had a laser pointer.

MEMBER KRYDER: Mr. Bryner --

CHMN STAFFORD: Member Kryder.

MEMBER KRYDER: What tab are we looking at

in the books? Do you have that or shall we just follow it on the screen?

MS. GRABEL: It is Exhibit UNSE-4, Mr. Kryder, but you're also welcome to follow it on the screen, whatever's easier.

MEMBER KRYDER: It will be identical.

MS. GRABEL: It's identical, except, as I noted, the one on the screen has page numbers.

MEMBER KRYDER: Thank you.

MR. BRYNER: Okay. So my current role as the manager of siting outreach and engagement for both TEP and UNSE. In this role I'm responsible for siting and receiving regulatory approval for all new transmission lines, as well as thermal generation facilities.

Specific to the Black Mountain Generating Station Expansion Project, as I just mentioned, my role has been to oversee filing our request for a disclaimer of jurisdiction from the Committee here, as well as preparing the Certificate of Environmental Compatibility application and those supporting exhibits.

I have a B.A. in geography and a M.S. in bioregional planning, both from Utah State University. I'm an active member of the American Planning Association, and I'm a certified planner, which is a

certification that I've had since 2011. I have over 18 years of experience in the electric utility industry, primarily with TEP and UNSE, where I worked in a variety of different roles, including more than 10 years of experience in maintenance planning and asset management, where I had direct responsibility and oversight over our transmission system. I also had an additional six years in environmental planning and permitting roles, where I worked on a number of different transmission line siting projects, as well as solar and wind development projects for several utilities and developers throughout the western United States.

Let's see, so in accordance with statute, UNSE filed the plan with the Arizona Corporation Commission on November 6, 2023. That was more than 90 days before filing the request for a disclaimer of jurisdiction and a CEC application, which we did on March 8th of 2024. And shown on the screen is an image of that plan that we filed.

And, in accordance with statutory requirements and the procedural order that was issued by Chairman Stafford at the prefiling conference that was held on February 28, 2024, UNSE has taken the following actions: So, first of all, we published the notice of hearing in not one, but two, newspapers of general

circulation within 10 days of filing the request for a disclaimer of jurisdiction and the CEC application. The notice was published in the Kingman Miner on March 13th and 20th, 2024. The Kingman Miner is a newspaper that's generally circulated in and around the city of Kingman. And in addition, the notice was published in Today's News Herald on March 15th on 17th of 2024. And Today's News Herald is a newspaper that's generally circulated in and around the city of Lake Havasu.

Temporary physical signs at four prominent locations along major roadways in the vicinity of the project site were installed on March 20th, 2024. These locations were approved by Chairman Stafford at the prefiling conference. These signs are each 24 inches wide by 36 inches tall, and they included the date, time, and location of the hearing, how to participate in the hearing and provide comment, as well as the project web page and telephone line, if someone wanted more information.

On the screen now are two examples of the temporary signs that were installed. Sign one is located just west of I-40 on Griffith Road. And sign three is located near the intersection of Shinarump Drive and Oatman Highway, which is better known as Historic Route 66.

UNSE conducted a targeted social media ad campaign beginning April 8th and continuing through today on both Facebook and Instagram. The target area included an 11-mile radius that was centered on our project site. The advertisement linked to the project web page where more information on the hearing and the proposed project could be found. As of yesterday, the Facebook and Instagram ads reached 22,215 people, with 31,544 impressions, which are the number of times the ad was displayed, and had 674 clicks. So that equals the click-through rated 2.1 percent. And what that means is for every 100 people who saw the ad a little over two actually clicked on it to get more information.

Physical copies of the request for a disclaimer of jurisdiction in the application were provided for public viewing in two locations. A copy was provided to both the Kingman Library and Mohave County offices by certified mail and were received on March 14th, 2024. Notice of the hearing was sent by certified mail to jurisdictions that were identified as being potentially affected by the project. Letters were sent to Bullhead City, Lake Havasu City, and the City of Kingman, on March 12th, 2024. And to Mohave County on March 20th, 2024.

In addition, to the notice requirements,

UNSE maintains a project web page that's easily accessible from our company's main project site. On the site interested parties can find an online comment form where they can provide feedback on the project. There's also a project-specific e-mail address and a telephone line for those who ask specific questions and they'd like to reach out to someone to get a specific response.

So UNSE has offered briefings on the project to local elected officials and stakeholders. To date, we've briefed two County Supervisors, and the administration of the City of Kingman, including the mayor, the vice mayor, and the City manager. All have received the project information fairly well and have been generally supportive of the project.

In addition, we met with several stakeholder groups, including the GEO Group, they run a prison that's located about one mile southwest of the project site. We also met with the Government Affairs Committee and the Partnership for Economic Development, which are both associated with the Lake Havasu City Chamber of Commerce. Again, all were generally supportive of the project. The only concern that was raised was from the GEO Group. They wanted to ensure that we had a coordinated safety plan with them in the event there was a situation at the plant.

So I'd now like to pivot to share some details on the proposed project and background for UNSE's request for the disclaimer of jurisdiction. So to start off, just a little bit of background on the Company. UNS Electric is a branch of UniSource Energy Services, which is under the parent company of UNS Energy, which is also the parent company of Tucson Electric Power. UNS Electric includes a noncontiguous service territory of approximately of 8,000 square miles, which covers portions of Mohave County and Santa Cruz counties. UNS Electric serves approximately 102,000 electric customers and a population just over a quarter of a million.

For purposes of this request, we'll focus on the service territory in Mohave County. So there are a number of local UNSE energy resources, including thermal generation at the Black Mountain Generating Station, along with several solar sites and a wind farm. Apart from UNSE's energy resources, there's other generation resources in Mohave County that I don't have shown on the map.

The existing Black Mountain Generating Station is located approximately 12 miles southwest of the City of Kingman in unincorporated Mohave County, as it's shown in that red box on the slide.

There are two generating units that are in

operation today and both commissioned in 2007. The current units are GE LM6000 SPRINT gas-fired combustion turbines. Each of the two separate units has a nameplate generating capacity of 61 megawatts. UNSE is proposing the use of generating units that are very similar to these two existing units in the expansion of the station.

BY MR. GRABEL:

Q. Mr. Bryner, before you continue, you used the phrase "generating units," to what are you referring when you use that phrase?

A. (MR. BRYNER) I'm generally referring to the turbine and the generator.

Q. The Arizona Corporation Commission's resource planning rules define generating unit as, "A specific device or set of devices that converts one form of energy, such as heat or solar energy, into electric energy, such as a turbine and generator."

Is that consistent with your usage of the term "generating unit"?

A. (MR. BRYNER) Yes.

Q. How are generating units different from a generating station?

A. (MR. BRYNER) So a generating station is going to be the overall facility or the campus. So it's going to consist of more than just the generating units. It's

also going to have your maintenance buildings, offices, and any other uses. So the Black Mountain Generating Station, it has, you know, the two units, Unit 1 and Unit 2 there today, along with those other facilities I just mentioned and that comprises the station.

CHMN STAFFORD: Quick follow-up question there. You're talking about a generator and a turbine. Let me make sure I understand this correctly. The turbine is what burns the gas and spins and then it -- the generator is a separate device that it -- that it powers to generate the electricity, correct?

MR. BRYNER: Correct.

CHMN STAFFORD: Okay.

MS. GRABEL: And we have pictures of each of those coming up.

CHMN STAFFORD: Great, I look forward to that. Please proceed.

BY MS. GRABEL:

Q. Is it common for a generating station to be comprised of multiple units?

A. (MR. BRYNER) It is, as I mentioned just now, the Black Mountain Generating Station that has Units 1 and 2. Another example with UNSE is our Valencia Station, it's located in Nogales that has four different units.

Q. Can you point to the two generating units on

this picture?

A. (MR. BRYNER) So I'm going to try to circle this, this with the laser pointer on the screen. So this is Unit 2. And then Unit 1 is kind of obscured a little bit by the cooling tower here, but it is located in this area.

Q. Are these two generating units adjoined in any way?

A. (MR. BRYNER) No.

Q. There are multiple pieces of equipment located between and around them, which I know you're going to get into. For now, do those additional facilities physically connect the two generating units in any way?

A. (MR. BRYNER) No.

Q. About how far away are the units located from one another?

A. (MR. BRYNER) They're about 1- to 200 feet.

Q. Can the units be individually dispatched?

A. (MR. BRYNER) Yes.

Q. Are they individually dispatched as a matter of practice?

A. (MR. BRYNER) They are.

Q. Thank you. Please continue.

A. (MR. BRYNER) So about two miles northeast of the Black Mountain Generating Station sits the Griffith

Energy Power Plant. It's not uncommon for folks to confuse the Griffith Plant and the Black Mountain site because they're so close together. In fact, a lot of people even within the Company get them confused and have gotten them confused.

However, the Griffith plant is a 600-megawatt plant and is quite a bit larger when you compare them side by side. So on the screen we've created an image for comparison purposes that illustrate the scaled silhouette of the Griffith Energy Plant superimposed over the Black Mountain station.

CHMN STAFFORD: Now, the Griffith plant that's a combined-cycle plant, not a single-cycle plant; is that correct?

MR. BRYNER: That's correct.

CHMN STAFFORD: And the turbines -- existing turbines at Black Mountain Generating Station are single cycle, correct?

MR. BRYNER: Correct.

MEMBER FONTES: Mr. Chairman, did you say "single" or "simple"?

CHMN STAFFORD: Single. Single, simple, they're a CT, right, they're not a combined cycle, they don't have the separate --

MEMBER FONTES: Are you talking about an

open cycle or a single cycle?

MR. BRYNER: I might defer to my colleague, Dylan Bearce for this, because in my terminology they're simple, but let's see.

MR. BEARCE: Did you have a point to clarify before I --

MEMBER FONTES: Can you clarify, is that open cycle, simple cycle, or single cycle?

MR. BEARCE: Yeah, so simple and single are oftentimes interchanged, but "simple cycle" is the more commonly used term.

MEMBER FONTES: Is that the term used by GE in the install? And that you use with the insurance company, can you verify for us?

MR. BEARCE: I would have to double-check what we filed with the insurance company. A lot of times we use, depending on what they ask and how they classify it, so I'd have to follow up on the specific usage.

MEMBER GOLD: Mr. Chairman?

CHMN STAFFORD: Yes, Member Gold.

MEMBER GOLD: Question for the expert. Are they GE LM6000 SPRINT generators, are there 10 of them there to get the 600, to get the wattage?

MR. BEARCE: Excuse me, are you referring to the Griffith Power Plant?

MEMBER GOLD: Yes.

MR. BEARCE: The Griffith Power Plant they're not GE LM6000s that are in consideration for Black Mountain Generating Station, they're a different make and model for that site, and it's a different technology used.

MEMBER GOLD: How many of them are there?

MR. BEARCE: I think those are -- go ahead.

MR. BRYNER: I was just going to say that the Griffith Power Plant is not UNSE's plant, so we're not really experts on that.

CHMN STAFFORD: But it's a different type of turbine and plant that they're proposing. Like, the Griffith one is a combined cycle, and those are -- they take longer to start up and turn off. And they want to run them more consistently. They're not quick start on and off like the simple cycles that they're using for the existing Black Mountain and the proposed.

MEMBER GOLD: The reason I was asking is I know there's a 6,000-megawatt generator; is there a 24,000-watt or 200,000-watt generator that you could have used in place of the 6000s to get the same wattage?

MR. BEARCE: So they're not -- they're rated at the nameplate capacity, at the 71,000 estimated kVA rating, with the power factor they're approximately

61-megawatt-rated generators, but they don't produce that much power.

MEMBER GOLD: Are there larger generators is my real question.

MR. BEARCE: Yes, there are larger generators.

MEMBER GOLD: How large can they be?

MR. BEARCE: The largest I've operated personally is close to 800 megawatts.

MEMBER GOLD: Thank you.

CHMN STAFFORD: Please proceed, Ms. Grabel.

MS. GRABEL: Thank you.

Q. Mr. Bryner.

A. (MR. BRYNER) Okay. I'd now like to orient you to the site of the existing Black Mountain Generating Station, which is shown on the screen, with an aerial image and the site is located just south of Yucca Drive, which you can see across the north of the -- the north -- the top side of the slide and Yuma Road, and I'm going to zoom in a little closer on the site now.

So on the screen now you have a zoomed-in version of that same aerial image that I previously displayed showing the existing Black Mountain site. In addition, it includes a schematic of the general arrangement of the proposed expansion. The schematic is

symbolized with shapes of two main colors. Blue represents equipment that is specific to each proposed generating unit. Gray represents equipment that would be shared between the two. Or, sorry, between either two or possibly all four of the proposed generating units.

Since the existing facilities are very similar to what UNSE is proposing to use in the expansion, I'd like to use equipment from the existing site to orient you on the proposed new facilities.

Q. Mr. Bryner, before you leave, if I could please briefly interrupt you. If you could again point to the existing two units in this aerial view, do you see that, and point out the cooling tower. Further up north.

A. (MR. BRYNER) Unit 2 is right here. Sorry, it's hard to control this mouse for some reason, probably because of the distance. Unit 1 is right here. And the cooling tower is right here in between.

Q. So from this aerial vantage, the cooling tower appears to connect the two units. Does it physically connect the two units?

A. (MR. BRYNER) Yeah, it does appear that way. The cooling tower has piping that goes into Unit 1 and Unit 2 separately. And it goes to separate cooling coils where there's separate temperature controls within each unit.

Q. Is the cooling tower necessary for either of the

two generating units to run?

A. (MR. BRYNER) No, it's not, and in fact, it's sort of optional. We only run it really during the peak summer months. It helps with efficiency.

Q. And you note in the schematic that the individual components are shown in blue, and the shared components are shown in gray.

Do any of the shared facilities physically connect the proposed four generating units?

A. (MR. BRYNER) No.

Q. Do any of them physically connect the new units to the existing units?

A. (MR. BRYNER) No.

Q. Are any of the shared facilities involved in the conversion of energy to electricity?

A. (MR. BRYNER) No.

Q. As a matter of practice, could all of the equipment be cons- -- all of the shared equipment be constructed to serve each individual unit?

A. (MR. BRYNER) Sure, yeah.

Q. Why not do that?

A. (MR. BRYNER) So we don't do that out of just a matter of efficiency. A lot of those shared facilities are capable of supporting more units. And so we try to be really prudent with any of our expenditures. And so

since we can use them to leverage that on more than one generating unit, we do that.

Q. All right. Thank you. And I know you're going into greater detail as to the specific components, so please proceed.

A. (MR. BRYNER) All right. So let's go ahead and start with the generator -- the generators themselves. The locations of the existing two generators and the four proposed new generators are outlined in yellow. The image on the screen is of the existing Unit 2 generator. The generators are separate and specific to each generating unit.

So on this photo of the generator, you can see a nameplate that's highlighted in that red circle, if you can see that. The nameplate is affixed by the manufacturer to provide the equipment details and specifications. So as we zoom in on the nameplate, we can read the specifications for the Unit 2 generator. This particular nameplate does not include the word "rating," instead it uses the word "output." So "output" is synonymous with "rating." So from the nameplate, we learn that the rating of this unit is 71,176 kVA.

MEMBER FONTES: Mr. Chairman, question?

CHMN STAFFORD: Yes, Member Fontes.

MEMBER FONTES: It's dry cooled or water?

MR. BRYNER: I'm going to refer to Mr. Bearce.

MR. BEARCE: It's a closed-loop, air-cooled system.

MEMBER FONTES: So it is? So it says without air up there on the bottom.

MR. BEARCE: You're speaking to the generator itself?

MEMBER FONTES: To the nameplate there, yeah.

MR. BEARCE: It's an air-cooled generator, I apologize.

MEMBER FONTES: So it's an air-cooled. So it's saying without air, that would be a water-cooled on the bottom of the nameplate, hard to read?

MR. BEARCE: I'd have to see a zoomed-in picture.

MEMBER FONTES: I just want to make sure we're looking at the right output. Because I get where it's manufactured and they use terms of art a little bit different over on another continent.

MR. BEARCE: Yeah, yeah. So a lot of times you have forced air designed into it. And where you actually, as the rotor rotates you have a cooling fan that will draw in air and some don't. And they're in

confined vessels, therefore, it's without circulated forced air. And so this rating here still falls well below the 100, but that would be a different rating for the generator entirely.

MEMBER FONTES: Related question, if I may, Mr. Chairman.

Do you have the heat rate on these two units? And the operational characteristics, going back 16 in the dispatch. That would be very helpful to look at, to see how they've been dispatched. Is there an exhibit on that?

MEMBER KRYDER: Use the microphone just --

(Cross-talk.)

CHMN STAFFORD: Yeah, one at a time. One at a time, everybody.

Member Fontes, could you get close to the microphone, it's difficult to hear you down at this end of the bench.

MEMBER FONTES: We're sharing resources over here.

Question just on the operational characteristics in performance of the plant, specifically with respect to the dispatch, have the units been dispatched in single, together, what's the historical -- you've got 16 years of operation

performance data in there, so we're looking just --

MR. BEARCE: Yeah, so I'll give you -- can you hear me okay? We're sharing too.

MEMBER FONTES: If you can point just to the exhibit too for everybody.

MR. BEARCE: Yeah, I'm trying to find it. I know that there's an exhibit with the historical runs, if one of you could please support on that.

So the heat rate is the way we measure the efficiency of the unit, and that's the -- that's the heat input measured in BTUs per KW of output from the generator, just so we're all level-set there. And they're in that 8,000, 8,500 BTU per kilowatt hour, that's the heat rate of the generating assets that are there today.

And so they -- they're sister units is what we call it, so a LM6000 is, you know, just built at the same elevation and the same environmental conditions, temperature, barometric pressure, you know, same conditions. They'll operate very similar, but they're never exact. And so you will see slight variances from actual heat rate. And that will vary by season as well. So, for example, in the summer you will see less output because less dense air produces less dense flow, which is how the machine works.

And so I know we do have historical data about how they've been dispatched. But to answer the question of their actual dispatch, they are managed separately, maintained separately, and dispatched separately. The peak load profile, UNS Electric -- I mean, one of the drivers behind this project is that we're sourcing from the market, and so they're short. And so we're trying to offset that dependency on the market. And so they do get dispatched at times together, they absolutely do. But they are started and stopped independent of one another, and there's no interdependency, where if you start one you have to start it to start the other. They are completely by themselves.

As an example, the way that the GE LM6000 PC SPRINTs air-derivative gas turbines are maintained is they're either on a frequency of hours run and you hit a particular number, which triggers, you know, maintenance protocols like you get with your car, right, they say at so many months change your oil, do this and that. It's very similar, so it's either start based or hours based and once you meet that number, you've got to do major work. And we call that a major overhaul, which is hot gas path inspection is what you'll hear. And so that work that is performed will take a unit out of service

while the other one can operate and still meet the system demands, without any dependency whatsoever with the downed unit. And those, you know, the duration of that varies. And then we stagger the operation of them, so we don't take both individual units out of service simultaneously to where we're even more dependent on the system itself.

And so that's the value of how we actually dispatch these, and they're remotely dispatched and they push start and stop on separate faceplates, et cetera, and ramp them around to follow system load demand.

MEMBER FONTES: Mr. Chairman, I have one final follow-up related to this, if I can.

CHMN STAFFORD: All right. Please, Member Fontes.

MEMBER FONTES: Do you guys have separate LTSAs, long-term service agreements on individual units?

MR. BEARCE: We do not have long-term service agreements executed for the maintenance of these assets. We perform most maintenance on our own. It's typically more affordable when you have on-site personnel, and so we do it. But more times than not, for the significant, we call it overhaul, which is a term that's synonymous with ratemaking, the overhaul work is typically contracted just because of the tooling and the

specialized labor force. And the amount of people that we need to bring in. And so that's not under a LTSA, but we will contract with the OM to perform that more complicated specialized work.

MEMBER GOLD: Mr. Chairman?

CHMN STAFFORD: One moment, please. I think --

Is that the end of your questions, Member Fontes?

MEMBER FONTES: I'm just wondering how you keep the spares. Do you keep that separate and segregated for operational and accounting purposes? I mean, that's your background, so how do you give us confidence that you're really operating these units segregated, separated, if you can characterize -- and, you know, my other question was with respect to insurance, because typically you have performance guarantees and operational, and I would assume they were commissioned separate. And so what I'm getting at is you don't have a LTSA, got it. That's an operator takes the risk. How do you manage that as a plant manager so that we can get that characterization along the lines of what I'm asking, just for my fellow members here who probably don't have as in-depth power plant background as you and I do, I think.

MR. BEARCE: Yeah, those are great questions, great line of questioning. And I think I can characterize it as we have a work management system that's called Maximo. And Maximo is essentially kind of an administrative function tool if you want to look at it from that perspective where we literally break down sites generating units and we break it down by the component level for unitization purposes, because we have a ratemaking process, and some of this is a capital work, and so we've got to be able to classify what asset that capital replacement or, you know, upgrade or however it's classified, what generating resource it's tied to. And so our work management system is how we keep things split out.

And we code everything according to we'll say spare part A, for simplicity, is it may be an asset that could be installed on any one asset, but we know what it's compatible with, right? We don't actually keep a lot of inventory on hand. Thankfully, LM6000s are very popular, and so that's a business decision where we'll decide to just source it, because we can overnight or we plan a lot of the work, it's not corrective maintenance, it's planned maintenance, where we'll source it from, you know, third-party vendors or even General Electric in the instance of the turbine compressor systems.

And so spare parts are tracked within our Oracle system which is interfaced with Maximo, and so we use these software tools to really categorize them. And we identify preventative maintenance, which are time-based or activity-based, performance-based, say you have a differential pressure on a filter and filter shows plugged, you've got to replace it. It will trigger a preventative maintenance plan, a work order, we'll source the filters to replace, we'll send somebody out on that individual unit, we'll do that work, we'll close the work order out and we're done.

If the other unit, let's say six months down the line triggers the same alarm, we'll pull inventory out and change the filters on that. So they're very independent, for good reason. It's really inefficient to do maintenance like there's a problem on one that isn't on the other, as an example, and so we track that in our work management system, which is what Maximo is that we use for UNS Electric, and inventory, for the most part, there's not a whole lot of on-site inventory. The major part, the longer leads, are so easily sourced, and that's the beauty of the LM6000 PC SPRINT. So I hope that answers your question.

MEMBER FONTES: Thank you.

CHMN STAFFORD: All right. Member Gold,

you had a question.

MEMBER GOLD: Yeah, from a layman's perspective, couple of things. Number one, you have a turbine which spins the generator. Turbine runs on methane or natural gas.

MEMBER KRYDER: Please use your mic.

MEMBER GOLD: The turbine runs on natural gas, I'm guessing?

MR. BEARCE: That's correct.

MEMBER GOLD: And the turbine spins the generator with specific speed. And the slower it spins, the less electricity is produced. The faster it spins, the more, of course based on temperature, humidity, and everything else; is that a general assumption that's correct?

MR. BEARCE: With a slight modification, would it be helpful to just quickly summarize how a combustion turbine works just at a high level and I'll keep it simple, so --

MEMBER GOLD: Yes, please.

MR. BEARCE: So if you're in a Southwest aircraft traveling, you'll look out the window on the wing and you'll see the pretty little blades that have a swirl so you don't walk in front of them and find yourself in a bad position. That's the compressor

section. And so a lot of the drivers of how it performs is based on the compressor section. So that physically pulls in air. So we have an electric starting motor that turns the entire continuous rotor which has a compressor, the power turbine, the low pressure turbine, and the generator, so they all spin.

There are four four-pole generators, and so the speed doesn't change once it gets up to speed. So you stay at a constant speed, but what happens is as the turbine is rotating faster, it pulls in more air, the stages of the compressors continue to squeeze down, that's why it's in the shape of a V, so you get more air.

As soon as you get to the tail end of that compressor, we introduce spark and fuel, and just like a carburetor or something, you know, you need air and fuel to mix to create combustion, that combustion happens in the center between the compressor and the turbine. It burns really hot, it burns really fast. And that hot gas is actually what's going through -- that's why they call them a gas turbine, because a fire really shouldn't be coming into contact with the blades, because it's already hot and pretty aggressive environment to be in.

So the gas from the fire, flue gas it's often called, will spin through the turbine and that produces thrust, so you're pulling in air and you produce

thrust, just like in -- I'm a private pilot, so if I get too far into that weeds -- when it produces the thrust, it puts more force on the turbine, and then the excitation of the generator produces more energy, but there's limits, because that energy produces heat, and you've got to design the generator to that. So the more air, the more gas, the more thrust, the more output. But there's a limit to that. And that could be oxygen, it could be fuel-limiting, things like that.

MEMBER GOLD: So basically, it's a turbo jet engine turning a generator that creates the electricity at a constant speed.

MR. BEARCE: I love it. That's exactly what it is.

MEMBER GOLD: Okay. So that's what we've got. Now, temperature, the cooling plants, as it's cooler, it's more efficient, produces more electricity, correct?

MR. BEARCE: Yup.

MEMBER GOLD: So on hot days, you really need a lot of air passage to keep it cool enough. Can you keep it cool enough to keep a constant source of electricity coming out of that?

MR. BEARCE: We can keep a constant source of electricity. These units have never reached the

nameplate capacity. And so we can maintain it at 45 megawatts net output from each respective unit annually. The cooling tower discussion that was brought up is we'll put it in service, so we don't what's called "de-rate," like lower the actual output capabilities to cool the air before it comes in, so that we can meet the peak summer demands. So yes, we can, and that's where the cooling tower comes into play.

MEMBER GOLD: The cooling tower is not really necessary, but in order to make it more efficient, you have a cooling tower?

MR. BEARCE: That's correct.

MEMBER GOLD: So the generating plants, the generating unit, composed of the turbine and the generator are totally independent from everything else?

MR. BEARCE: Yes.

MEMBER GOLD: Now, quick question. How much do these things cost?

MR. BEARCE: They vary. If you were to buy, just get a not a specific quote, a LM6000, a spot market from the OEM is approximately $20 million.

MEMBER GOLD: So you have a $20 million project, but it also cost a whole bunch of million dollars to also set it up as a plant, correct?

MR. BEARCE: Correct.

MEMBER GOLD: So just out of curiosity's sake if you were to have just produced one, one LM6000, you would not have even considered coming to us for a CEC because you wouldn't need it, correct?

MR. BEARCE: That would be a discussion we would have internally. I'm not at liberty to make those type of strategic --

MEMBER GOLD: I'm not asking you to make it, I'm just asking it seems to me that you would have no necessity to come to us if you were just producing one. However, Arizona has needs for electricity that change and your plants can actually turn on and turn off, where solar plants are constantly producing, as long as the sun is shining and wind turbines are constantly producing, as long as the wind is blowing. The electricity, if we're not using, is converted into heat. Solar plant because it's always producing, it's doing something. Your plants can turn on and turn off, correct?

MR. BEARCE: Yes, sir.

MEMBER GOLD: Assumption. So the decision to make more than one was based on needs for our state, and the fact that you chose to do not one at a time, but four at once is based on fiscal economy. It's got to be less to not just buy them, but to do the foundation, to do everything else that goes with them. So it's lots

more cost-effective if you're going to ultimately need four to do four at the same time. And that was a fiscal decision that was made.

Now, question, coming before the Line Siting Committee, to come up with the CECs that you're going to -- that you may or may not require, and we're here to determine that -- is a CEC as expensive as making four plants or making one plant, finishing it, making another plant, finishing it, and doing it individually? How expensive is a CEC? And perhaps that's a question for Ms. Grabel.

MS. GRABEL: Yes, Mr. Chairman, thank you, Member Gold. I don't think Mr. Bearce has the background to answer some of these questions. So, first of all, to answer your first question, if UNSE was only siting or only constructing one LM6000 less than 100 megawatts, clearly, we would not apply for a CEC because the statute is very clear in that regard. The cost of a plant and you've heard Mr. Bearce testify is millions of dollars, a CEC hearing, start to finish, depending on the length can be up to a hundred -- maybe a million dollars, depending on how much, but obviously the cost of construction is much higher than the cost of a CEC proceeding.

MEMBER GOLD: Understood.

MS. GRABEL: Was that your question?

MEMBER GOLD: Yes. And that's really -- thank you for your answer, you've helped me a great deal, and what you're doing is you're saving money by building them all four at the same time, but you have the inconvenience of probably, possibly, yes or no, having to have a CEC.

When was the last CEC done for this plant? I thought 2007 was the year I heard.

MS. GRABEL: Member Gold, there has never been a CEC issued for this plant.

MEMBER GOLD: Never?

MS. GRABEL: Never.

MEMBER GOLD: Because it was done before 2021 when -- 1971 when the law was passed?

MS. GRABEL: No, it was constructed in the early 2000s. I believe it was put into service in 2008. UNSE purchased it, and we really can't speak to why the prior predecessor chose not to file for a CEC, but this is an example of a plant that or two generating units that were constructed without going through a CEC hearing.

MEMBER GOLD: So this was grandfathered before any of these Arizona state regulatory laws were required; is that correct?

MS. GRABEL: No, Mr. Chairman, no, Member

Gold, there was no grandfathering involved, just the entity that constructed it chose -- did not receive a CEC for it, and it has since been approved for acquisition by the Arizona Corporation Commission, been brought into rate base into UNSE's rates, and it serves as a precedent that is just counter to the other precedent that the intervenors are citing.

MEMBER GOLD: So a CEC was never done for this original plant?

MS. GRABEL: That's correct.

MEMBER GOLD: Okay. Thank you.

CHMN STAFFORD: And no application for disclaimer of jurisdiction was sought either.

MEMBER GOLD: I don't know what that means, but okay.

CHMN STAFFORD: Well, what we're doing today, UNSE is saying, hey, either give us a CEC or tell us we don't need one. And yet in the prior case, I don't recall who it was that actually constructed the plant, was it -- who was the entity that constructed the plant originally that UNSE acquired it from?

MS. GRABEL: I cannot recall the name of it. I'll let Ms. Hill address that question.

CHMN STAFFORD: Thank you.

MS. HILL: Mr. Chairman, Committee Members,

can you hear me?

CHMN STAFFORD: Yes, kind of, but if you would get closer to the mic that would be more helpful.

MS. HILL: The entity that originally constructed the plant was UniSource Energy Development, which is --

MEMBER KRYDER: Mr. Chairman?

CHMN STAFFORD: Yes, Member Kryder.

MEMBER KRYDER: I can't hear.

CHMN STAFFORD: Yes, closer to the mic, please.

MS. HILL: Is this better? Yes, I can hear myself now. Usually I'm not too quiet. It's not -- it's never a problem.

Yes, Mr. Chairman, Committee Members, the entity that originally constructed was UniSource Energy Development. That is an affiliate company of UniSource. It's another -- and so UniSource Energy Development originally constructed it. And then there are two exhibits from the Sierra Club, actually, that have been admitted that are the decisions to both approve the purchase of Black Mountain by UNS Electric and also to move it into rate base. And I could look -- Mr. Woolsey might actually know the numbers off the top of his head, but if the Committee members would like to look at those

decisions, the discussion of a CEC didn't come up at that moment, and there was no rejection of it being moved into rate base by the Corporation Commission or concern about the purchase.

CHMN STAFFORD: All right. Well, I think we can get to that later. I think it will probably be part of Sierra Club's case, and with that, any further questions from members? Otherwise, we can allow the applicant to continue with their direct.

(No response.)

MS. GRABEL: Thank you, Mr. Chairman.

CHMN STAFFORD: Please proceed.

BY MS. GRABEL:

Q. Mr. Bryner, I believe it's back to you?

A. (MR. BRYNER) Yeah, thank you. I'm going to --

Q. If we could get the PowerPoint presentation back on the screen. Thank you.

A. (MR. BRYNER) Okay. I just wanted to step back. So we were talking before we had the line of questioning right there, we were talking about the generators and the nameplate rating on the generators, and that it's in kVA, so 71,176 kVA. So I just wanted to go through how we get that into a unit that's more familiar to the Committee, which is megawatts, since megawatts are what's cited in the statute. So that's done through a simple conversion

formula, where you take the kVA multiply by the power factor, divided by 10, raise to the power of 3, and it equals 60.5 megawatts or we round that up to 61.

MEMBER GOLD: Mr. Chairman?

CHMN STAFFORD: Member Gold.

MEMBER GOLD: Just to simplify that, I taught physics at one time. Watts is equal to amps times volts. What he's doing is he's taking the amperage that it's creating times the voltage that it's creating, multiplying it by 10 to the 3rd, which is a million, and that's how you get the megavolts -- megawatts; is that correct?

CHMN STAFFORD: I believe 10 to the 3rd is a thousand.

MEMBER GOLD: Pardon me?

CHMN STAFFORD: I believe 10 to the 3rd is 1,000.

MR. BRYNER: That's correct.

MEMBER GOLD: Okay, 10 to the 3rd is a thousand, but mega is million watts.

CHMN STAFFORD: Thousand.

MR. BRYNER: So mega would be a million watts, so kilowatts would be a thousand watts.

MEMBER GOLD: So megawatts is a million, I gotcha.

MR. BRYNER: Correct. And then the one thing that I would say to correct you is it's corrected by the power factor in that formula. And why we did 10 to the 3rd that's because that's the EPA's formula for it. And that's why we just didn't change it to a thousand.

THE REPORTER: Can I ask everybody to please not touch your microphones while somebody else is speaking.

CHMN STAFFORD: Thank you.

Ms. Grabel, please proceed.

MS. GRABEL: If we can get the PowerPoint put back up.

Q. And while we're waiting for that to happen, Mr. Bryner, just to be clear, the nameplate is physically attached to each generator by the manufacturer and given a specific rating, correct?

A. (MR. BRYNER) Yes, it is.

Q. And that's the nameplate rating of that generator?

A. (MR. BRYNER) Yes.

Q. And there's one nameplate for Unit 1 and another nameplate for Unit 2, correct?

A. (MR. BRYNER) Correct.

Q. Thank you.

A. (MR. BRYNER) And, in fact, what I've got on the screen right now is the nameplate for Unit 1, which, again, is very similar to the nameplate we just saw for Unit 2. And, actually, I don't think I changed it -- yeah, I did.

Q. Before you leave that one, does the nameplate rating ever change?

A. (MR. BRYNER) No.

Q. It kind of is what it is, right?

A. (MR. BRYNER) That's correct, yeah. It represents really the maximum output of that generating unit under perfect conditions.

Q. And Mr. Bearce addressed this a little bit earlier in his discussion with Member Gold, but how does the nameplate rating compare to the actual capacity of the generating unit?

A. (MR. BRYNER) So the nameplate rating is always going to be higher than the actual capacity, because the actual capacity is going to be dependent on multiple factors. You know, I think we mentioned a couple of them, elevation, temperature, a number of different things. So it's always going to be the actual capacity that it can produce is less than that nameplate rating.

CHMN STAFFORD: So is it safe to say that the nameplate rating is the maximum output under ideal

ambient conditions?

MR. BRYNER: I think that's safe to say.

CHMN STAFFORD: Which are never the case in Arizona anywhere, pretty much, right?

MR. BRYNER: I think anywhere.

CHMN STAFFORD: Especially in the summer, when they're needed the most. It's impossible to get 61 megawatts out of either unit in Arizona in the summer, correct?

MR. BRYNER: That's correct.

CHMN STAFFORD: Okay. And I think it's about 45 megawatts is what the max -- I seem to recall reading somewhere that you could get to 48 potentially, is that, in the summer, or is that just at a different time of year?

MR. BRYNER: So I'm -- I'm going to say it's probably a different time of year, but from speaking with one of the plant operators, the maximum that he'd ever witnessed was 48.

CHMN STAFFORD: Okay. All right.

Member Richins, you had a question?

MEMBER RICHINS: Yeah, can you -- can you hear me okay -- can you describe the environmental reviews this plant goes under -- goes through on a regular basis now, and, if possible, the environmental

reviews that were required at the time of construction, if possible. I realize that you may not be able to answer that question, but -- because earlier in your testimony, you talked about how many environmental reviews these plants go under. And so because this wasn't the subject to a CEC hearing in 2007, I'm curious as to what those environmental reviews looked like then, and then what you deal with on an ongoing basis?

MR. BEARCE: That's a great question, with your permission could I answer it backwards and talk about what we do now?

MEMBER RICHINS: (No audible response.)

MR. BEARCE: Great. So we are on a three-year audit cycle. And a lot of times we talk about air quality, Title V, that's not the only waste stream or concern for environment. So we're on a three-year multimedia cycle, so air, waste, and water, and so we go through a myriad of six-month reports to ADEQ as the responsible entity for this site, and so we do self-certifications, we do our own internal reviews, and then we submit those. And we are -- I'll call it judged, that's probably a tough word -- but essentially they evaluate our evidence of what we propose. These sites, as well as the future site or future development at this site, the individual units, have continuous emissions

monitoring system, which they track everything.

And it's all data-centric, we have to have a really high percentage, greater than 95 percent of operating times. We can't take them down. They can calibrate, but they need to be available tracking the data. And so that's the level of detail that we get in in those cycles. The three-year cycle I spoke to is our outside. We get a third-party audit, which is always a really health way to look at things is to say what are the best practices, what are labeling things, you know, how is our pond, and we go through all the air, waste, and water condition audits.

And so that's our methodology. We have committees internally, we have corporate services, so we've got a lot of other formal processes to really evaluate this stuff. And so it's a resilient environmental process that we undergo currently today.

MEMBER RICHINS: Thank you for that. What -- is ADEQ, then, the primary government oversight for you guys or are there federal entities that have oversight into your operations and emissions?

MR. BEARCE: Yeah, so the Feds oversee everything. We do have PDEQ, for example, you know, in Pima County. And so, depending on who has jurisdiction over where the facility is located, we do have resources

outside of the state of Arizona as an example, so in New Mexico, DEQ will have it, so the Feds oversee all of those programs.

MEMBER RICHINS: Could you cite the federal agencies for the record that have oversight now.

MR. BEARCE: For the --

MEMBER RICHINS: To get it on the record, the federal agencies, is it the EPA --

MR. BEARCE: Yeah, the EPA --

(Cross-talk.)

THE REPORTER: Hold on. Hold on. One at a time.

MR. BEARCE: I apologize.

So the EPA has jurisdiction over ADEQ and PDEQ, and they'll issue orders and obviously that cascades down, but they have -- they have regulatory authority over those agencies.

MEMBER RICHINS: Thank you.

MR. BEARCE: To answer the second half, if you'd like, so just like any major construction project, you've got your swift that he spoke about, the wastewater piece, the isolating everything there. We've got fugitive dust controls that have to be in place. We still have to go through Title V air permitting for Class 1 and all this, you know, depending on the

triggers, that can trigger many other standards. The proposed equipment, I'll just use that as more context, I wasn't involved in the prior project is that we have to go through air modeling. We'll be doing environmental justice. The outreach efforts, a lot of new things that aren't even necessarily legally required, but are the right thing to do, and so we will exercise those and we've done, you know, our outreach and we would continue to do it on this effort as well. We also have the aquifer protection program for the water side, which is around the ponds and storage and protecting the aquifer, and that sort of thing. So we would go through normal construction permitting processes, I can't cite them all right now for you, but it would have been a very similar process back then that we're proposing to undergo on this project.

MEMBER RICHINS: Understood. Thank you.

So you don't consider a CEC would be part of the right thing to do, then, in this instance?

MS. GRABEL: Mr. Chairman, Member Richins, I don't want to object to a member, but I think that mischaracterizes Mr. Bearce's testimony.

MEMBER FONTES: Mr. Chairman, can I ask a related question?

CHMN STAFFORD: Yes, Member Fontes.

MEMBER FONTES: How much of that overlaps with what we review on the studies that inform the CEC, perhaps let's get to the answer of that in a different way. Would you be paying the same consultants and using the same outputs to inform the presentation to the CEC and this Committee.

MR. BRYNER: So, Member Fontes, I'll address that one, just because I'm a little more familiar with the CEC than Mr. Bearce.

So there's certainly a lot of overlap. There's only so many environmental resources to review and, you know, the typical protocols that review those in the same manner, so whether you're looking at air quality, water quality, you know, biological resources, cultural resources, different things like that, which many of these permits, you know, have you look at, including also I forgot to mention public outreach, things like that, that are required as part of that. Certainly a lot of overlap would be there. You're going to have different nuances with the applications and the approval processes that would be different. And you may have a few things that are stand-alone, you know, thinking of one, you know, we typically create visual simulations and things like that for the CEC that are not going to be required for an air quality permit, because

it's not pertinent to the review.

MEMBER FONTES: Are there any things that you require that nobody else does as a part of our review and for the CEC that you've worked with in your professional experience?

MR. BRYNER: Sorry, I'm just thinking. I would say not really. The one that was kind of getting me was the existing development plans, which is Exhibit H of the CEC application, but when you look at, you know, some of the local permits that you need to get, I would say those typically cover that, so I would say --

MEMBER FONTES: So everything you're doing for State and County is pretty much consistent with what we're requiring, you're just presenting it in a different format to us?

MR. BRYNER: I would say the level of review is pretty --

MEMBER FONTES: And those are all -- those are all capitalizable costs you're doing for State and County, they're going into a rate base, so the additional costs for us are just the legal and the presentation, so the characterization of the additional cost burden that you have to present to this committee is probably negligible?

MR. BRYNER: I guess I would be -- I would

be a little bit concerned about oversimplifying that, because the public outreach aspect that the committee here has come to expect is substantial for a CEC. A lot more substantial than it is for any of the other permitting.

MEMBER FONTES: Thank you, Mr. Chairman.

CHMN STAFFORD: All right. Member Little, you had a question?

MEMBER LITTLE: It was going to be a question, but perhaps it's more of an observation at this point. The public outreach was one area that I don't believe is required by ADEQ or any of those other. And we have often seen people come in with very real concerns and very real comments that are important comments about plants over which we had no jurisdiction that they knew nothing about until the CEC hearings for the intertie to tie that into that plant into the system.

And I would like to remind all of us that one of the important parts of the law says that the CEC would provide a single proceeding to which access will be open to interested and affected individuals, groups, County, and municipal governments, and other public bodies, to enable them to participate in these decisions. It's not just the environmental aspect.

CHMN STAFFORD: Thank you, Member Little.

Ms. Grabel, about how much longer do you have for your direct case?

MS. GRABEL: It depends on how many questions you all have. I mean, we have about 13 slides left, and then I have a little bit of colloquy with Mr. Bryner afterwards, so could be -- it's been an hour, it could be another hour, depending on the questions.

CHMN STAFFORD: All right. Well, if it was going to be 20 minutes I'd say let's go ahead and continue on through, but it's 12:35, and I think I'm sensing that people, my fellow Committee members, are in need of some sustenance. I think it would be nice to take a lunch break and then come back in about an hour.

MS. GRABEL: It could be 20 minutes, it really depends on the questions.

CHMN STAFFORD: Okay, let's go --

MEMBER HILL: Mr. Chair, I have a question.

CHMN STAFFORD: Okay, hold on a second.

Member Hill.

MEMBER HILL: Okay. I want to follow up on the public interest and the public having more engagement in these projects, because there's just going to be more of them as the grid decentralizes and changes.

Mr. Bryner, do you have, by right, the zoning that you need to site this facility at this time?

MR. BRYNER: For this particular site, yeah, the zoning is correct for what we need to do.

MEMBER HILL: So where is the public comment and engagement in a project like this, where you already have the zoning by right, the land use by right, where is the public notification, engagement, and mitigation of impacts happening? Can you characterize that?

MR. BRYNER: Sure. So I want to start off by saying just because something is required or is not required doesn't mean that we don't do it. So as a --

MEMBER HILL: So it's voluntary on your part?

MR. BRYNER: Yeah, I know, you know, it might make some a little bit nervous, but as a company we really do try to do right by the communities we serve. And so that means that we try to keep them informed of whatever it is we're working on, whether it's a small distribution upgrade in a neighborhood, letting that neighborhood know, hey, this is going to be happening or whether it's something larger.

But specific to things that are actually mandated and regulated, so the air quality permit would be a good example of something where we do have to reach out and do some community outreach and engagement in

order to satisfy the requirements of that permit.

MEMBER HILL: Thank you.

It's been my experience that TEP has done good outreach, in particular to its customers, so I want to compliment you on that. I think what I'm thinking about is the consequences of some of the decisions today have statewide significance, and it's not always going to be TEP, and I don't want to characterize it as, you know, the regulations have to -- I think we have to be consistent in treating all of these projects similarly.

And to provide that public opportunity for comment, discussion of mitigation of impacts, and approve siting in a community, it's not always going to be TEP, and so I think I'm thinking broadly about the statewide consequences of that. And so I appreciate all of your good work, but I'm trying to think through this in a bigger picture. Thank you.

MR. BRYNER: Understood. Thank you.

MS. GRABEL: Member Hill, if I may address that quickly and then we can break for lunch. I would suggest that there's really no dispute that nonthermal generation doesn't require a CEC, and we have large solar plants being built all over the state without that kind of public outreach, and I think that's what Ms. Little's question was getting to earlier. So I just wanted to

leave it at that. I understand the issue --

MEMBER HILL: No, I don't disagree with Member Little. I have genuine concerns about how all of these hearings are structured and where we're getting public comment and where we're not. But I don't want to backslide to a place where we're not getting any public input on any generation, so thank you.

MS. GRABEL: Thank you.

CHMN STAFFORD: Any other questions from members?

MEMBER FONTES: I have one observation and maybe you haven't done it thus far, but under the EPA environmental social justice public outreach, it would be useful for the members and the community and the stakeholders here for you to know what your plan is to address that. And then how does that map into our requirements? Again, it's a gas-fired plant, EPA rules are new under this administration, they're still being implemented.

MR. BRYNER: So, yeah, thank you, Member Fontes, so yeah, we actually have done a full analysis for the environmental justice concerns under the EPA rule and we didn't enter that as an exhibit. It's being done as part of our air quality permit process, but we have taken it into consideration and looked at those

populations. I don't have it in front of me right now, otherwise, I could reference it, but if you have specific questions, I can research that and provide an answer.

MEMBER FONTES: Just a characterization of your plan for stakeholder engagement, as you do, and then how you're going to document that, again, you can -- we can look at how that compares to what our requirements are here in this particular case.

MR. BRYNER: I know for a fact we don't have that plan yet, because we're working on formulating it. We just finished up the analysis.

MEMBER FONTES: I have one other item. I cannot find the dispatch operational data in any of the exhibits, so if we could address that after lunch, I'd appreciate that, Ms. Grabel?

MS. GRABEL: I can answer it real quickly, if you don't mind, Mr. Chairman, Member Fontes, it was actually a WRA exhibit that they withdrew, and so it's no longer before the Committee as an admitted exhibit. I can reference you to the prior exhibit, which was WRA-3, I believe.

MEMBER FONTES: Thank you. I turned that over to somebody, I'd like to get a copy of that, if I could.

CHMN STAFFORD: I think the time for that

will be WRA's direct case, which will be coming -- they will be presenting a witness with Sierra Club as a panel.

MEMBER FONTES: Thank you, Mr. Chairman.

CHMN STAFFORD: Yes, Ms. Johnson.

MS. JOHNSON: I just wanted to point out that the procedural order does not require the parties to docket their exhibits, and so there isn't a reason why the Committee members would have WRA exhibits that have since been withdrawn.

CHMN STAFFORD: Well, I guess it's up to WRA whether they want to offer it again in response to Member Fontes's question.

WRA, Ms. Doerfler?

MS. DOERFLER: I honestly will need to speak further to make sure I know exactly what we're talking about. There was a lot of shuffle with the exhibits with the short time frame for this case. So I will get more information, and then our hope would be to provide you with the information that you would need.

CHMN STAFFORD: All right. Well, it sounds like you'll do that after lunch. So with that, Members, are you ready to take a break for lunch now or do you want to keep going until 1:00?

(No response.)

CHMN STAFFORD: All right. With that,

we'll take a recess for lunch and we'll come back at 2:00.

We stand in recess.

(Recessed from 12:39 p.m. until 2:00 p.m.)

CHMN STAFFORD: All right. Let's go back on the record. We'll continue with the applicant's direct case.

Ms. Grabel.

MS. GRABEL: Thank you, Mr. Chairman. Before we begin, I do have a couple of responses to questions that the Committee members asked prior to lunch, and so responsive to Member Fontes's inquiry about the insurance description, the insurance description describes the site as a simple-cycle power generation station with peaking service for the northwestern part of Arizona.

And in response to Member Hill's inquiry about public outreach, I did want to make the Committee aware that there are several requirements associated with the air quality permit revision. One is reaching out to all tribes within 50 kilometers, according to the ADEQ tribal outreach policy. The final draft permit of the air quality permit application must be noticed for public review and comment for 30 days. Other notice requirements associated with newspaper publications,

associated mailing lists, and posting at the project sites are also required by regulations and the associated regulations are Arizona Administrative Code R18-2-330(a) and (g) R18-2-330(c) and (f). There's also a public comment hearing that's actually hosted by ADEQ at the end of the public comment period. If that's helpful.

MEMBER HILL: Thank you.

MS. GRABEL: Sure.

CHMN STAFFORD: And that's for the aquifer protection permit?

MS. GRABEL: Yeah, it's for the air quality permit revision.

CHMN STAFFORD: Air quality permit revision. Okay.

MS. GRABEL: Correct. And if that answers all of the members' questions, we're ready to revisit Mr. Bryner's PowerPoint presentation. And I believe he's at page 25 --

Q. Is that what we decided? 26?

A. (MR. BRYNER) Yeah. So we'll start over or we'll start back at -- whoops, I think I just did something. There we go.

Yeah, I think we were kind of talking about the Unit 1 generator nameplate. We went over Unit 2's nameplate, I just wanted to hit on Unit 1 real briefly,

so we -- I think I showed this slide already. Then on slide 26, just wanted to point out that similar to Unit 2, the Unit 1 nameplate has that same output rating of 71,176 kVA, which again, using that same conversion formula equates to 60.5 megawatts, or 61 megawatts.

So each of these two units, they have their nameplate affixed, and each of the proposed new -- or the proposed four new generating units would have a similar nameplate affixed to those that would be affixed by the manufacturer, and would include the specifications, including the generating -- the output rating of those generating units.

MEMBER FONTES: Mr. Chairman?

CHMN STAFFORD: Yes, Member Fontes.

MEMBER FONTES: So what is the current model, that's a 1971 vintage technology, what is a GM [sic] LM6000, and is it the PF or the PC configuration? What are the nameplate ratings of those?

MR. BRYNER: I'll defer to Mr. Bearce.

MR. BEARCE: So I don't have a specific manufacturer identified for these yet. We haven't gotten that far. The PF does have a higher generating capacity, that is not what we're proposing. We did model it, and I do know it's a higher capacity. The PF is not in consideration for this. It's still below 100, but it's

higher. I don't have those numbers. The proposed, well, yeah, while this is old, they're very similar in rating from an output stamp on the actual nameplate itself, even to this day. For the LM6000 PCs, which is the considered model.

MR. BRYNER: So let's move on to slide 27. So this now is the gas turbine that we've talked about. The locations of the existing gas turbines and the proposed new gas turbines are highlighted in yellow on the slide, and the turbines are separate and specific to each of the generating units. In between, in connecting the gas turbine to the generator is a coupling. Together the gas turbine and the generator form the generating unit. The photo on this screen shows this coupling between the gas turbine and the generator of the existing Unit 2. So a similar coupling would connect the gas turbine and the generator of each of the proposed four separate generating units.

Each of the separate generating units also has its own auxiliary skid, which is illustrated in this photo. These skids contain multiple subsystems and instrumentation. The locations of the auxiliary skids on the existing skids two generator units, along with the four proposed new generating units are outlined in yellow on the slide. These auxiliary skids are also separate

and specific to each of the generating units.

Each of the separate generating units has its own exhaust stack and continuous emission monitoring system or CEMS, which is illustrated in the photo. The locations of the exhaust stacks and the CEMS on the existing two generator units and the four proposed new generating units are outlined in yellow. The exhaust stack and the CEMS are each separate and specific to each of the generating units.

The generating units, I believe as Mr. Bearce spoke about, are controlled remotely out of a central location in Tucson, but each of the separate generating units has its own local controls. So you can see on the screen, you know, I didn't get my laser pointer, if you'll give me just a second.

You got it? Thank you.

Let's see, you've got a -- never mind. I think we're too far away from the computer.

So on the screen you can see a photo of the control room. So on the left side of that photo is the control for, Unit 1, and on the right side of the photo are the separate controls for Unit 2. So they are both housed within a common building, a common control room, and a similar set of controls would be required for each of the four new generating units. But each unit is

operated independently of one another, it can be started and stopped independently so that we can provide the necessary level of power to meet the load requirements.

I do also want to point out on this slide, if you -- the gen-tie line, so we've talked a little bit about that, so there is a gen-tie line associated with this project, it's not part of our proposal or anything we're discussing here today, and it's illustrated conceptually with that orange dashed line. The existing Black Mountain Station has two gen-ties coming out of it today, they're both 69-kV lines, which are -- is the voltage of our operating transmission system in Mohave County.

Now, in looking at the requirements to bring the proposed new generation out to the grid, we learned that it would actually require four new 69-kV circuits. So if we were to build those four new 69-kV circuits, we could actually avoid the need to come before this Committee to get a Certificate of Environmental Compatibility. However, we're proposing a 230-kV gen-tie line instead, and that's, you know, even though it will require a CEC, and that's because it's the right technical solution for us, and it's the right economic solution for our customers.

CHMN STAFFORD: Now, that 230-kV line, will

that tie all six units or just the four new ones?

MR. BRYNER: It would just tie the four new ones, so they'll be in a 230-kV yard, as opposed to the others are in a 69-kV yard.

CHMN STAFFORD: Okay, thank you.

MEMBER GOLD: Mr. Chairman?

CHMN STAFFORD: Yes, Member Gold.

MEMBER GOLD: Could I ask Mr. Bryner one more question, you said it was the right technical, economic, and what?

MR. BRYNER: I believe I just said the right technical and economic solution.

MEMBER GOLD: Okay. Thank you.

MR. BRYNER: So up to this point all the equipment that I've shared with you as part of the proposed expansion has been separate and unique to each generating unit. For efficiencies, there are a number of facilities that are shared between two or even all four of the proposed new units. And just to make it clear, they're not involved in the production of electricity. These shared -- these shared facilities. And these are symbolized on this map with gray shapes on the screen.

Despite sharing these facilities, the shared equipment would be installed really whether we installed one unit or we installed 10 units. The first

of these shared facilities that I'll show is the cooling tower. As shown in the photo, the existing station Units 1 and 2 share a common cooling tower, and as we've discussed already, the cooling helps the units to run more efficiently, but is not required for power production, and is only used during peak summer months. Many of the shared facilities that I'll go over here in the next few minutes are part of this cooling function.

For efficiency, UNSE proposes to have two additional cooling towers, each shared by two of the generating units, which are highlighted in yellow on the screen. The water pumps for the proposed expansion would actually be located in the same building as the existing pumps that are shared today between Units 1 and 2, and they're shown in the photo. The raw water pumps are located on the right side of the photo, and the demineralized water pumps are located on the left side of the photo.

The reverse osmosis system, or RO system, which is used for treating water, is shared between the existing Units 1 and 2. UNSE proposes to include a new RO system for the expansion that would serve all four of the separate generating units. Similarly, while the demineralized water tanks are shared between Units 1 and 2, a new set of tanks would be installed and shared

between each of the four proposed new generating units. A single evaporation pond exists today and is shared by the existing Units 1 and 2. And a new evaporation pond would be built and shared between each of the proposed four new generating units.

Now, similar to the control center, each separate generating unit would have its own turbine control panel. But they would be housed in a common building. Shown in the photo on the bottom right is the turbine control panel and battery system for Unit 2. And in the upper right is a mirror image of that same installation for Unit 1.

Lastly, each separate generating unit has its own set of switch gear and a cable to convey the electricity produced to the generator step-up units or GSUs, where it's transformed and distributed through the grid. The existing station has two GSUs, one associated with each generating unit. For the proposed expansion rather than installing four GSUs, for efficiency, UNSE is planning to size those with greater capacity so that two separate generating units can share a single GSU. So while there are some shared facilities between each of the separate generating units, none are physically connected nor is there a dependency on one generating unit in order to operate another.

In conclusion, UNSE made the request for a disclaimer of jurisdiction over the siting of the proposed expansion of the Black Mountain Generating Station, based on the definition of "plant" in the statute, which defines a plant as "Each separate thermal electric, nuclear, or hydroelectric generating unit with a nameplate rating of 100 megawatts or more." UNSE proposes to install four separate generating units, each with an anticipated nameplate rating of approximately 50 megawatts, but in no case 100 megawatts or greater. These separate generating units do not meet the definition of a plant under the statute.

The Company, therefore, respectfully requests that the Committee and the Commission disclaim jurisdiction over the Black Mountain Expansion Project, as we've proposed it today.

BY MS. GRABEL:

Q. Thank you for your presentation, Mr. Bryner. I do have a few additional questions. If the Company needs 200 megawatts of capacity, why construct four 50-megawatt units instead of a single 200-megawatt plant?

A. (MR. BRYNER) So primarily for flexibility. So the combustion turbine technology can be ramped up quickly, so we can turn on one, two, three, or four of the units, whatever it is that we need in order to meet

our current load profile. It gives us that operational flexibility that we need, so that we can be the most efficient, really, to meet our customers' expectations.

MEMBER FONTES: Mr. Chairman, I've got a follow-up question to that.

CHMN STAFFORD: Yes, Member Fontes.

MEMBER FONTES: Why not use TM2500 and use smaller aeroderivative turbines in 25 megawatts or even another similar product?

MR. BRYNER: So that's outside of my expertise, but I'll refer to Mr. Bearce if he knows.

MR. BEARCE: Sure. So there's some synergies that's taken with a similar technology that we currently have on-site. We've got all the systems and so there's some efficiencies with using the same. We could use -- we wouldn't use a trailer mount version, we would go with the LM version of the 2500, if we did. But it didn't seem -- it's more shaft risk, it required more real estate disturbance, and so for the purposes of this project having these four, based on the load profile, it was the best technical solution for this installation to go with four LM6000 PC SPRINTs.

MEMBER FONTES: With respect to the load that it's servicing, is this selling into the EIM, is this servicing the community, or providing peak shaving

or how would you characterize it in terms of the load that it's servicing?

MR. BEARCE: So right now we're currently pulling on the market for the capacity that this installation covers.

MEMBER FONTES: So it's going to displace purchases from the market in the summer capacity --

MR. BEARCE: Yes, sir.

MEMBER FONTES: -- to save consumers the difference between your cost of production to that of what you would purchase out of the market?

MR. BEARCE: That's correct.

MEMBER FONTES: Thank you.

MS. GRABEL: Thank you.

Q. And, Mr. Bryner, before I turn you over for cross-examination, would you please turn to the exhibit marked UNSE-14, and I'll let the Committee members have time to get there as well.

Is everyone there?

UNIDENTIFIED SPEAKER: Yes.

MS. GRABEL: Thank you.

Q. Mr. Bryner, what is Exhibit UNSE-14?

A. (MR. BRYNER) It's a copy of an op-ed article that was written by counsel for intervenor AriSEIA.

Q. Have you reviewed this article?

A. (MR. BRYNER) I have.
Q. This article was published on April 13, 2024, so that's just 11 days ago, correct?
A. (MR. BRYNER) Yes.
Q. If you'll look at the second paragraph, counsel for AriSEIA suggests that UNSE is asking the Committee and the Commission to waive its jurisdiction over siting thermal electric, and nuclear power projects.
Is that an accurate characterization of this request?
A. (MR. BRYNER) So, no, we're asking for the Committee to disclaim, not waive jurisdiction. And it would only apply to any new generation that is 100 megawatts or under, as the statute says.
Q. Thank you. And in the third paragraph of this article, the author argues that, "If UNSE is successful, essentially all new gas plants in Arizona would be exempt from the law."
Is that accurate?
A. (MR. BRYNER) So, no, again, this would apply only if those generating units that are 100 megawatts or under 100 megawatts, as the statute says. And if a unit with the nameplate rating of over 100 megawatts were -- were needed, maybe we need a new base load, or something like that, a larger combined-cycle unit, the utility

would build the unit that is the right technical solution, similar to the transmission line I referenced.

And speaking on behalf of UNSE and TEP, I can assure you that we're not going to build 10 50-megawatt units if we need one single 500-megawatt unit, if that's the right technical solution, just so that we can skirt the rules and avoid the need for a CEC.

Q. Thank you.

The Arizona Corporation Commission has the power to disallow recovery of an imprudent investment, correct?

A. (MR. BRYNER) Yes.

Q. So if the Company needed to build a 200-megawatt base load resource and did not have a concurrent need for fast-ramping units, would it construct four units under 100 megawatts simply to avoid this Committee's jurisdiction?

A. (MR. BRYNER) No, as I just mentioned that, absolutely not. We're always making our decisions, our recommendations based on what's prudent and most -- what's needed technically and what's prudent for our customers.

Q. Any decision to the contrary could subject the Company to disallowance of the costs incurred, correct?

A. (MR. BRYNER) Correct.

Q. The line siting statute exempts non-thermal

generation from requiring a CEC, correct?

A. (MR. BRYNER) That's correct.

Q. Most of the generation built today consists of nonthermal facilities, solar and storage, correct?

A. (MR. BRYNER) That's correct.

Q. So I'm going to read from the last line of paragraph 4 of this article, in which AriSEIA writes, "While the public hasn't likely heard a lot about UNSE's proposal, some concerned organizations have asked if this would remove half of the job of the Arizona Power Plant and Line Siting Committee and whether or not the legislature could possibly have intended to pass a law, that eliminated review of almost all power plants in the future."

Is it the exemption of nonthermal solar and storage plants in the CEC process that actually eliminates the review of most power plants in Arizona?

A. (MR. BRYNER) I would disagree. I would say no.

Q. You would disagree that it's the nonthermal exemption that bypasses most of -- the review of most power plants?

A. (MR. BRYNER) So the nonthermal exemption is what would -- what would disallow most of the power plants that would need to come here, so most of the projects are -- I'm tongue-tied, I'm sorry.

Q. Most of the projects that are being sited today are solar and storage, correct?

A. (MR. BRYNER) That is correct, and they don't require coming before this body.

Q. Thank you.

Do AriSEIA or any of the other intervenors take issue with the exemption from nonsolar plants -- from nonthermal plants, rather, from the CEC process?

A. (MR. BRYNER) Not that I'm aware of.

Q. Finally, please look at the last paragraph of the article on the first page.

MEMBER GOLD: Mr. Chairman?

CHMN STAFFORD: Yes, Member Kryder?

MEMBER GOLD: This is Gold.

CHMN STAFFORD: Or Gold, sorry.

MEMBER GOLD: Did you just say that solar and wind power plants are exempt, but only gas-fired power plants are required?

MR. BRYNER: So the way that, if I can address your question, Member Gold, so the way the statute reads is any gas -- well, it says thermal generation --

MEMBER GOLD: Basically --

(Cross-talk.)

THE REPORTER: Hold on.

CHMN STAFFORD: One at a time.

MEMBER GOLD: When you say "thermal," you mean coal, oil, or gas?

MR. BRYNER: Correct.

CHMN STAFFORD: That also includes solar thermal. There was a CEC issued for the solar thermal plant.

MR. BRYNER: Yeah, like a concentrating solar or something like that.

MEMBER GOLD: So solar is exempt or is not exempt?

MR. BRYNER: So your photovoltaic technology would be exempt.

MEMBER GOLD: So solar plants are exempt. Turbine -- wind turbines are exempt?

MR. BRYNER: Correct.

MEMBER GOLD: But a gas plant is not exempt?

MR. BRYNER: Correct.

MS. GRABEL: Or, no, Member, I'm going to argue that, so our position is that a gas plant under 100 megawatts is exempt. But if it's over 100 megawatts, a thermal facility has to come before this Committee for a Certificate of Environmental Compatibility.

MEMBER GOLD: What about a solar plant

that's over 100 megawatts?

MS. GRABEL: No, because it's nonthermal generation, assuming it is, and it's not thermal solar, then it does not require to have a CEC. That is why this Committee sees so many applications for the generation tie lines that connect solar plants, but not the siting of the solar facility itself.

MEMBER GOLD: Really?

MS. GRABEL: Yes.

MEMBER GOLD: Thank you.

CHMN STAFFORD: My theory is that because in 1971 when they passed the statute utility-scale solar PV was not really viable at that scale.

MEMBER GOLD: So, Mr. Chairman, it looks like our statute is a little outdated.

CHMN STAFFORD: Well, I'm as old as the statute and I don't think I'm out of date. And I think the statute certainly hasn't kept up with the times.

MS. GRABEL: All right.

CHMN STAFFORD: Member Little, you had a question?

MEMBER LITTLE: My question has to do with your statement that if a utility or an applicant were to determine that a 200-megawatt gas-fired generation would be best, you said maybe they need a low base load, or

whatever, in your experience, working in the utility industry in Arizona, when was the last time you saw a gas-fired generation of anything over greater than 100 megawatts planned for in Arizona?

MR. BRYNER: So I'll reference just within the realm of TEP and UNSE. So the Gila River Power Plant, which was, I believe it got its CEC back in the early 2000s. We purchased those units, you know, I don't know, a decade or so later.

MEMBER LITTLE: That was over 20 years ago? My point -- my point is that in today's climate, planning in the, generally speaking, gas-fired generation is needed for a purpose other than base load. And generally speaking, they tend to be smaller units. But they also tend to be lumped in one location, because that's where the gas is.

BY MS. GRABEL:

Q. Mr. Bryner, may I ask a couple follow-up questions in response to Ms. Little's arguments. Do you know whether there was actually a moratorium placed on the construction of new natural gas plants within the past decade, perhaps more?

A. (MR. BRYNER) I'm not aware of any moratorium like that.

Q. Okay. We can offer that into evidence later, if

necessary. And is it possible that additional base load resources will be needed that cannot be met with solar or energy storage in the future?

A. (MR. BRYNER) I think it's possible.

MS. GRABEL: Thank you.

Any other questions?

CHMN STAFFORD: I had a quick question or two.

How -- to your knowledge, what is the largest simple-cycle turbine/generator that's commercially available currently.

MR. BRYNER: If you wouldn't mind, I'd like to pass that off to Mr. Bearce.

MR. BEARCE: So in a simple-cycle configuration, it's usually the GE, staying with that manufacturer, they call it a 7FA, and there's variations of that, but the .05 is the most common, and it's around 175 to 190 megawatts, which would be the actual output. I don't know what their nameplate capacity rating would be on that machine, I just know that's the output, I want to delineate those two, but it exceeds the 100 megawatts, that question right now.

CHMN STAFFORD: All right. So I imagine they are a little less versatile to start and stop for different levels of generation, as opposed to having four

50-megawatt units, as opposed to one 200-megawatt CT.

MR. BEARCE: Mr. Chair, that is absolutely true.

CHMN STAFFORD: Now, what's the -- when's the last time someone built a combined cycle in Arizona?

MR. BEARCE: I couldn't cite that with specificity.

CHMN STAFFORD: I think the Gila -- the one that you recently acquired -- that TEP recently acquired that was one of the later builds.

MS. GRABEL: I don't know.

MR. BRYNER: Sorry, it doesn't look like we -- we have a good answer.

CHMN STAFFORD: Okay. All right. Now, what do you -- what's the smallest-sized combined-cycle turbine you're aware of?

MR. BEARCE: Ooh, man, you're quizzing me on some stuff here that goes back into the vault. I don't currently operate any small combined cycles or we don't have them on the horizon, because, for the most part, they're not really economical to build for that load profile. But they would most likely be over the 100 megawatts.

CHMN STAFFORD: Right. Because the combined cycle, you don't want to quick start and stop

those, you want to turn them on and run them constantly. It's more of a base load that can ramp up and down in a smaller degree of variability than, say, the CTs.

MR. BEARCE: Yeah, when you introduce the steam cycle, there's heat stresses that take away the operational flexibility, which hinders the operation to be able to do what the project we're proposing does.

CHMN STAFFORD: Okay. And the larger CT that you acquired, is it a CT or is it a combined cycle, the Gila units that you obtained?

MR. BEARCE: Gila is a combined-cycle power plant.

CHMN STAFFORD: That's what I thought. And that's each unit there is over 100 megawatts, correct?

MR. BEARCE: That's correct.

CHMN STAFFORD: Okay. I think the last CTs that were sited over 100 megawatts each was the APS Ocotillo Modernization Project. I think those are like 102 megawatts apiece for about five units that replaced the two steam units that were there in Tempe. That's the one that -- that's the last -- that's the last case where I recall seeing simple cycles greater than 100 megawatts. If that's incorrect, please let me know, but I think that was the -- I think all the CTs that have come on since then are significantly less than 100 megawatts each.

MS. GRABEL: I would reiterate for the record, Mr. Chairman, that it's in Decision Number 76632 entered on March 29th, 2018, that there was a moratorium placed on the construction of natural gas in the Company's Integrated Resource Plan, so that might explain part of the reason why we didn't have construction of natural gas during that period.

CHMN STAFFORD: Right. I'm looking at more not the absence of all natural gases, I'm talking about the choice between CTs and combined cycles. It seems that, you know, with the differing load profiles and the proliferation of nondispatchable resources, like PV solar and wind, if those -- if the CTs are what you look to to fill in the gaps, as opposed to having a combined cycle to run more like a base load.

MS. GRABEL: Yes.

MS. HILL: Mr. Chair, can I ask a question?

CHMN STAFFORD: Member Hill.

Speak into the microphone, please.

MEMBER HILL: I'm just reading this op-ed because I hadn't read it before. And I just have a question about the relationship or the process by which TEP makes decisions. The -- it looks like the RICE project is, in total, 200 megawatts. And this project is 200 megawatts. Can you talk a little bit about the

decision to do a disclaimer of jurisdiction now and not in the previous project? Can you explain kind of the thought process there?

MR. BRYNER: So I was advised by my counsel to let them go ahead and take that question, if that's okay.

MEMBER HILL: Sure.

MS. GRABEL: I guess I'll start by saying TEP and UNSE -- this is UNSE not TEP, they are affiliated entities, but they're different entities --

MEMBER HILL: Okay.

MS. GRABEL: -- I was not part of the process back in siting the RICE units, so I cannot tell you exactly why they chose to site it at the time. I do know that there was a discussion on the record with the then-chairwoman as to whether a jurisdiction was actually -- if the Committee actually had jurisdiction over that project. And I think the Company at that time put on the record they decided to do it in order basically to avoid controversy with other stakeholders, but they maintained that there may not be jurisdiction over the project.

So in this case, because there has been the precedent of the RICE, there has been the precedent of Sundance and other units, UNSE has decided to just come

forward and seek clarification on a statutory interpretation that's been up in the air for a little while.

MEMBER HILL: Okay. Thank you.

MS. GRABEL: Certainly.

CHMN STAFFORD: Any other questions from members?

(No response.)

CHMN STAFFORD: Okay. I assume your witness is available for cross-examination?

MS. GRABEL: Not yet. I have one more follow-up question. Thank you.

Q. If you'll look, Mr. Bryner, at the last paragraph on the first page of AriSEIA's op-ed, Ms. Johnson writes, "UNSE did not conduct an All-Source Request for Proposal for this project nor is this project identified in the Integrated Resource Plan they filed in November."

Is this statement completely accurate?

A. (MR. BRYNER) No, it's not.

Q. In fact, if you please turn to UNSE-1, which is our application, I'd like you to read into the record the verbiage that's included in Footnote 1 of the application.

A. (MR. BRYNER) It states, "UNSE's 2023 Integrated

Resource Plan calls for the addition of 200 megawatts of natural gas turbines to support system reliability during the summer months. Specifically, the IRP calls for the addition of four new fast-start, fast-ramping aeroderivative combustion turbines pursuant to ACR14-2-705(b). UNSE plans to issue an All-Source Request for Proposal to meet this need."

Q. Did AriSEIA have the benefit of this language 11 days ago when it published this article?

A. (MR. BRYNER) Yes.

Q. Thank you.

And, now, if you'd please turn to UNSE-15, which is UNSE's 2023 IRP.

A. (MR. BRYNER) Okay.

Q. Is the Committee there?

This is UNSE-15, and we're going to look at page 1. And that's the introduction by the Company's CEO Susan Gray, and in this -- take in this first page intro, Ms. Gray calls out in the last paragraph on the left column that, "Our 2023 Integrated Resource Plan calls for the addition of 350 megawatts of solar and wind resources, 200 megawatts of natural gas turbines, and 225 megawatts of energy storage systems by 2038."

Did I read that correctly?

A. (MR. BRYNER) That's correct.

Q. Is the Black Mountain Expansion Project that we're talking about today included in the list of capacity additions cited here?

A. (MR. BRYNER) Yes, it would be those 200 megawatts of natural gas turbines that are referenced.

Q. Okay. Thank you.

And if you'll turn to page 53 of this document, which again is the 2023 Integrated Resource Plan.

Are you there?

A. (MR. BRYNER) Yes.

Q. That's page 53 of the IRP.

This depicts these capacity needs against a timeline; is that correct?

A. (MR. BRYNER) That's correct.

Q. Are the 200 megawatts of natural gas combustion turbines depicted on this timeline?

A. (MR. BRYNER) They are with the reflected timeline of 2028.

Q. And, again, is that the Black Mountain Expansion Project we're talking about today?

A. (MR. BRYNER) That's when the technology need is -- the resource need is identified.

Q. Did AriSEIA have the benefit of reviewing this Integrated Resource Plan at the time it published the

April 13th article?

A. (MR. BRYNER) Yes.

Q. In fact, it was, if it's not still now, one of their exhibits, correct?

A. (MR. BRYNER) That's correct.

Q. And of the 775 megawatts of generation additions called for in UNSE's IRP, the Company is seeking a disclaimer associated with just the 200 megawatts of natural gas units, correct?

A. (MR. BRYNER) That's correct.

Q. Will a CEC application be required to construct the other 575 megawatts of capacity called for?

A. (MR. BRYNER) No, it wouldn't be, because there's 350 megawatts that are identified as being from a wind or solar resource, and 225 additional megawatts that are for battery storage. And so both of those are considered nonthermal. And so, thus, as we discussed, would not require a CEC under the statute.

Q. Does AriSEIA object to the exemption of these nonthermal facilities from the CEC process?

A. (MR. BRYNER) Not that I'm aware of.

Q. Do you have any final comments you would like to make?

A. (MR. BRYNER) Nothing at this time.

MS. GRABEL: Mr. Bryner and Mr. Bearce are

now available for cross-examination.

CHMN STAFFORD: All right.

Sierra Club, your witnesses.

MR. WOOLSEY: Thank you, Mr. Chairman.

C R O S S - E X A M I N A T I O N

BY MR. WOOLSEY:

Q. And, good afternoon, Mr. Bryner and Mr. Bearce. I'm sorry, I can't quite see Mr. Bearce behind the podium over there. So I'm going to direct my questions primarily to Mr. Bryner, but please feel free to refer me to Mr. Bearce if he's better positioned to answer a particular question.

Mr. Bryner and Mr. Bearce, do you happen to have access to copies of Sierra Club's exhibits that were exchanged between the parties? And if you don't, I have extra binders here that I could give you, with the Chairman's permission?

A. (MR. BRYNER) We have them here in front us.

Q. You have them, okay.

So I guess, diving in.

Mr. Bryner, you're not an engineer, correct?

A. (MR. BRYNER) That's correct.

Q. And you're also not an attorney?

A. (MR. BRYNER) That's also correct.

Q. Okay. So I wanted to -- I wanted to go back to this issue of the four new Black Mountain units and their connections to shared equipment. And so I'd actually like to start by taking a look at Exhibit Sierra Club SC-3. And I think I actually want to put this one up on the screen, if I can. So I think I will try to do that. I just have to figure out how to get this on the screen there?

UNIDENTIFIED SPEAKER: You're there. It's in the control room.

MR. WOOLSEY: I'm not seeing it yet on the --

UNIDENTIFIED SPEAKER: There it is.

MR. WOOLSEY: There we go.

Q. So -- and then this is also Tab 3 in Sierra Club's binder for the Committee members.

So, Mr. Bryner, this is a site plan of the proposed Black Mountain Expansion, correct?

A. (MR. BRYNER) Yeah, it's a schematic.

Q. And this diagram shows that all four proposed units would be located at the same power plant site, correct?

A. (MR. BRYNER) Yeah, that's correct.

MS. GRABEL: Actually, Mr. Chairman, I needed to object to the use of the word "plant" to the

extent it calls for a legal conclusion.

CHMN STAFFORD: I think he's using "plant" in the terms of kind of a generic way, not as defined by the statute.

MR. WOOLSEY: That's correct, Mr. Chairman. I'm not intending to ask for a legal conclusion.

MS. GRABEL: Perhaps he could use the phrase "BMGS" or "Black Mountain Generating Station," just to avoid -- to have a clear record.

CHMN STAFFORD: Okay. So the term "generating station," is that --

MS. GRABEL: I'm good with that.

CHMN STAFFORD: -- no one's contesting "generating station?"

Okay. Please proceed.

BY MR. WOOLSEY:

Q. So, Mr. Bryner, on this site plan equipment and facilities that UNSE expects would be shared between two or more turbines or generators are shaded in gray and highlighted in yellow as shown in the key in the upper left; is that correct?

A. (MR. BRYNER) Yes, that's correct.

Q. Okay. And then I'd like to pull up Exhibit UNS-11, which is the same as exhibit Sierra Club 2, apologies, we should have withdrawn Sierra Club 2 because

they are the same document. And we have that up on the screen as well.

So in this document, UNS listed out shared equipment and facilities that the Company expects two or more of the proposed new Black Mountain units would rely on, correct?

A. (MR. BRYNER) So it has all of the equipment, all of the major equipment listed, and it does have things that are identified to be individual for each of the generating units and then it has the facilities that would be shared.

Q. Okay. And, specifically, for those shared items, the items that are identified in the second column as being shared, there are 12 types of equipment or facilities that are identified as shared between all four turbines and four types of equipment that would be shared between two turbines each; is that correct?

A. (MR. BRYNER) You just have to give me a minute to count.

Can you repeat your numbers for which things?

Q. Sure.

So 12 items that would be shared between all four units, and four items that would be shared between two units each?

A. (MR. BRYNER) That appears correct.

Q. Thank you.

So just to talk about a few of these specific items, so each of the four new Black Mountain units would be physically connected to the same shared air compressor, correct? And if it's helpful, in Exhibit UNSE-11 that's row 27, noting the shared air compressor.

A. (MR. BRYNER) Yeah, that is helpful. I was trying to find it on there. So each of them would -- would share the air compressor. I wouldn't say that they're connected through the air compressor.

Q. Well, so I didn't ask connected through the air compressor, I asked would they be physically connected to the air compressor. Would they be physically connected to the air compressor?

A. (MR. BRYNER) I'll let Dylan go ahead and take that.

A. (MR. BEARCE) So the instrument air compressor supplies air for multiple -- oh, there you are -- the instrument air supplies air to multiple units, because of the economies of scale, but that doesn't mean that they're physically connected, because it's not used for the generation of electricity or for the energy conversion.

Q. Well, so how is that air transmitted to the units?

A. (MR. BEARCE) Through tubing.
Q. Through tubing. And that tubing runs from the compressor to each unit; is that correct?
A. (MR. BEARCE) To auxiliary equipment that -- valve actuators.
Q. To valve actuators at each unit?
A. (MR. BEARCE) To the associated auxiliaries for each unit, yes.
Q. Okay. Mr. Bryner, could we go back to your presentation, Exhibit UNSE-4, and maybe we'll -- we can put that one up too.
A. (MR. BRYNER) Actually, it's in that binder.
Q. There it is, okay.
Actually, Nihal, would you be able to -- so could we -- could we turn to page 33 in your presentation.
CHMN STAFFORD: Is that UNSE-4?
MR. WOOLSEY: Correct, yes, Exhibit UNSE-4. Mr. Bryner's presentation.
Q. And my apologies, it looks like the page numbers in this one are different than the copy that I have. But I'm looking for the page that shows the cooling towers, which I think are 33 in the PDF, but they may be 34 or 32 in this version. There we go. 32. Okay, so I guess my page numbers are off by one.

So Mr. Bryner, UNS expects that the two shared cooling towers would be connected to the new Black Mountain units, two units to each cooling tower, correct?

A. (MR. BRYNER) Again, the word "connected," I would say two would be shared between -- or two units would share one cooling tower.

Q. Well, so let's talk about what I'm referring to with "connected." Would you expect that there would be piping or tubing running between the cooling towers in each of the four units?

A. (MR. BRYNER) So, as I mentioned in my testimony, looking at Units 1 and 2 today, there is piping that goes from the cooling tower to Unit 1. And then at Unit 1, that piping goes into cooling coils and is controlled by individual temperature controls and there's separate tubing or piping that goes to Unit 2 for the same function. So it would be similar for that.

Q. Right. And both of those sets of tubing or piping that you're describing, both would go to the existing units, correct?

A. (MR. BRYNER) They would. That cooling tower would be shared between them.

Q. And you'd expect a similar configuration for the four new units wherein each of the two cooling towers would have tubing or piping running to the two new units?

A. (MR. BRYNER) Yes, we would expect a similar configuration.

Q. Okay. So the Company -- well, I'm sorry, so just to confirm, then, so, for example, one of the new Black Mountain units would be physically connected via piping to a cooling tower, and that same cooling tower would be physically connected via piping to another generating unit, correct?

MS. GRABEL: I'm going to object to that; it misstates Mr. Bryner's testimony.

CHMN STAFFORD: Could you please rephrase that.

BY MR. WOOLSEY:

Q. Okay. So -- so we're talking about how there would be two cooling towers shared between the four new units, correct?

A. (MR. BRYNER) Yes.

Q. And we're talking about how, similar to the existing units, each of those cooling towers would have piping or tubing connecting it to two of the units, correct?

A. (MR. BRYNER) So I think it's the word "connecting" that we're having an issue with. I would say that the cooling tower would serve the function of providing that cooling element for each of the units.

Q. Okay. So the piping or tubing, one end of it is connected to the cooling tower; would you agree with that?

A. (MR. BRYNER) Correct.

Q. And where does the other end of that piping or tubing go?

A. (MR. BRYNER) It would go to one of the generating units.

Q. Okay. So it sounds, then, like we're in agreement that piping or tubing connects the cooling tower with the generator unit, no? If both -- if one end of the tube is connected to the cooling tower and the other end of the tube is connected to the unit?

A. (MR. BRYNER) I'll let Mr. Bearce go ahead and give that a go.

A. (MR. BEARCE) So in the interest of trying to be clear, when we define "generating unit," it's the necessary equipment required for the conversion of energy for the production of electricity. The cooling tower is not required, therefore, don't see that as connected in the way that I think it's attempting to be illustrated, and so we consider these separate cooling loops with the shared cooling tower, in essence, having their own cooling flow paths through separately regulated flows, coils, and control systems, in a summer peak need for

efficiency's sake, not for generation of electricity. So the word "connected" is apparently a hang-up, but the separate loops is to where I can't agree with your statements.

Q. Well, so, again, I'm not asking about connections -- direct connections between one unit and another unit, I'm just asking the tubing, the coils, the pipes that we're talking about, one end is connected to a cooling tower and the other end is running around or near or through the actual generator and turbine set, right; is that correct?

A. (MR. BEARCE) That's correct.

Q. Okay. Let's move on. So UNS expects that all four new Black Mountain units would be physically connected to the same demineralized water tanks and water pumps, correct?

A. (MR. BRYNER) I think we're going to run into the same kind of issue there. So yes, those demineralized water pumps, those would be shared between them, but in the same manner as Mr. Bearce mentioned, they're not physically connected in the sense of providing that -- that electric generating function.

Q. So I assume there are pipes running from the water tanks and water pumps, correct?

A. (MR. BRYNER) Correct.

Q. And where do those pipes go?
A. (MR. BRYNER) So, again, in the same way as we talked on the cooling towers, it's going to go to the one of the generating units.
Q. Okay. And so when you say that the pipe goes to the generating units, what exactly do you mean?
A. (MR. BRYNER) I'm going to have Mr. Bearce go into a little more technical background on that.
A. (MR. BEARCE) Okay. So you're speaking, just for clarification, Mr. Woolsey, you're speaking to the demineralized tanks; is that correct?
Q. So I was asking about the demineralized water tanks and the water pumps and the piping associated with both of those.
A. (MR. BEARCE) Okay. So the raw water pumps pump raw water to the water purification systems, the RO that Mr. Bryner had put in his direct testimony. That then pipes it to be demineralized through the RO and goes into holding tanks. There is no generating unit affiliated from that cycle that you're describing.
Q. And then from the holding tanks, what happens next? Where does the water go?
A. (MR. BEARCE) It stays there until there's a demand asked by the unit.
Q. And what happens when there's a demand asked by

the unit?

A. (MR. BEARCE) So each generating unit -- we haven't had final design so there's a caveat here -- but each generating unit would have, for NOx injection water for a Title V air permit, emissions requirements, not for the generation of electricity, but we don't know the final piping schematic of it. In the interest of meeting the parties and being as descriptive as we can, we've given you a general arrangement drawing. I can't say with certainly that they won't have their own pumps and their own pipes or if there will be some sort of different configuration.

But, typically, for emissions controls-related monitoring and inputs they have their own system feeds to minimize risk of damaging the environment and to manage better controls.

Q. Okay. But for the time being anyway, the Company has identified that the Company expects that the water -- the demineralized water tanks and the water pumps would be shared, such that they would serve all four units, correct?

A. (MR. BEARCE) We assert that those common facilities would support the auxiliary feed to the system. How they'll be used is undetermined yet.

CHMN STAFFORD: How many -- let me jump in

real quick -- how many tanks are there?

MR. BEARCE: Right now?

CHMN STAFFORD: For the current setup.

MR. BEARCE: I believe there are four.

CHMN STAFFORD: Four tanks for the two units that exist?

MR. BEARCE: That's correct.

CHMN STAFFORD: And how many tanks would there be for the four new units?

MR. BEARCE: I don't know the answer to that.

CHMN STAFFORD: It could be one, it could be 20?

MR. BEARCE: Yeah, that's where the detailed engineering comes in, to identify what's the right capacity, what if you get contamination of one tank, you know, there's a lot of factors that go into the design characteristics, which makes a lot of this questioning very difficult to be specific, because we don't know. They're similar units and so from that respect there could be two tanks per unit. We don't know the answer to that. And in the interest of trying to be just candid with what we do and we don't know, you know, if there's a sized bigger, it could be one tank per, in theory.

CHMN STAFFORD: But right now you said for the two units that exist, there's four tanks?

MR. BEARCE: That's correct.

CHMN STAFFORD: Now, can Unit 1 draw from all four tanks or only from one or two tanks?

MR. BEARCE: I actually don't know the answer to that, I'm sorry. So --

CHMN STAFFORD: All right. I guess -- so I guess that's something to follow up at a break, because I'm interested to know, because there's four existing tanks with two units, can each unit draw water from a subset of those four or from all four?

MR. BEARCE: Yeah, to be fair, Mr. Chair, none of those are required for the generation of electricity, but we can certainly follow up on that.

CHMN STAFFORD: Right, I just -- for my own edification and that of the panel's, thank you. All right.

MEMBER GOLD: Mr. Chairman?

CHMN STAFFORD: Yes, Member Gold.

MEMBER GOLD: And I don't know if this is out of line, but it's a common sense question. One side is saying that only the, get the right terminology, the generating units are what we should be concerned with, and the other side is saying that it's not only the

generation units, but it's any unit that's ancillary to the generation units that should be considered. And to take it to one step from absurdity, so we can limit this, is everything uses the air around the units. So, technically, from a layman's point of view, they're all connected by the air. They all use the same air. But legally, we're talking about the generating unit. We're only discussing the generators and the turbines; am I correct in that assumption?

CHMN STAFFORD: No, we're looking at the whole physical layout for the existing and the proposed plant to establish what the facts -- what it will look like, so they'll have four units new, proposed, they're each 50 -- well, I guess 61-megawatt nameplate rating, that's a fact that we've established through the testimony. It will be up to this Committee to ultimately determine whether those four units are indeed separate or not.

And the applicant, who is arguing that they should be considered separate, is making -- trying to draw the line between the actual generators and the nameplate, whereas the intervenors are trying to draw attention to the fact that they're connected in other ways, so they should not be regarded as separate under the statute.

MEMBER GOLD: So this is a semantic issue that we have to resolve and make a recommendation on?

CHMN STAFFORD: On the interpretation of law. Right now they're just trying to establish the facts of what is proposed and what exists at the current site.

MEMBER GOLD: Thank you.

MEMBER HILL: Mr. Chair, I have a question.

CHMN STAFFORD: Yes, Member Hill.

MEMBER HILL: If all of these, as they described, ancillary facilities --

MEMBER KRYDER: Move a little closer to the mic.

MEMBER HILL: If all of these ancillary facilities are not necessary for generating electricity, can you tell me why you're building them?

MR. BEARCE: So trying to stay pretty black and white. And so I'll do my best to stay --

MEMBER HILL: Because it feels really gray.

MR. BEARCE: And I think it's a semantics piece. And so there are very specific functions that convert a chemical energy, in this case natural gas, to electrical energy, and to stay consistent with the letter of the law, as I'll describe it, that's that process that is really what drives and affects the nameplate rating,

the functional actual generation of the asset. All of the auxiliaries really blur the line and can call out other things. But you do have to have support facilities.

For example, the one that was given is do you have a long-term service agreement with the third-party vendor? That's a business decision to say we're going to do the work in-house, and now we need to build a shop, versus we don't need to, we're going to ship it to Houston to their depot to have them do the work.

They support the overall effort and the mission of the station, but not everything is directly tied to that energy conversion. And so, in the interest of trying to stay consistent with what the statute reads, it's that thermal conversion, and that's the part that we focus heavily on, because that's really what's mostly relevant.

We could physically submit a general arrangement that has nothing connected to anything and there's no questions asked and we could have four new ROs, et cetera, that's -- that's not -- it's not always a bad idea, it's not always a good idea. It's just our proposed plan is saying those aren't part of the energy conversion process. It just has more to do with they're

auxiliary equipment, and there's a lot of different ways to do it. And engineering providers do it differently. And so -- sorry if that doesn't answer your question -- but those are some of the pieces to where everything we build is prudent and goes towards the mission, but not everything we build is in direct, you know, influence over the ability for a unit to generate electricity. And specifically all the time, like the cooling tower. That's used seasonally, given the harsh environment of Arizona in the summer. It's needed, but not needed every moment of every day.

MEMBER HILL: And my follow-up is on the pumps or the water discussion. It sounds like you need the water to meet federal air permits; is that correct?

MR. BEARCE: Yes.

MEMBER HILL: It just starts to feel like you need that to get your permit to generate electricity, so I'm just struggling with are there pieces of these ancillary facilities that you actually do need to generate electricity legally under state and federal law?

MR. BEARCE: Yeah, now, I don't -- I don't disregard what you had said, how it's going to be configured, whether it be their own skid on a per unit basis, I don't have answers to that.

MEMBER HILL: Okay.

MR. BEARCE: But that's not part of the energy conversion process and so I just, to your point, to be fair, yes, it is needed to meet emissions profiles. That's part of it. But it's not the whole story. So the piping configuration, we don't know. The systems that were on display were just for water purification processes.

MEMBER HILL: Okay. Thank you.

CHMN STAFFORD: The water serves two purposes at the generator, doesn't it? One is to reduce emissions and another for cooling to improve efficiency in the hot weather, correct?

MR. BEARCE: That's correct.

CHMN STAFFORD: Are those two separate loops, are they all -- for water coming in there -- I'm assuming it's all treated water that's used for both functions?

MR. BEARCE: That's correct.

CHMN STAFFORD: Okay. Member Richins.

MEMBER RICHINS: The plant is fed by natural gas, correct?

MR. BRYNER: That's an easy question, I'll take that.

Yes.

MEMBER RICHINS: Softballs first.

Where does that gas originate from to get to the plant?

MR. BRYNER: It gets more challenging, so I'll go to Mr. Bearce.

MEMBER RICHINS: You're welcome. I told you, softballs first.

MR. BEARCE: I was never good at softball.

So it comes off the main header, we have a dedicated line that enters the campus.

MEMBER RICHINS: Where does that run from and to through that -- through Mohave Valley, Golden Valley -- is it Golden Valley or Mohave Valley?

MR. BEARCE: I'm actually not very knowledgeable with the routing of that piping, so I apologize if I don't know. I'm hearing Golden Valley.

MEMBER RICHINS: Is it just one line feeding that plant into the whole plant?

MR. BEARCE: It enters in the exchange of custody in a single-metering station entering the station, yes.

MEMBER RICHINS: Okay. So in order for that generating station -- we're not using "plant" -- to function, that natural gas feeds into the whole facility from one location into that plant, into that generating station? Just confirming that, right?

MR. BEARCE: (No audible response.)

MEMBER RICHINS: And then the electrons, once they're generated, once you make that conversion from thermal to electric, where those electrons likely to go? Are they going to other markets? Are they feeding your customers directly? Is there a purchase agreement? Are they going to California? What does that look like?

MS. GRABEL: Would you like me to answer?

I'm not sure, Member Richins, whether or not these witnesses are qualified to answer that, but I can help you if that would be useful.

MEMBER RICHINS: Of course.

MS. GRABEL: Okay. Thank you.

So I mean, I think that Mr. Bearce testified earlier that right now they are taking purchases from the market, and this would be displacing that market purchases, which means that it is being used to serve the load in that area.

MEMBER RICHINS: That's right. Okay.

And do you anticipate an increased load of at least 200 megawatts in that region, according to your -- that article that you referenced a little earlier?

MS. GRABEL: I'll let Mr. Bryner take that one.

MEMBER FONTES: Can you point that out in the IRP, too?

MR. BRYNER: It is in the IRP, I'll have to --

MEMBER FONTES: That specific subregion, the load increase.

MR. BRYNER: So I can't point out the load increase. I mean, there are load projections in the IRP, but specifically today we already have a deficiency and we're buying, I think at least this amount of electricity on the open market. And so -- so that we're not subject to market volatility, this will -- will decrease those risks.

MEMBER RICHINS: Okay.

MEMBER FONTES: For this particular part of the system, are you talking about TEP, or are you talking about UNS?

MR. BRYNER: UNS.

MEMBER FONTES: UNS for that -- for those counties?

MR. BRYNER: Correct. For Mohave and Santa Cruz counties.

Do you want us to find the specific location?

MEMBER FONTES: Just the load growth, just

so we can see it's consistent with the 200 megawatts, the displaced.

MR. BRYNER: Maybe on our next break, we can grab that.

CHMN STAFFORD: Before we go too far down that road. This is not the, you know, environmental review. We're not going to issue a CEC as a result of this proceeding. We're just trying to get to the facts of how the existing plant is configured, and how the new plant will be configured. The matter of purpose and load, those are really not completely relevant to this proceeding to figure out what does this proposed plant fit the definition of the statute, such that it would require a CEC or not. So things like we'd normally ask at these things, they're less important in this context for today's proceeding.

MEMBER FONTES: Yes, Mr. Chairman. I was just looking at it in terms of the energy conversion, just so we can look at the future so we know that that load is there for the energy conversion. I almost want to ask the same thing on the gas. Is it one single gas contract or is it separate gas contracts, because you're characterizing these as separate units that are operating independent and dispatching. So just trying to focus it on --

CHMN STAFFORD: That's a good question, what's the --

(Cross-talk.)

MEMBER FONTES: I'm focusing on the intake and the outtake in terms of this energy conversion conversation that Mr. Woolsey started at the plant level, by understanding it at the system level, if you will, Mr. Chairman.

CHMN STAFFORD: Yes, the gas -- you've already stated the gas flows into the site for both the existing plant and the new plant. They'll both be served by one meter, correct? That's what I heard.

MR. BEARCE: So -- so I want to be specific here. I'll talk slower, sorry.

The natural gas enters the site through one primary pipeline off the main header. And I think it passes through Golden Valley. When it enters the campus, that is what we call the exchange of custody where the gas supplier meters total volume are met. At that stage, we have to meter and flow gas independently no matter how many units are there, for a number of reasons. But that's what we do and they have individual meters.

So -- so while, yes, it enters the campus with one pipe, it spiderwebs out to whatever number of generating units exist at a given station.

CHMN STAFFORD: Right. And there are separate meters that are, I guess, for you to track the internal usage by each generator?

MR. BEARCE: That's correct.

CHMN STAFFORD: But you get a build based on the meter, the one meter where the change of custody takes place?

MR. BEARCE: Yeah, the fuels group works through all of that. And so I'm not -- I'm not an expert on how all the inner workings, I know enough to be dangerous here, but I do know that it's more complicated than that, so that's the level of my expertise.

CHMN STAFFORD: And what about the fuel contract, do you have any knowledge of what the fuel contract is for the existing unit and what it would possibly be for the addition of four other generators?

MS. GRABEL: Mr. Chairman, I don't want Mr. Bearce to speculate. We did respond to a data request on this exact subject, we're looking for it now. And give us the opportunity, maybe after a break we can come back and talk about this --

CHMN STAFFORD: Is this one of your exhibits, Mr. Woolsey?

MR. WOOLSEY: It is. And I was actually planning to ask about that further on in my cross-exam.

CHMN STAFFORD: All right. Well, let's let Mr. Woolsey continue with his cross-examination. It seems like we're jumping ahead to the questions he's about to get answers for.

So please proceed, Mr. Woolsey.

MR. WOOLSEY: Thank you, Mr. Chairman. And I appreciate the Committee members' questions. I think they're getting at some of the same things I was going to ask.

Q. I thought, just briefly, we had some discussion, Mr. Bryner, about the quantities of some of the shared equipment, so I thought it might be helpful if you'd refer to Sierra Club Exhibit SC-13, which I think we can put up on the screen as well.

And, Mr. Bryner, this is a UNS response to a Sierra Club discovery request, correct?

A. (MR. BRYNER) That's correct.

Q. And so we were talking about the demineralized water tank, which is listed as item M there. And then if you -- if you scroll to the second page into the Company's response under item M, it says "one per four LM6000s," correct?

A. That's correct.

Q. Okay. So there would be one shared demineralized water tank between the four units, correct?

A. (MR. BRYNER) That's correct.
Q. Okay. Thank you.
So following up on some of the discussion that we just had about cooling systems, cooling improves efficiency, correct?
A. (MR. BRYNER) that's correct.
Q. And, therefore, output?
A. (MR. BRYNER) I'm going to let Mr. Bearce answer that, because he's a little more of an expert on it.
A. (MR. BEARCE) So could you please restate the question?
Q. So my question is the cooling systems that we've been discussing for the proposed Black Mountain units, do cooling systems improve the output of a generator?
A. (MR. BEARCE) They can.
Q. Okay. So we've already talked quite a bit about the water tanks and water pumps. I think I'll skip over the rest of my questions there, because I think the Committee members have addressed those.
The four new Black Mountain units would all be connected to the same shared evaporation pond, correct?
A. (MR. BRYNER) Yes.
Q. And that connection, would that be via some kind of pipe or conduit?
A. (MR. BRYNER) I don't have the answer to that,

but I'll betcha Mr. Bearce does.

A. (MR. BEARCE) Yes.

Q. That would be yes, via a pipe or a conduit?

A. (MR. BEARCE) Yeah, the reverse osmosis reject water from the shared system RO would go directly to the cooling tower through a pipe.

Q. So that would be a single pipe, then, that would be carrying the water that served all four units?

A. (MR. BEARCE) That water going to the pond doesn't serve a unit.

Q. Well, but it has -- that water has served a function, correct?

A. (MR. BEARCE) That water is the -- sorry, I'm leaning over Clark here. It's impolite the way we have these mics, I apologize -- so the way the reverse osmosis works is you have a product water and you have a reject water. The reject water is the unusable water, and that goes to the pond. They don't go to the generating unit.

Q. Right. And that reverse osmosis system, again, though, that system is serving all four units, correct?

A. (MR. BEARCE) As preliminarily designed, yes.

Q. Okay. The new Black Mountain units would also be connected to two shared power distribution centers and two shared power control modules; is that correct?

A. (MR. BEARCE) Want me to continue or you want to

continue?

A. (MR. BRYNER) Keep going.

A. (MR. BEARCE) Could you point to the line items.

Q. Sure. So on Exhibit UNS-11 power control modules are listed on row 7, and power distribution centers are listed on row 25, and both of those are identified by the Company as being shared.

Do you see that?

A. (MR. BEARCE) Sorry, I was in the SC binder, not -- I was referring to the other document you were referencing earlier.

Q. So this is in Exhibit UNS-11. It's also, if you're in the Sierra Club binder, I believe it's Exhibit Sierra Club 2, it's the same document.

A. (MR. BEARCE) Okay. Yeah, I'm with you now.

Q. Okay. So just to repeat the question, the new Black Mountain units would be connected to two shared power distribution centers and two shared power control modules, correct? And, again, that's kind of -- row 7 is power control modules and row 25 is power distribution centers.

A. (MR. BEARCE) Okay. Yes. I have great eyes, I'm sorry, I'm struggling to see it from here.

Q. Okay. And would you expect that each of those power control modules would be connected to two of the

new Black Mountain units via wiring?

A. (MR. BEARCE) I'm actually not familiar with the entire schematic, but they would be controlling them.

Q. Okay. And that -- but that control presumably -- when you say "control," presumably that means there's some kinds of signals that would be transmitted in some way from the control modules to the units, correct?

A. (MR. BEARCE) It depends on the input. Some of it goes over communications through a distributed control system, not necessarily hard-wired.

Q. Okay. So it could be -- you're saying some of it could be wireless?

A. (MR. BEARCE) They wouldn't be a direct from the LVC to the unit is what I'm saying.

Q. Okay. But, again, you said you're not certain, at this point how -- how those control modules would be connected because this is still preliminary; is that correct?

A. (MR. BEARCE) That's correct.

Q. Okay. The Company expects that two shared step-up transformers would be connected to the new Black Mountain units, correct?

A. (MR. BEARCE) That's correct.

Q. And would you expect that each of the step-up

transformers would be connected to two of the new units via wiring?

A. (MR. BEARCE) This gets pretty technical. I'm not sure it's relevant to the conversion of energy.

Q. Well, the reason I'm asking, Mr. Bearce, is, again, because I'm asking about the connection here, because I think these facts bear on, you know, the question of, you know, whether these are connected units or separate units, so that's why I'm asking.

A. (MR. BEARCE) So my simple answer is it depends on the design of the transformer. And if we end up with a three-coil GSU, they'll have independent coils and they will transmit through induction, not through hard wiring. I don't have an answer on the design of the transformers.

Q. Okay. But, again, the Company has identified the transformers as being shared, correct?

A. (MR. BEARCE) That's correct.

Q. Okay. And all four of the new Black Mountain units would ultimately be connected to the same external gen-tie line running to the site, correct?

A. (MR. BEARCE) That's correct.

Q. Okay. So would it be fair to say that setting aside the storage building, in most other cases where UNS has identified equipment that would be shared, that shared equipment would be connected to two or more of the

new units in some fashion, whether it be by pipes, tubes, wires or some other type of physical conduit?

A. (MR. BEARCE) I'll just defer back to our answer in the data request and stick with the numbers that were confirmed today.

Q. So is it you don't have an answer to that question?

A. (MR. BEARCE) I don't want to make a general response. I will say that the -- they're outlined as according to the data request that was fulfilled by the Company.

Q. Well, so the Company's response to the data request identifies expected quantities of equipment and whether the Company expects that the equipment would be shared. But I'm asking something a little different here. I'm asking about how that shared equipment would be connected to the new generators and the new turbines, so it's a different question, Mr. Bearce, than what's in the data request.

A. (MR. BEARCE) So, just to be clear, what was your question that you asked me?

Q. So we've been walking through item by item various items of shared equipment, but I -- you know, in the interest of time, I was just trying to get at a more general question here, which is that, you know, setting

aside the storage building, is it fair to say that in most other cases where the Company has identified shared equipment, that that shared equipment would have some kind of physical connection to two or more of the new generators or turbines, the new units, whether that be by pipes, tubes, wires, or some other type of conduit?

A. (MR. BEARCE) I would say greater than 50 percent would be.

Q. Okay, thank you.

So the four new units would be supplied with gas from the same external gas pipeline, correct?

A. (MR. BEARCE) Correct.

Q. And I believe before one of the Committee members had a question about fuel contracts and all, just to confirm, all four units would burn gas purchased under the same fuel contracts; is that right?

A. (MR. BEARCE) I don't work on the gas side. I'm not familiar enough to answer that question.

Q. Okay. Fair enough.

And, Mr. Bryner, I assume the same is true for you?

A. (MR. BRYNER) That's correct.

MS. GRABEL: Well, Mr. Chairman, I'd like to object. One of his exhibits, if you look at Sierra Club Exhibit Number 5, answers the question that he's

asking, and so if he would like to read from his own exhibit and ask the witness's understanding of that exhibit, that might short-circuit come of this.

CHMN STAFFORD: Well, who at UniSource provided the response to that data request?

MS. GRABEL: It's an individual who is not present here today.

CHMN STAFFORD: Okay. Well, then, I guess direct them to that response and then ask them to read it, because they can't testify to it, because the person who answered the data request is not testifying today.

MR. WOOLSEY: Fair enough.

Q. Okay. So that's -- that's, as Ms. Grabel pointed out, that's Exhibit Sierra Club 5, which is the Company's response to Sierra Club data request 1.13.

And would you let me know when you have that in front of you?

A. (MR. BRYNER) I have it.

Q. And so do you see where it says, "UNSE does not have fuel purchase contracts specific to any unit, but purchases and schedules the delivery of fuel from suppliers based on the expected dispatch of each individual unit on an as-needed day-ahead basis."

Do you see that?

A. (MR. BRYNER) I see that.

Q. Okay. And so my question, again, because I wasn't entirely clear from the Company's response here is, would all four new units burn gas purchased under the same fuel contracts, plural, and I understand the Company's response saying there are not contracts specific to any unit, but that's not what I'm asking.

A. (MR. BRYNER) So, as we just mentioned, we're not experts in this area, so this is the response that we have.

Q. Fair enough. So let's -- let's move on.

If you were to remove all of the shared equipment, much of which we've discussed that's listed in Exhibit UNSE-11, leaving only the equipment that's listed in that exhibit by the Company as being specific to each unit, in other words, if there were no shared air compressor, no power control module, no step-up transformers, none of the shared equipment, would the four units still be able to operate and deliver power to the grid if they had no air compressor or no power control module or any of that other shared equipment?

A. (MR. BEARCE) I've got to go through that list here to make sure, because if we don't have a step-up transformer transmit, it could self-generate and it could run.

Q. What about the air compressor, though?

A. (MR. BEARCE) We could do that with bottles.
Q. With bottles?
A. (MR. BEARCE) Oxygen bottles.
Q. Okay. So you're talking about alternatives to some of this equipment, but I guess what I'm asking is if you were to remove the equipment that's identified as shared and replace it with nothing, so not, you know, swap out these items of shared equipment for other alternatives, but if you were to remove those shared items and replace them with nothing, could the units be able to operate and deliver power?
A. (MR. BEARCE) Some you could and some you could not.
Q. Some you could not, meaning some of these items, if you were to remove them, the units could not operate?
A. (MR. BEARCE) That's -- well --
MS. GRABEL: If I could get a clarification of the question. Is the question whether the generating units could operate without the shared facilities or if they could transmit electricity to the grid? Because I heard the question asked both ways.
MR. WOOLSEY: Thank you. Both of those.
Q. So both be able to operate and be able to deliver power to the grid?
CHMN STAFFORD: If they can't deliver power

to the grid, there's not much point in operating, thought, is there.

MR. BEARCE: Mr. Chair, there is not.

BY MR. WOOLSEY:

Q. So I take it you're conferring internally or --

A. (MR. BEARCE) There's a lot of systems that I have to go through in my head on the spot, so I need a minute, please.

Q. Fair enough, please.

MS. GRABEL: And I guess, Mr. Chairman, I'm going to object to this question as irrelevant, to the extent that we're deviating from what it takes to generate the nameplate rating associated on the plant.

CHMN STAFFORD: Well, I don't -- I don't think that's the only thing that we're looking at really. I mean, the nameplate is like the threshold. That's like the line drawn between what's a major new facility and what's not under the statute. But I think what the point of Mr. Woolsey's questions is to get to the separateness of the units.

MS. GRABEL: I fully understand where Mr. Woolsey is going. I'm just thinking that we're talking about the ability of a generating unit to generate energy to produce a nameplate rating of whatever it is. And so my question is maybe it's better -- better

phrased as which of these shared facilities are necessary to generate the electricity to meet the nameplate rating?

CHMN STAFFORD: There you go.

Would you like to ask that question, Mr. Woolsey.

MR. WOOLSEY: Well, Mr. Chairman, I preferred the way that you phrased the question. But I think, you know, I would submit that it's not just the question of whether the shared equipment is needed to meet the nameplate rating, but whether it's needed for the units to operate and deliver power, which is how I phrased it.

CHMN STAFFORD: Yeah, I think, because you're not going to generate the nameplate rating most of the time. Actually, probably pretty much zero of the time you'll hit the nameplate rating for any of those units.

MR. BEARCE: We would never hit the generator nameplate rating.

CHMN STAFFORD: Right. Right. So I mean, just for the units to function to generate power to export to the grid I guess that's kind of what the relevant inquiry is.

So I guess how many systems are you looking at? I don't have that list right in front of me?

MR. BEARCE: There are 30 listed -- Mr. Chair, there are 30 listed in the data request.

CHMN STAFFORD: All right. So there's 30 items, and they're all shared between at least two units. And this -- you're talking, this is for the proposed units, not the existing units, you're talking about the shared equipment, right?

MR. WOOLSEY: Mr. Chair, my understanding, based on the Company's response to the data request, is that there are 16 items of equipment that the Company has identified as being -- that would be shared between the four new units. We're just talking about the new units here. And that of those 12, I believe Mr. Bryner responded earlier, 12 of those would be shared between all four units and four would be shared between two units each.

And so the question that I was asking Mr. Bryner and Mr. Bearce here is just if you were to remove all of that shared equipment and replace it with nothing, would the four new units be able to operate and deliver power to the grid.

CHMN STAFFORD: Certainly that's not how it's supposed to, I would assume, because otherwise, we wouldn't have included a bunch of superfluous equipment in your -- at your plant because, otherwise, I don't

think the Commission would look too kindly on you gold-plating a generating facility to put in rate base.

MR. WOOLSEY: I was hoping this would be an easy yes-or-no question.

MR. BEARCE: So there is equipment listed where you couldn't generate electricity in the context that you provide. But it doesn't mean that if we installed one unit that you would ever practically remove it, because it wouldn't function. So when we shared them amongst two, that's ease of construction and economies of scale to make it affordable for our customers.

BY MR. WOOLSEY:

Q. Understood. Thank you.

Okay. Let's actually talk about that. So you just mentioned that the Company has identified the reason for sharing several items of equipment between units would be because of economies of scale or construction ease, correct?

A. (MR. BEARCE) I'm just going to hold onto this.

Yes.

Q. So setting aside those factors, setting aside economies of scale, setting aside cost considerations, would it be technically possible to build four generating units with zero shared equipment and zero shared facilities? I assume the answer is yes, correct?

A. (MR. BEARCE) Yes.
Q. Okay. But the Company is not proposing to do that here, right?
A. (MR. BEARCE) No.
Q. And would it be possible to acquire property at four different locations and build four unconnected plants, each consisting of one 50-megawatt generating unit, with all supporting equipment unique to each plant? And again, I'm not asking here about costs, I'm just asking would that be technically possible?
A. (MR. BEARCE) Technically that would be possible.
Q. Okay. But, again, that's not what the Company is proposing to do, correct?
A. (MR. BEARCE) Correct.
Q. All four proposed new units would be housed at the same power plant, right?
A. (MR. BEARCE) The generating station is the house for these four proposed units.
Q. Okay. And we've discussed that the Company has not yet completed the engineering process for the expansion project, correct?
A. (MR. BEARCE) Correct.
Q. Is it -- and it's possible that the final configuration of the proposed generators, turbines, and supporting equipment might differ from the preliminary

schematics that the Company has shared, correct?

A. (MR. BEARCE) It's possible.

Q. Okay. So just to confirm a couple things that were touched on during direct testimony, each Black Mountain unit would include a turbine and a generator, among other things, correct?

A. (MR. BRYNER) Yes.

Q. And generators and turbines are distinct equipment that can have different nameplate ratings, correct?

A. (MR. BRYNER) That's correct.

Q. And --

CHMN STAFFORD: Wait a second. I thought only the generator had a nameplate rating, not the turbine.

MR. BRYNER: So that's a good question, Mr. Chair, so each piece of equipment has a nameplate rating.

CHMN STAFFORD: And which -- so which did you show us earlier, was that the generator or the turbine --

MR. BRYNER: We showed you the generator nameplate rating. There is a picture of the turbine nameplate within one of our exhibits, but it does not show the output of that turbine.

CHMN STAFFORD: Right. And what is the term if it's not in megawatts or kVA, what is it?

MR. BRYNER: I'll put Mr. Bearce on that.

MR. BEARCE: Yeah, so the answer is it depends. Some manufacturers put it on both. For a lot of conventional steam turbine gensets, they'll have a turbine, steam turbine rating, and they'll have a generator rating. And then we'll identify throughout the engineering process what your single limiting factor is, whether fuel limited, air limited, whatever, right, and you'll take the higher of the two ratings.

This one only has a generator name placard -- nameplate mounted on it. And so the best reference we have of what the combustion turbine package as a whole is good for is in the OEM manual, which is one of the exhibits. I forgot exactly who all illustrated it, but it's as high as 51 under perfect conditions. Similar to the same statement of the generator set for the kVA rating, so when you do the conversion -- I'm ballparking it without having it in front of me -- it's about 51 megawatts, it's limiting, which is why in this case you'll never see that generator rating metric exceeded.

CHMN STAFFORD: Right. So the LM6000 generator/turbines we're talking about, they're sold as

the generator and the turbine together, and those are rated on the generating portion, but not a separate one for the turbine, correct?

MR. BEARCE: Yeah, they call it a package.

CHMN STAFFORD: Okay.

MR. BEARCE: And it's pretty explicit, it's a probably put-you-to-sleep read, but it does list out all of the auxiliaries and things that are included in that. It's a pretty detailed high-level scope, and there are options, but yes.

CHMN STAFFORD: Okay. And so just to make sure I understood what we were talking about for these particular units. All right.

Mr. Woolsey, please continue.

MR. WOOLSEY: I was about to ask questions in a similar vein, and so I have, I guess, a follow-up to that.

Q. So the Company has indicated that the nameplate of the two generators -- excuse me -- the nameplate of the two existing generators is 61 megawatts each, correct?

A. (MR. BRYNER) That's correct.

Q. But the physical nameplates on the existing turbines don't list any nameplate rating using any metric, correct?

A. (MR. BRYNER) As we've just mentioned, that's correct.

Q. Okay. And you said instead the name -- the rating for the turbine, you said, was in the OEM manual?

A. (MR. BRYNER) Yeah, that's correct.

Q. Okay. And you -- and so the nameplate rating on the turbine is 51 megawatts for the new proposed turbines, correct?

A. (MR. BRYNER) I'd prefer Mr. Bearce answer that one.

A. (MR. BEARCE) That was an approximation. We haven't done detailed engineering on that.

Q. Okay. Is -- and that number -- so you referenced the OEM manual, if we were to actually look in the OEM manual would we be able to find a place in there where it identifies that nameplate for the turbine as 51 megawatts, or is that a calculation that you're deriving using the manual?

A. (MR. BEARCE) I'd have to refer to it. But I believe it is listed in several ways. A lot of times they'll call it "base horsepower," but I believe in the OEM manual that was attached, it's in megawatts, already converted.

Q. Okay. So if you have a generator and turbine set which operate together, and the turbine has a lower

nameplate rating than the generator, the lowest rated piece of equipment limits the output; is that correct?

A. (MR. BEARCE) Yes.

Q. So in order to know the nameplate capacity of an entire unit, you need to know not only the nameplate capacity of the generator, but also the nameplate of the turbine, correct?

A. (MR. BEARCE) No.

Q. Why not?

A. I believe the statute calls out the generator nameplate. And you can't exceed the electrical output of a capable device.

Q. So just to be clear, I'm not asking about the statute. I'm just asking about nameplate capacity as that term is used in the industry. So, again, the question is -- well, actually I'll move on to a slightly different question.

CHMN STAFFORD: Mr. Woolsey, how much more cross-examination do you have? Because we're coming up on 90 minutes, and we're going to need to take a break for the court reporter. Before we do, I just want to kind of get a gauge of how much more cross you have.

MR. WOOLSEY: Yeah, I think if, depending on how many more questions the Committee members have, I think --

CHMN STAFFORD: Assuming zero.

MR. WOOLSEY: Assuming zero, I think I can get through it in 10 to 15 minutes.

CHMN STAFFORD: All right. Well, it's been an hour and a half since we came back, so let's take a 10- to 15-minute recess, give our court reporter a chance to rest her fingers. And then we'll come back and we will resume with your cross-examination.

We stand in recess.

(Recessed from 3:30 p.m. until 3:47 p.m.)

CHMN STAFFORD: All right.

Let's go back on the record. Mr. Woolsey.

MR. WOOLSEY: Thank you, Mr. Chairman.

Q. And, all right, so I wanted to move to a different topic, and I'll try to go quickly here, because I know it's getting late in the afternoon.

So, Mr. Bryner, would you please turn to Sierra Club Exhibit SC-22. That's the September 22nd Black Mountain air permit application.

A. (MR. BRYNER) Okay. I'm there.

Q. When UNS submitted this air permit application to ADEQ for the existing Black Mountain plant, it submitted a single permit application for the entire plant, not separate applications for each unit, correct?

A. (MR. BRYNER) I guess I'll just -- again, I know

semantics of plant, we'll say for the station, the generating station.

Q. Sure. For the generating station. But it was a single application, correct?

A. (MR. BRYNER) That's correct.

Q. Okay. And when ADEQ issued the most recent air permit for Black Mountain in 2023, it issued a single permit for the entire generating station, correct?

A. (MR. BRYNER) Can you point me to that exhibit?

Q. Sure. So that's Exhibit Sierra Club SC-21.

A. (MR. BRYNER) Yes, that's correct.

Q. Okay. And that permit that was issued by ADEQ refers to Black Mountain generating station as one plant, correct? And I can provide a page --

A. (MR. BRYNER) Yeah, can you provide that to me?

Q. So on page 1, it says, "This Class 1 air quality permit is issued to UNS Electric, Incorporated, the permittee for the continued operation of a peaking power plant identified as Black Mountain Generating Station."

Do you see that?

A. (MR. BRYNER) I see that.

Q. Okay. The Company plans to submit a single air permit application to ADEQ for the four proposed new Black Mountain units, correct?

A. (MR. BRYNER) So it's a -- trying to get the

wording right -- but we would modify our air permit to include the four new generating units.

Q. And that modification would require you to submit an application to ADEQ, correct?

A. (MR. BRYNER) Yes, that's correct.

Q. And that would be one application for the entire project, correct?

A. (MR. BRYNER) One for the generating station, correct.

Q. Okay. Are you familiar with UNS's annual reporting about Black Mountain to the U.S. Energy Information Administration? And specifically on form EIA-860.

A. (MR. BRYNER) So can you point me to that exhibit?

Q. Sure. So this is Sierra Club Exhibits SC-9 and SC-10, which are copies of EIA-860 forms provided by the Company in response to discovery. And let me know when you have those in front of you.

A. (MR. BRYNER) I've got them here. Thank you.

Q. Okay. So the Company submits a single EIA-860 form, which covers both turbines at the existing Black Mountain Generating Station, correct?

A. (MR. BRYNER) So that's correct.

Q. Okay. And on those EIA-860 forms, UNS uses a

single plant code for both existing units, correct?

A. (MR. BRYNER) Can you point me to where that's at in the form?

Q. Sure. So, for example, in Sierra Club Exhibit SC-10, which is the 2023 form, if you turn to page 3, you'll see the plant -- there's a field there identified as plant code, and then the number 56482.

A. (MR. BRYNER) Okay. I see that.

Q. Okay.

A. (MR. BRYNER) And yes, it appears there's one plant code for the station.

Q. Okay. The Company plans to report all four of the proposed new generating turbines on one form EIA-860, correct?

A. (MR. BRYNER) That's the standard practice.

Q. Okay. Thanks.

Would you please turn to Sierra Club Exhibit SC-26, which is an excerpt from UNS's 2023 IRP.

A. (MR. BRYNER) Okay. I'm there.

Q. And if you refer to page 5 of that exhibit, which is Appendix B, page 4 from the IRP, and let me know when you're there.

MS. GRABEL: What exhibit number?

MR. BRYNER: 26.

MEMBER GOLD: (Inaudible.)

THE REPORTER: I'm sorry, I can't hear.
MEMBER GOLD: Mr. Chairman?
CHMN STAFFORD: Yes, Member Gold.
MEMBER GOLD: Mine only goes up to page 4.
MR. WOOLSEY: I'm sorry, I'm referring, I guess, if you look at the page numbers at the bottom there this would be Appendix B page 4 of the UNS 2023 IRP.
MEMBER GOLD: Okay. Thank you.
CHMN STAFFORD: And this is the Black Mountain Generating Station unit profiles?
MR. WOOLSEY: Correct.
MS. GRABEL: And, Mr. Chairman, I'd just like to object that this is only a portion of the Company's IRP, and that the entirety of the IRP is contained in UNS Exhibit 17.
CHMN STAFFORD: Yes, it's been admitted. So he's just referring to this --
MS. GRABEL: I know.
CHMN STAFFORD: -- particular page.
MR. WOOLSEY: And I'd be happy to refer to the full IRP, either way, it would be the same -- the page looks the same in both exhibits.
Q. And, Mr. Bryner, on that page, do you see where it says, "The Black Mountain generating station is

located five miles south of Kingman, Arizona and provides UNSE with 90 megawatts of combustion turbine capacity from two units"?

A. (MR. BRYNER) Yes, I see that.

Q. Why does the Company refer to the combined or cumulative capacity of the two Black Mountain units?

A. (MR. BRYNER) So if you'll notice, we're referring to the Black Mountain Generating Station, so the combined capacity of the station. We're not referring to each unit specifically and that output rating.

Q. But is the existing generating station two power plants or is it one power plant?

MS. GRABEL: Objection; we're not using the term "plant."

CHMN STAFFORD: It's -- okay, I guess there's plant, as defined in the statute, then there's plant in the vernacular. I think --

What is your question? Are you talking about the generating station or the --

MR. WOOLSEY: So, Mr. Chairman, I wasn't asking about the statute, specifically. I'm just asking as the word "power plant" is generally understood in common usage, is Black Mountain one power plant or two power plants.

MS. GRABEL: Mr. Chairman, I'm going to continue that objection. Because the word "plant" is the legal issue here today. I think I'd prefer the use of the word "generation station," which we agreed to and which is how it's reflected in the IRP.

CHMN STAFFORD: Right. Because that's kind of the crux of the issue is the statutory definition of "plant" as opposed to the vernacular, so to avoid confusion call it a generating station.

You said there's one code that you have an EIS for that?

MR. BRYNER: That's correct.

CHMN STAFFORD: Will it be two codes after the addition or still one code?

MR. BRYNER: I don't know. I'm seeing Mr. Bearce pointed out one, and so I would agree there would be one code for the generating station.

CHMN STAFFORD: Okay. Just call it a generating station to avoid any confusion with the word "plant," please.

MR. WOOLSEY: Fair enough.

Q. So CEC review before the Siting Committee can encompass review of certain impact categories that may not be addressed by the permitting processes of other state and federal agencies; is that correct?

A. (MR. BRYNER) That's not correct. I believe we had a discussion on that earlier and determined that the issues at hand in the CEC are covered by other permits -- well, let me maybe correct my statement just a little bit. We did discuss that there's a much more robust public outreach process expected, but even that is not really in the statute, and that's more set by precedent.

Q. Well, so I understand that there's some overlap with other permits, but I'm asking about areas of the CEC review process that might not be covered by other permit processes.

So is your answer that you don't think there are any areas that would not be covered by other permit processes?

A. (MR. BRYNER) So at the moment, and again, I'll refer to my previous question [sic], I don't want to contradict myself, but I cannot think of anything specifically in the exhibits to the CEC application that are unique to the CEC application that are not covered in something else, but that's all dependent on the site.

Q. Well, so here's an example, maybe. Let's say that there's a site in -- in an unincorporated area where there is no local regulation governing noise or views, wouldn't the CEC process be the only place where noise or

views would be evaluated if there's not a local regulation on noise or views?

A. (MR. BRYNER) I'm not sure on that. I don't have an answer for you right now. I would need to research it and see the specific site. There's just too many -- to many different things that could trigger it even beyond local permitting.

Q. Okay. Generally speaking, would you agree that a 100-megawatt gas-fired peaking plant is likely to have greater impacts than a 50-megawatt gas-fired peaking plant, if all other variables are equal?

A. (MR. BRYNER) I don't believe I would agree with that.

Q. You wouldn't agree that a larger plant would generally tend to have larger impacts?

A. (MR. BRYNER) I think it depends on a number of factors. And one of those would be how often the plant is running.

Q. Sure. So assume that the capacity factor would be the same for both the 100-megawatt and the 50-megawatt plant, same capacity factor?

A. (MR. BRYNER) I think, again, there's just too many variables in there. I can't give you a straight answer.

Q. Fair enough.

Would you please turn to Sierra Club Exhibit SC-12. And let me know when you're there, please.

A. (MR. BRYNER) Okay. I'm there.

Q. So the Company affirmed in this discovery response that it has never acquired or installed a simple-cycle gas-fired generating turbine with an individual nameplate capacity of more than 100 megawatts at any of its facilities.

Do you see that?

A. (MR. BRYNER) I see that.

Q. Okay. And, to your knowledge, does the Company have any plans to install a simple-cycle gas-fired generating turbine with an individual nameplate capacity of more than 100 megawatts at any of its facilities in the future?

A. (MR. BRYNER) So when you say plans --

MS. GRABEL: Mr. Chairman, that's actually confidential information. The Company's future resource plans are not something I think that we can discuss. He could answer potentially hypothetically, but --

CHMN STAFFORD: Well, you have the IRP so doesn't that say what you're planning to do? It said --

MS. GRABEL: Yeah, I'll let Mr. Bearce --

CHMN STAFFORD: -- I seem to recall you're going to add 200 megawatts of gas, and that's what we're

talking about today, correct?

MR. BEARCE: So, Mr. Chair, respectfully, the IRP is a signal of system needs, but that comes under no assumption of who will be the successful bidder to build said requirements. So while we intend for this diligence process we're going through now to put us in the most competitive and highest level of certainty to bid into the All-Source RFP, it's still subject to that bid process through a third-party monitor.

So while we would love to self-perform, we've got to be the most financially responsible out of the bunch to be picked by the third-party monitor process. So our interest certainly is to self-perform, but it doesn't always make sense, and so I respectfully say, we would love to do it but there are other procedures that we have to adhere to and compete for that work.

So what it says in the IRP is a system need, not necessarily that we are the winner, and we haven't bid for this -- this project. So we're going through the diligence phase right now. If that clarifies --

CHMN STAFFORD: Oh, okay. So the 200 megawatts you identified as needing to add to your system, UniSource's system, it will be this plant, but

you haven't decided whether UniSource will build this plant and own it or it will be built by a third party that you will either have a PPA for or that you'll actually own it?

MR. BEARCE: Yeah, all of that is subject to the All-Source RFP, and us choosing to bid into it, and ultimately for our name to be on it, we would need to be the successful bidder for that. So we send that to market, that's the desire for the technology that we've decided is the best. And this is the diligence phase to find out if we're in the best position to fulfill that system need.

CHMN STAFFORD: Well, is the RFP for 200 megawatts of gas or for four 50-megawatt peaking units?

MR. BEARCE: So generally speaking, the All-Source RFP is all sources, we have signaled gas because that's what the resource planning model shows, but if somebody's got a better solution, that's what all the performance requirements, system modeling, and competitive bidders can give the alternatives to that. And so that's why they consider it an all-source, because just because maybe the readily available information crops up as the solution, other bidders can compete with different technologies if they see it fits the need.

CHMN STAFFORD: Okay.

All right. Please proceed, Mr. Woolsey.

MR. WOOLSEY: And I have just four or five more questions here. I'm almost finished.

Q. So earlier there was some mention of TEP's Sundt Generating Station. You're familiar with the RICE units there, correct?

A. (MR. BRYNER) I am.

Q. And there's 10 RICE units with individual capacities of under 100 megawatts for each unit, but collectively the capacity of the RICE units is about 200 megawatts, correct?

A. (MR. BRYNER) That's correct.

Q. And TEP applied for and obtained a CEC from the Commission for those units, correct?

A. (MR. BRYNER) Correct.

Q. But the Company -- or, excuse me, not the Company, but no disclaimer of jurisdiction and no CEC was ever obtained for the existing Black Mountain Generating Station, correct?

A. (MR. BRYNER) So I think you're kind of bringing up a couple different points there. You were talking about RICE and then you jumped over to Black Mountain. Could you just break that up?

Q. Sure. So my last question there was regarding

the existing Black Mountain Generating Station. No disclaimer of jurisdiction and no CEC was ever obtained for Black Mountain, correct?

A. (MR. BRYNER) That's correct.

Q. Okay. To your knowledge, prior to the Company's application in this case, has any utility asked the Committee or Commission for a disclaimer of jurisdiction for a generating project with a total capacity over 100 megawatts?

A. (MR. BRYNER) To my knowledge, no.

MR. WOOLSEY: And those are all the questions I have. Thank you.

CHMN STAFFORD: Thank you.

All right. Next up for cross is AriSEIA.

C R O S S - E X A M I N A T I O N

BY MS. JOHNSON:

Q. Good afternoon. My questions will just be for the panel generally, so whoever would be more appropriate to answer, please feel free.

I'd like to go back to some of the comments we made earlier before getting into my preset list of questions. Do you recall this morning disagreeing with my characterization of the LM6000s as turbines?

A. (MR. BRYNER) Yes.

Q. Who is the manufacturer of the LM6000?
A. (MR. BRYNER) They're GE units.
Q. Do you know what GE's full name for the LM6000 is?
A. (MR. BRYNER) I do not.
Q. Subject to check, would you be willing to agree that according to GE's website it is called "LM6000 aeroderivative gas turbine"?
CHMN STAFFORD: It appears he's checking now.
MR. BRYNER: So on the cover of the specification for the generator it says "LM6000 gas turbine generator set product specification."
BY MS. JOHNSON:
Q. Okay. That's a little different than my question about the website, but it also calls it a turbine, so we can move on.
Let's go back to Footnote 1 of UNSE's exhibits, the application, I believe, is UNSE-1. Footnote 1 on ES-1 reads, "UNSE's 2023 Integrated Resource Plan calls for the addition of 200 megawatts of natural gas turbines."
Do you see that?
A. (MR. BRYNER) Sorry, we're having some technical issues.

Q. I believe that's analog, actually?
A. (MR. BRYNER) Analog issues, okay.
Yes, I see that.
Q. Okay. Thank you.
Mr. Bearce earlier had an analogy to airplanes. Is LM6000 also used as an airplane turbine?
A. (MR. BEARCE) LM6000s are aeroderivative, which is similar technology used for aircraft.
Q. Okay. Is it fair to characterize a LM6000 as a jet engine?
A. (MR. BEARCE) It's a prime mover that functions the same.
Q. Would you agree that once a turbine or jet engine is attached to an airplane, it is indeed part of the airplane?
A. (MR. BEARCE) I'm not connecting the dots how a power plant relates to a Boeing 737.
Q. I'm just asking you about airplanes. You brought up airplanes, so we're talking about airplanes.
A. (MR. BEARCE) I fly rotary engines.
Q. So you don't have a position on whether or not a turbine is part of an airplane or not?
A. (MR. BEARCE) Depends on the airplane. But a jet engine is what the thrust mechanism is for a large ATP-driven aircraft.

Q. Could an airplane fly without it?
A. (MR. BEARCE) With a different position, yes.
Q. Without a turbine?
A. (MR. BEARCE) There are glider airports that don't have an engine at all.
Q. Okay. We're talking about, I think, jet airplanes is what you brought up.
Do jet turbines have their own throttle controls, even though they are part of an airplane?
A. (MR. BEARCE) Are you referencing a multi-engine aircraft?
Q. Whatever aircraft you want that flies passengers out of Sky Harbor would be fine with me.
A. (MR. BEARCE) So I am not an expert on jet engines.
MEMBER GOLD: Mr. Chairman?
CHMN STAFFORD: Yes, Member Gold.
MEMBER GOLD: I would like to read something into the record, based on this questioning. "What planes use LM6000?" "GE LM6000 (CF6-80C2) gas turbine, part one, the GE, General Electric, LM6000, is a turbo shaft aeroderivative gas turbine engine. The LM6000 is derived from the CF6-80C2 aircraft turbo fan which is used in the Boeing 747-400, McDonnell Douglas MD-11, Airbus A300, and Airbus A310-sized airplanes."

And why are we asking this question?

MS. JOHNSON: That is a great question.

Q. So let's turn back to the Boeing 747, then. Is a jet engine part of an airplane if we're talking about Boeing 747?

MS. GRABEL: Mr. Chairman, I think this is a little out of control. We're not talking about airplanes in this proceeding, we're talking about generating units at generating stations. I think we're kind of wasting our time.

CHMN STAFFORD: It's a simple yes-or-no question. Is the jet engines -- is a jet -- is a jet engine part of a jet, I guess?

MR. BEARCE: Yes.

BY MS. JOHNSON:

Q. And would you agree that the FAA can regulate an airplane once the jet engine is attached to it?

A. (MR. BEARCE) The FAA regulates air traffic, licensing, et cetera, so you're asking me to speculate. My speculation is yes.

Q. Okay. Let's turn to UNSE-14.

A. (MR. BEARCE) I'm there.

Q. Would you agree that the general audience of an op-ed is the public?

A. (MR. BEARCE) Yes.

Q. Would you agree that the public is not made up entirely of attorneys?

A. (MR. BEARCE) Yes, I hope so.

Q. Is it your position that the words "disclaim" and "waive" are not synonymous in the context of the op-ed?

CHMN STAFFORD: That's kind of a legal interpretation question. I don't think he's qualified to answer that.

MR. BEARCE: That's where I was going.

MS. JOHNSON: That's fine, Chairman. My point is that they tried to undermine my credibility because I used the word "disclaim" instead of "waive," when speaking to the general public. And so I'm asking if their position is that those words mean something different.

MS. GRABEL: Mr. Chairman, I'll take that question since I do believe it's legal. The words "disclaim" and "waive" are not synonymous. Disclaim suggests that the Committee -- is suggesting that it does not ever have jurisdiction over a matter, whereas "waive" would mean you have jurisdiction, but are opting not to use it. They're not synonyms.

CHMN STAFFORD: Thank you. That's a good distinction between the two. Thank you.

MS. JOHNSON: All right. I'll move on.

Q. There have been questions from the Committee about the different types of plants. We've been using a lot of different terminology, "open," "single," "simple," et cetera.

Can you tell us in as lay of terms as possible what the difference is between a CC and a CT?

A. (MR. BEARCE) Would you please spell out your definition of CC and CT per the acronym?

Q. The acronym is combustion cycle versus combustion turbine.

CHMN STAFFORD: I thought it was combined cycle --

MS. JOHNSON: Combined cycle, yeah.

CHMN STAFFORD: Wait. Combined cycle and combustion turbine.

MR. BEARCE: That's why I asked for clarification, because I would have misanswered the question. So you want combined cycle and combustion turbine?

BY MS. JOHNSON:

Q. I'd like you to explain to the Committee kind of broadly what the difference is.

A. (MR. BEARCE) Okay. So a combined cycle is two or more processes tied together. So when you think of it

as you've got your combustion turbine, which normally goes out an exhaust stack, right, your exhaust just goes out a flue.

On a combined cycle you have what's called a heat recovery steam generator, also known as a boiler, where that hot gas passes through, boils water, produces steam, and that steam goes through a steam turbine. Breaking down being the second part of the combined cycle.

They don't have to be run that way. You can run just the gas turbine or you can run them both together. Simple cycle lacks that heat recovery steam generator also known as a HRSG.

Q. And that CT tends to have smaller generator sets, I think is the word we agreed on, is that correct, than a CC?

A. (MR. BEARCE) I would say that a CT that goes on a large combined-cycle plant can be also installed and has been installed independent, so they can be the same size. I wouldn't say that's an accurate statement.

Q. Would you say that generally or at least occasionally CTs are also sometimes called "peakers"?

A. (MR. BEARCE) That's correct.

Q. Okay. Is UNSE currently planning to build any new CCs?

A. (MR. BEARCE) That's confidential information about our business plans are. The only time we could build that show prudent investment and comply with the law is to compete in the All-Source RFP and win out in that instance.

Q. And has a CC won an All-Source RFP in the last five years?

A. (MR. BEARCE) Not that I'm aware of.

Q. Are you aware of any other utilities in the state of Arizona currently building CCs?

A. (MR. BEARCE) That is confidential information, that's strategic of what other knowledge I have of what other utilities are performing. And it's not at my liberty to speak on their business.

Q. You can just rely on public information. Are you aware of any public information that indicates other utilities in Arizona are planning to build CCs?

A. (MR. BEARCE) Not that I'm aware of.

Q. Thank you.

Are peaker plants ever built with an odd number of generating sets?

A. (MR. BEARCE) Yes.

Q. They are. Okay.

When you were asked about UNSE-14, you disagreed with the statement about what you would or wouldn't do,

and there was a question about whether or not if the Committee disclaimed jurisdiction you would still go through public processes and whatnot. What would be the regulatory mechanism with which to hold you to such a promise?

A. (MR. BRYNER) I can't answer that.

Q. Because there is not one, correct?

A. (MR. BRYNER) So I mentioned there's other permits, other things that we would need to do. But as far as, you know, my statement about, you know, what we would do as a company for outreach to engage the public, different things like that, beyond what's required in things like the air permit, I would say, you know, it's kind of my word there.

Q. Okay. And can we turn to the last slide of your PowerPoint presentation. That is UNSE-4, please.

And you have ARS 40-360.09 on that slide; is that correct?

A. (MR. BRYNER) That's correct. Well, a piece of it.

Q. The relevant piece I would argue, and I assume that you would as well, which is why it's there?

A. (MR. BRYNER) Yes.

Q. Could you read that for the Committee, please?

A. (MR. BRYNER) ARS 40-360, subpart 9, "Plant means

each separate thermal electric, nuclear, or hydroelectric generating unit with a nameplate rating of 100 megawatts or more."

Q. And the statute, as you have also mentioned, does not reference solar, photovoltaic, or wind; is that correct?

A. (MR. BRYNER) That is correct.

Q. And is that why we are not talking about those technologies today?

A. (MR. BRYNER) So we're not talking about those today, because we're talking about the combustion turbines, which are at hand, because they are thermal electric generating units.

Q. That's right. And are we at the legislature today?

A. (MR. BRYNER) I don't believe so.

Q. Thank you. All right. Let's go back to UNSE-1, please. We're looking at page ES-2, and unfortunately, there are not line numbers, so we're going to have to just do our best.

UNIDENTIFIED SPEAKER: What exhibit?

MS. JOHNSON: It's UNSE-1, the application.

CHMN STAFFORD: Page ES-2?

MS. JOHNSON: Correct.

Q. Are you there?

A. (MR. BRYNER) I am there.
Q. Okay. In the first full paragraph the application reads, "The existing natural gas units at Black Mountain were constructed by their previous owner without a CEC, because they, too, each have a nameplate rating under 100 megawatts."
Do you see that?
A. (MR. BRYNER) I see that.
Q. Okay. Can you please turn to page A-1 of the same application, which if you're looking at the PDF is page 32.
A. (MR. BRYNER) So I'm there.
Q. Okay. We're looking at the third full paragraph under A-1.1 facility description. It says, "The BMGS major plant components will consist of two GE LM6000 PC SPRINT simple-cycle natural gas-fired combustion turbines rated at 40 megawatts each."
Do you see that?
A. (MR. BRYNER) Yes.
Q. Okay. Now, let's turn to AriSEIA-2, please. Let me know when you're there, please.
MEMBER GOLD: Mr. Chairman?
CHMN STAFFORD: Yes, Member Gold.
MEMBER GOLD: There are no tabs. So what page are we looking at?

MS. JOHNSON: We don't have Bates numbering, sir.

CHMN STAFFORD: Yes, if you look to -- there's the cover page for the Exhibit 2.

MEMBER GOLD: I see it.

CHMN STAFFORD: Just they're separated by pages, they just don't have the tab that makes it easier to find.

MS. JOHNSON: It's page 7 of the PDF, so it should be around page 7 within the binder as well.

MR. BRYNER: And I'm there.

BY MS. JOHNSON:

Q. Okay. And AriSEIA-2 is UNSE's Supplemental Response to AriSEIA's First Data Requests; is that correct?

A. (MR. BRYNER) That's correct.

Q. Okay. And I asked about the discrepancy between 48 megawatts and the 61 megawatts, and in your response to 1.11, which is the last full paragraph on -- under AriSEIA 1.1, you say, "UNSE did not draft the document contained on page A-1 of the application, and does not know what the author meant by the term 'rating.'"

Do you see that?

A. (MR. BRYNER) I do see that.

Q. Are you saying that while you don't know who

drafted A-1 or what they meant, you did have specific knowledge of their statutory interpretation of ARS 40-360 when the plant was built?

A. (MR. BRYNER) You need to let me turn back to A-1 to let me take a look.

Q. Okay.

MS. GRABEL: Mr. Chairman, Ms. Johnson, would you mind repeating that question? I want to make sure I caught it.

MS. JOHNSON: Sure. Would you like me to go back to the broader overall question or just the sub question for 1.11?

MS. GRABEL: Subquestion for is 1.11.

BY MS. JOHNSON:

Q. 1.11 states, "UNSE did not draft the document contained on page 1 of the application and does not know what the author meant by the term 'rating.'"

And the question is, are you saying while you don't know who drafted A-1 or what they meant, you did have specific knowledge as to their statutory interpretation of ARS 40-360 when the plant was built?

MS. GRABEL: And I guess I'm going to object to that question as conflating two different issues, one is what the author meant in A-1 and one is the definition of nameplate rating and those two are not

synonymous, as was responded to in 1.11.

CHMN STAFFORD: And just can you answer each question individually, then?

MR. BRYNER: Can you ask them one at a time?

BY MS. JOHNSON:

Q. Sure. Let's go back, so I apologize to the Committee because we're jumping around between exhibits. Page 2 of your application reads, "The existing natural gas units at Black Mountain were constructed by their previous owner without a CEC, because they, too, each have a nameplate rating under 100 megawatts." But then the original documents relating to the plant say that they're 48 megawatts.

And then you tell me in my data response that you don't know who drafted it or why they say that, so my question is if you don't know who drafted A-1, how do you know that they purposely didn't get a CEC, because they understood the statute in the same way that you do?

A. (MR. BRYNER) So in looking at A-1, I can see who authored it. It was from Tierra Right of Way Services, it appears. But no, I can't -- so it would have been a contractor who worked on this, but I can't say for sure what was in their mind on this or what they were thinking.

Q. So is it then inaccurate what you've stated on page 2, which says that they did not obtain a CEC because the nameplate rating of the total unit or the individual units was below 100 megawatts?

A. (MR. BRYNER) So I believe that on page 2 it doesn't say the total output of the generating station, it's talking about each individual unit.

Q. Well, no, let's back up. I thought that your position was that the total doesn't matter, it's that the individual units are under 100 megawatts; is that not your position?

A. (MR. BRYNER) That is our position.

Q. Okay. And so whether or not the units were 45 or 48 or 61, would you agree that that's below 100 megawatts?

A. (MR. BRYNER) Yes, I would agree with that.

Q. Okay. And are you not arguing, then, on page ES-2 that the fact that the underlying plant did not have a CEC is not then precedence for the Commission to not need a CEC in this case?

A. (MR. BRYNER) So what we're saying on ES-2 is in reference to not the total output of the generating station, but that each individual generating unit is under 100 megawatts, so therefore, no CEC was needed.

Q. Right. And you say that the previous owner

constructed it and didn't get a CEC, because they had the same interpretation as you?

A. (MR. BRYNER) That's correct.

Q. And I'm asking how you could possibly know that?

MS. HILL: Mr. Chairman?

CHMN STAFFORD: It seems like that would be an opinion, I mean, that is one possible explanation. Another one would be that if they just relied on the net output, then it's -- to combine units are less than 100 megawatts. That's another reason why they didn't get a CEC. Obviously, they -- whoever it was, and they're not that person, that entity is not here before the Committee today to say what their interpretation of the statute was, but they made a decision to build without requesting a CEC and without requesting a waiver. We know that.

Is that part of the stipulated facts, I believe?

MS. GRABEL: It is, your Honor.

CHMN STAFFORD: Right, so we can't possibly know what whether they believed it was because what the applicant has alleged that the interpretation is that each unit must be below 100 megawatts or above to require a CEC or the total combined if they were relying on the 45 to 48, because that would put the entire plant under

100 megawatts.

So either of those could be the reason for them to not request the CEC or a disclaimer, but we can't -- the witness can't possibly know what was in their head, I mean, it's just --

MS. JOHNSON: Well, that is indeed the point, Chairman. Which is why it's not -- it is incorrect to assume that that is the reason why the application and to argue its precedence.

MS. HILL: Mr. Chairman, may I --

CHMN STAFFORD: Yes.

MS. HILL: I'm sorry --

CHMN STAFFORD: I don't see your nametag.

MS. HILL: Yeah, Megan Hill.

CHMN STAFFORD: Ms. Hill. We have a Member Hill and a --

MS. HILL: I know. And then a Meghan Grabel and, right, it's a lot of us. So, I'm sorry, I just want to step in. I just want to clarify the Company's position here.

We're not arguing -- this is really asking for clarification. And to suggest that we believe that there is -- I mean, I think we're all pretty clear on the Commission -- past Commission Decisions are not necessarily precedential, and so I don't want to mistake

our position for anything other than we're coming in and asking for clarification. And so I think characterizing anything that we cite is precedent in terms of the way we typically think of that in the law would not be accurate about what we're doing.

CHMN STAFFORD: Exactly. Commission Decisions aren't precedential.

MS. HILL: Correct. I just wanted to clarify that before we got into more questioning about precedence, and what -- the, you know, things happened in the past, we're willing to admit things happened or didn't happen in the past, but we're here on that purely legal issue, and we're asking the Committee for clarification and the Commission.

CHMN STAFFORD: Right, in that vein, I'd like to ask either the Megans a question.

In the application on this page, ES-2, you cite three different Decisions by the Commission. I believe they're all admitted as exhibits, but I'll take official notice of them either way, so they're part of the record.

You have Decision Number 70186, Decision Number 71914, and Decision 72213. They all relate to the existing Black Mountain Generating Station. I looked at those Decisions, and I don't see the nameplate capacity

anywhere in any of those Decisions. In the 70186, on page 2, they refer to the generating station is 90 megawatts. In the 91 -- 71914, on page 6, they refer to it as 90 megawatts total capacity, and then in Decision 72213, they don't mention the size of the generating station at all.

So I think that whether or not the predecessor who built the plant, why they didn't get a CEC or request a disclaimer of jurisdiction, we'll -- we're not going to be able to determine that here today. So -- but the fact is that I don't, from what I'm seeing, it's not clear that the Commission was ever aware that the nameplate capacity on this plant is above 100 megawatts.

MS. GRABEL: So, Mr. Chair- -- want me to take it?

MS. HILL: Yeah, you can go ahead and if I need to follow up, I will.

MS. GRABEL: So, Mr. Chairman, I would concur with you that the Decisions themselves do not state the nameplate capacity of the units. It would be odd for them to, because that probably wasn't an issue in any of the proceedings. What they're talking about is the actual operating capacity, which is what you're referring to. I would note in the proceeding in which

the units were added to rate base, Staff's engineers, they actually hired a third-party engineer who went out and visited the sites -- I read the engineering report -- they were all over these units.

And so I would be surprised if they didn't know what the nameplate capacity was. That said, it would be unusual for them to reference it in the documents, because it was irrelevant to the determinations they were making at the time. That said, we're not resting our laurels on saying because you did it before, you have to do it now.

We're making our case legally, just as Megan told you, because we want to know the answer to the legal question. We've seen it done both ways. We want a determination.

CHMN STAFFORD: Are you referring to the utilities report on Black Mountain Generating Station that was docketed on December 21st of 2010 --

MS. GRABEL: I am.

CHMN STAFFORD: -- in compliance with Decision Number 71914?

MS. GRABEL: I am, Mr. Chairman.

CHMN STAFFORD: I looked at that and I didn't find any mention of the nameplate capacity in that either. They referred to it as two 45-megawatt units,

each capable of sustained operation of 48 megawatts. And they refer to in another page as the nominal 45-megawatt units. I don't see any mention of the nameplate capacity in that document anywhere.

MS. GRABEL: Agreed. And I think the reason is that it wasn't an issue in that proceeding. But if you -- I mean, if you've read it as clearly as you have, you'll know that they did an exhaustive tour, they did an exhaustive analysis of the operation of the units, they noted that one went out of service and relied on Unit 2, in order to, you now, basically fulfill the capacity needs at the time. And so they did a very exhaustive analysis of the units. But it's not in there, because it wasn't at issue.

CHMN STAFFORD: Right. So let's -- that's why I think it's -- I think Ms. Johnson's point is that it could have been, well, no one -- the whole -- the total output at the plant was under 100 megawatts so no one though to dig any deeper to look at the nameplate capacity, because it's not really relevant for the purpose of rate basing it. The purpose was is it used and useful, was it a prudent investment. That's what you look at, it's a totally different thing, so --

MS. GRABEL: I agree with all of that. That's why we're here.

CHMN STAFFORD: Okay, good.

Further questions, Ms. Johnson?

MS. JOHNSON: I do, Chairman, but I believe that Ms. Hill had something she was going to add.

MS. HILL: No, your Honor -- no. I'm sorry, 21 years of other litigation.

No, Mr. Chairman, and Ms. Johnson, Committee Members, Ms. Grabel answered.

CHMN STAFFORD: All right. Thank you. Ms. Johnson, please continue.

MS. JOHNSON: I will continue, and I will move on from that point. I would like to just point out that the Company specifically has used the word "precedent" at least twice today in response to Commissioner Tovar, they also say that the fact that the underlying plants did not get a CEC is precedent, which I believe to be incorrect.

CHMN STAFFORD: All right. I think we can all agree that "precedent" in the legal term is not what is being talked about. It's just that the fact that it has happened before. That this plant was built without either a CEC or a disclaimer of jurisdiction from the Committee or the Commission.

So all right. Let's -- moving on.

MS. JOHNSON: Moving on.

Q. Earlier, Ms. Hill noted that, actually, UniSource-affiliated company did build the plant, and so why don't we know why they didn't obtain a CEC?

CHMN STAFFORD: Ms. Hill?

MS. HILL: So thank you.

So a couple of things. First, to the extent that there is any institutional memory about that and to the extent that that would have been part of a legal discussion, that's privileged and confidential and we decline to answer that question.

CHMN STAFFORD: Well, it was a separate entity, correct?

MS. HILL: That is correct, Mr. Chairman. There are some common administrative functions between the two -- some common officers between the two; however, they are two separate entities and there is a pretty firm wall, but to pretend that there aren't a common officer here and there would be incorrect.

CHMN STAFFORD: Does the ent- -- does the -- what's the name of the entity that built it?

MS. HILL: UniSource Energy Development.

CHMN STAFFORD: Okay. Does that entity still exist?

MS. HILL: It does.

CHMN STAFFORD: And what function does it

play for the applicant's entity?

MS. HILL: At the moment, none that I'm aware of.

CHMN STAFFORD: Would it be involved in the construction of the proposed addition to Black Mountain?

MS. HILL: If it chose to bid into it and they were the winner of the All-Source RFP, then yes, they could be. Just like any other third party could be.

CHMN STAFFORD: All right. And is it -- I think that's enough.

All right. Let's -- Ms. Johnson, back to you.

MS. JOHNSON: Thank you.

Q. How long has UNSE owned Black Mountain Generating Station?

A. (MR. BRYNER) So we purchased the units in 2007.

Q. Okay. And how long have you known that you've been operating it without a CEC?

A. (MR. BRYNER) So that's a -- I'll answer the question. So we've known from the beginning that there was no CEC, but also we were never under the impression that we were operating it in any manner that was illicit.

Q. How long have you known that you've been operating it without a CEC and without a disclaimer of jurisdiction?

A. (MR. BRYNER) Again, we went into it knowing all these things.

Q. Okay. In your opening comments today, you mentioned the Commission's IRP rules, and the definition of "generating unit." Is it your position that the Commission's IRP rules supersede state statute?

A. (MR. BRYNER) Can you restate?

Q. Is it your position that the Commission's IRP rules supersede state statute?

MS. GRABEL: That calls --

CHMN STAFFORD: That's more of a question for Ms. Grabel than for Mr. Bryner, because as he stated several times throughout the proceeding, he is not a lawyer.

Ms. Grabel, please.

MS. GRABEL: No, we do not believe that the Arizona Corporation Commission's rules supersede state statute, however, they can help interpret state statute, to the extent it is necessary.

BY MS. JOHNSON:

Q. And were the Corporation Commission's IRP rules adopted before or after or simultaneous with the Line Siting statutes in 1971?

A. (MR. BRYNER) I don't know that.

CHMN STAFFORD: This is -- this is all,

like, legal argument, the fact of when they were adopted is, it's a -- that's more for legal argument than having -- I can put Ms. Grabel on the spot here and --

MS. GRABEL: I'd be happy to do my closing right now.

CHMN STAFFORD: This is history knowledge, but I think those are more to be brought out in the oral argument. They can't -- the applicant isn't going to be in the position to testify about what statute was passed when with fact witnesses. And this is the fact portion of the hearing.

MS. JOHNSON: I agree with you and yet they cited the statute and the administrative code in their presentation, but I'll move on.

CHMN STAFFORD: Yes, thank you.

BY MS. JOHNSON:

Q. Has the Black Mountain Expansion Project won an All-Source RFP?

A. (MR. BRYNER) No.

Q. Do you plan to bid into your own All-Source RFP for the Black Mountain Expansion Project?

A. (MR. BEARCE) If we feel that we have a competitive position, then we will likely strongly consider doing so. We don't have enough facts.

Q. Okay. And can you point me to the place in your

IRP where you discuss the Black Mountain Expansion Project?

A. (MR. BRYNER) So I think we went over that earlier, looking at the IRP in a few different places. It doesn't specifically mention the words "Black Mountain Expansion Project," it mentions our need for 200 megawatts of, you know, again, the preferable resource was combustion turbine.

Q. And so just to be clear, does your IRP specifically mention the Black Mountain Expansion Project?

A. (MR. BRYNER) Again, no.

Q. Thank you.

Okay. Back on page 2 of your application, which is UNSE-1, and the page would be ES-2. Also, we're still in the first main paragraph. It says, "The existing Black Mountain Generating Station is comprised of two separate units, each with a nameplate rating of 61 megawatts."

Do you see that?

A. (MR. BRYNER) Sorry.

Yes, I found it.

Q. Okay. And so you are -- we are clear that it is 61 megawatts and not 48 or 45, right?

A. (MR. BRYNER) Correct. And I believe that's in

the stipulation of facts that everybody agreed on.

Q. Okay. Could you turn to AriSEIA-1, please. Are you there?

A. (MR. BRYNER) Yes.

Q. Is AriSEIA-1 the ADEQ air permit from 2007, an excerpt?

A. (MR. BRYNER) Yes.

Q. Okay. And if you move to what is labeled page 1 of 37, which is page 6 of the PDF, I assume approximately page 6 of the binder.

A. (MR. BRYNER) Okay. I'm there.

MEMBER KRYDER: Please read the heading again.

MS. JOHNSON: Okay. Yes, I will. The top of the page reads "Arizona Department of Environmental Quality, Air Quality Class 1 Permit," and I'm looking at the second full paragraph under what is called "Summary."

CHMN STAFFORD: It's like page 6. Keep going. There you go. That's it.

MS. JOHNSON: Are we all -- are we all ready?

CHMN STAFFORD: You got it, Member Kryder?

MEMBER KRYDER: Go ahead.

BY MS. JOHNSON:

Q. Okay. Paragraph 2 under "Summary" reads, "The

principal equipment at BMGS will be two simple-cycle combustion turbine generators, each with a designed capacity of approximately 48 megawatts, for a total combined plant capability of approximately 96 megawatts."

Do you see that?

A. (MR. BRYNER) Yes.

Q. Okay. We're going to turn now to Sierra Club 21. And Mr. Woolsey asked you about this earlier.

A. (MR. BRYNER) Okay. I'm there.

Q. I also want to look at the second paragraph under "Summary," it says that BMGS "Consists of two simple-cycle combustion turbine generator units with a nominal net capacity of 45 megawatts each, for a total of 90 megawatts."

Do you see that?

A. (MR. BRYNER) Yes.

Q. Okay. If you can turn to Sierra Club 22, please.

A. (MR. BRYNER) Okay.

Q. Okay. Can you look at the first paragraph under the "Executive Summary." It says, "The station consists of two simple-cycle combustion turbine generators, General Electric LM6000 PC SPRINT, designated as gas turbine Units 1 and 2, each with a nominal net capacity of 45 megawatts for a total combined plant net capacity

of 90 megawatts."

Do you see that?

A. (MR. BRYNER) Yes.

MS. GRABEL: Actually, it says capability of 90 megawatts, not capacity.

MS. JOHNSON: That's fine, capability.

Q. Do you see it?

A. (MR. BRYNER) Yes, I see that.

Q. Okay. Can you turn to Sierra Club 26, please.

A. (MR. BRYNER) Okay.

Q. And could you identify this document for everyone?

A. (MR. BRYNER) It's a few pages pulled out of UniSource's latest IRP.

Q. Okay. And we touched on this a little bit, but I just want to be clear. Could you turn to page 2 of Appendix B?

CHMN STAFFORD: And, for the record, UNSE-15 is the entire 2023 IRP, correct?

MR. BRYNER: That's correct.

CHMN STAFFORD: Okay.

BY MS. JOHNSON:

Q. What does it say is the net nominal capacity and the UNSE planning capacity of each unit at Black Mountain?

A. (MR. BRYNER) So it lists the net nominal capability at Black Mountain Unit 1 of 45 megawatts, Black Mountain Unit 2 of 45 megawatts, and the planning capacity is listed as the same.

Q. Okay. Can you turn to page 4 of Appendix B of that same exhibit?

A. (MR. BRYNER) Okay.

Q. The top left says, "The Black Mountain Generating Station is located approximately five miles south of Kingman, Arizona, and provides UNSE with 90 megawatts of combustion turbine capacity from two units."

Do you see that?

A. (MR. BRYNER) I see that, yes.

Q. Okay. Okay. Now, we're going to move back to your application. And, Chairman, you'll have to beg my forgiveness, because a little bit of this talks about what you talked about, but not entirely.

So if we can go back to page 2 of the application, that's ES-2 of UNSE-1.

A. (MR. BRYNER) Okay.

Q. Okay. You say, "Importantly, the Commission has addressed several issues related to the Black Mountain Generation Station without suggesting that a CEC should have been obtained for them."

Do you see that?

A. (MR. BRYNER) I see that.

Q. And I'm not going to ask you about precedent, because we've already gone around and around about that. But I just want to be clear that if we take a look at those Decisions. So Decision Number 70186 is Sierra Club 29. Can you look at page 2 of that Decision, line 3?

Tell me when you're there.

A. (MR. BRYNER) I'm there. Just reading it, sorry.

UNIDENTIFIED SPEAKER: What document?

BY MS. JOHNSON:

Q. This is Sierra Club 29, which is Decision Number 70186. We're looking at page 2 of that Decision, line 3. And it says, "UED is constructing a 90-megawatt simple-cycle gas-fired electric generation station known as Black Mountain Generating Station near Kingman, Arizona."

Do you see that?

A. (MR. BRYNER) Yes.

Q. Can you point me to anywhere in the decision where it says the plant is 122 megawatts?

CHMN STAFFORD: We've already covered this, I believe. None of these Decisions say that there's a nameplate rating of 61 megawatts for each of the units. It's constantly referred to in every Commission document

as being 45 or 48 megawatts per unit. The nameplate capacity is never mentioned in any of these documents as far as I can see.

And because it's apparently the nameplate ratings's only relevant to the jurisdiction of this Committee and nobody else cares about it, because they're only concerned what the actual output of the plant could be when it's going to be used. So I think you firmly established that they've never referred to this plant as having nameplate ratings of 61 megawatts for each unit prior to this proceeding. I think we can all agree to that, correct?

MS. GRABEL: The Company stipulates to that, Mr. Chairman.

CHMN STAFFORD: All right.

MS. JOHNSON: And does the Company also stipulate to the fact then that if they never knew it was 122 megawatts, they wouldn't have known that you were operating a CEC [sic] without a CEC.

MS. GRABEL: We will not stipulate to that because I do not know what the Arizona Corporation Commission knew about the nameplate rating.

MS. JOHNSON: You'll stipulate to the fact there's no document that says the nameplate rating, but not to the fact they don't know the nameplate rating.

MS. GRABEL: I will stipulate that none of these documents identify the nameplate rating, nor in the engineering report that discusses the facility.

MS. JOHNSON: Have you provided any documents to the Commission that stipulate or that state the nameplate rating?

MS. GRABEL: We do not know of any other documents that discuss the nameplate rating.

MS. JOHNSON: Okay. And is it your position that the Commission consciously disclaimed jurisdiction over the plant in Decision Number 70186?

MS. GRABEL: Can you repeat that question?

MS. JOHNSON: Is it UNSE's position that the Commission consciously disclaimed its jurisdiction over a plant that it knew to be 122 megawatts?

MS. GRABEL: Ms. Johnson, we do not know -- we were not parties -- obviously, UNSE was a party to that decision, I personally was not, none of the people at this table were. And we cannot tell you what conversations happened then. We can't answer that question.

MS. JOHNSON: I think it's interesting, Chairman, that they've put forward these Decisions in their application, and yet the witnesses that they have provided cannot speak to them.

CHMN STAFFORD: Yeah, these facts aren't really an issue. I guess this is more of a legal argument about what should happen. I think, now depending on what the Committee and the Commission interprets the statute to mean, I guess if the Company or the Company's predecessor guessed wrong, then they would have to rectify that at some point, presumably. But right now we're just trying to get to the facts of what the existing plant and the proposed plant. And then we'll have time for argument of whether the CEC process applies to it or not.

But I think we've clearly established that the nameplate rating was not addressed in any of these cited Decisions that are now been admitted. And that as far as I'm aware, is that the first time, certainly this Committee had any inkling that the nameplate ratings for those two units was more than 45 or 48 as the application that was filed in this case, where they brought to light the actual nameplate rating, which nobody cared about before, was actually higher, it was actually 61 for each unit.

MS. JOHNSON: Chairman, I'll move on, but I would like the record to note that both Decision 71914, which is Sierra Club 30, and Decision Number 72213, which is Sierra Club 31, do not indicate that the plant

exceeded 100 megawatts.

CHMN STAFFORD: Yes, so noted. I think we've all stipulated to that. No one's contesting that.

MS. JOHNSON: Okay.

Q. Back to page 2 of your application. ES-2, UNSE-1. You state that, "The Company understands that the Committee has entertained CEC applications from applicants seeking to build a project with a cumulative capacity in excess of 100 megawatts." And then you cite to TEP's RICE project. The panel also works for TEP; is that correct?

A. (MR. BRYNER) That's correct.

Q. Okay. When did UNSE come to interpret ARS 40-360.09 in the manner asserted in this application?

MS. GRABEL: I'm going to object to that, it calls for privileged information.

CHMN STAFFORD: Yeah, I'm going to sustain that objection.

BY MS. JOHNSON:

Q. Whose idea was it?

MS. GRABEL: Again, object on the basis of privilege.

CHMN STAFFORD: Yeah, sustained.

BY MS. JOHNSON:

Q. When did UNSE decide to apply for a disclaimer of jurisdiction?

MS. GRABEL: I'm objecting to that on the basis of confidentiality.

CHMN STAFFORD: Sustained. I mean, we -- it was some point before -- well, they filed the application, obviously, but we don't even know when -- I guess we don't even know if UniSource was even aware what the nameplate rating was when they acquired it from the other entity. And we don't have anybody that can testify as to who knew what when.

BY MS. JOHNSON:

Q. I believe that Mr. Bryner acknowledged that they have known that the plant was 61 megawatts for each unit since they purchased it; is that correct?

A. (MR. BRYNER) I guess I should clarify my answer to you. I was interpreting that you said did we know that we didn't have a CEC, did we know that there was never a request for a disclaimer of jurisdiction, and the answer to those was yes.

Q. Okay. When did you know the size of each of the turbines?

A. (MR. BRYNER) I don't know that I can answer that.

CHMN STAFFORD: I guess, you personally,

when did you -- when did you come to know, because it's a fact, as stated in here, it says there's two separate units each with a nameplate rating of 61 megawatts. When were you personally aware of that fact?

MS. GRABEL: Mr. Chairman, I'm going to object to this based on relevance. I don't know how this inquiry is relevant to the legal argument that's at issue today. And I'm not sure why it would be relevant when Mr. Bryner would have come to understand that a disclaimer requirement was going to be made, or whatever the question was. I think we're getting way off topic.

MR. BRYNER: Do you want me to answer?

CHMN STAFFORD: I think -- I'm interested to know. I mean, you've come in here with this request, and so I'm going to assume that you must have realized this at some point when you were preparing to add to the plant that it came to light that the units were actually 61 megawatts.

MR. BRYNER: So I attested to that we filed our plan for this expansion back in early November, as we were preparing to file that plan. That's when I became more familiar with the current units at Black Mountain and what their nameplates were.

CHMN STAFFORD: Okay.

MR. BRYNER: So this --

CHMN STAFFORD: So November of last year?
MR. BRYNER: Thereabouts.
MS. HILL: Mr. Chairman.
CHMN STAFFORD: Yes.
MS. HILL: May I clarify?
And I believe several of these were pointed to in the Sierra Club exhibits on Mr. Woolsey's cross-examination. We file an EIA-860 form every year, and in that form we, as a company, must list the nameplate rating of each of the units at Black Mountain as Mr. Woolsey pointed out. He pointed out that both of those units are on one form, as the form is designed, and each of them is there identified as 61-megawatt nameplate ratings. So we have been, as a company, acknowledging that publicly on those forms.
I believe the Sierra Club asked us to provide five for six years of those, and certainly on every single one of those we were acknowledging that publicly as a company.
CHMN STAFFORD: All right. Okay. That's fair. You would have to know that, because you were required to file that form. And apparently someone else cares about the nameplate capacity.
MS. HILL: Actually, yeah, they do.
CHMN STAFFORD: That's like --

MEMBER GOLD: Yes, back in 1971.

CHMN STAFFORD: Pardon?

MEMBER GOLD: I'm sorry, Mr. Chairman. I said, yes, back in 1971.

CHMN STAFFORD: No, this is current. I mean, you file that form annually with the Energy Information Systems, that's the EIS we're talking about?

MS. HILL: EIA, yes.

CHMN STAFFORD: EIA, is it Energy Information --

MS. HILL: Administration.

CHMN STAFFORD: Administration, yes.

MEMBER GOLD: But the nameplate rating isn't really relevant, it can only produce 42 or --

CHMN STAFFORD: Right. Right. The nameplate -- my point is that the nameplate rating has relevance in another setting besides this Committee's juris- -- the Committee's and the Commission's jurisdiction. Because everything else that they talked about, you know, with the Commission, they were concerned about what the output was, you know, like how to meet their load, is it used and useful, was it a prudent expense, did they buy a giant plant when they needed something half the size. That's the kind of thing they're looking at.

And the nameplate isn't really relevant there, because -- and the nameplate I believe they testified is always going to be higher than what you can actually operate the plant on. Because, particularly in the summer in Arizona, you can't because that's a harsh environment and it's not the ideal ambient conditions to get the most out of the generator. That's why they use the water to cool it to improve the efficiency to boost the output in those high temperatures, correct?

MR. BEARCE: (No audible response.)

CHMN STAFFORD: Right. I'd maybe iterate that he's nodding, so --

MR. BEARCE: Yes, Mr. Chairman. For the record.

MEMBER GOLD: So if I understand this completely, Mr. Chairman, the nameplate rating for a generating unit is equivalent to the red line on a car, where if you exceed it, it explodes or something?

MR. BEARCE: The only variance is it's pretty much guaranteed to fail. Your car might handle it. It's a little different.

CHMN STAFFORD: Because you can get in the red, you just can't keep it in the red for a car. But apparently for the generating units, red's a complete no-go.

MEMBER GOLD: Got it. So this thing is 42 megawatts and that's the actual output. So in effect you've got 42 times four, if you turn them all on at the same time?

MR. BEARCE: We're estimating 45 megawatts, but yes, sir.

CHMN STAFFORD: So 45, 90, 180 megawatts if you're running everything at the same time at the maximum capacity, maximum safe capacity?

MR. BEARCE: (No audible response.)

MEMBER GOLD: Gotcha. Thank you.

CHMN STAFFORD: If you run above that it stops operating, right?

MR. BEARCE: (No audible response.)

MS. HILL: Mr. Bearce, you have to answer out loud for the court reporter.

MR. BEARCE: I apologize. So yes, stop oper- -- I don't want to get too far in the hypothetical. I mean, if you run things full out it will fatigue them. The manufacturer puts ratings on them, and we don't exceed those. In this case the prime mover in question, the combustion turbine is incapable of producing it, so it's of little concern to us that we'll ever exceed that, because it can't do that. But yes, we do not run things beyond. And that's where the conversation we had

regarding you take the lower, because you can't push equipment beyond its design capabilities, and that's really what we're trying to articulate here, because in this case we can't and we wouldn't.

MEMBER GOLD: Mr. Chairman?

CHMN STAFFORD: Yes, Member Gold.

MEMBER GOLD: Getting back to relevancy, to why we're all here today, each of your generators can produce 45 megawatts safely?

MR. BEARCE: That's correct.

MEMBER GOLD: Combined, if they're all running at the same time, you have 180 megawatts, plus the other two plants -- the other two generators that are already there, which is another 90?

MR. BEARCE: That would be correct, per our design.

MEMBER GOLD: Gotcha. Thank you.

CHMN STAFFORD: So the total net output capability if the expansion is done, as described today, would be -- was it 270 megawatts would be the total output for the entire generating station?

MR. BEARCE: That's our best estimate for the station.

CHMN STAFFORD: All right. So but typically you don't refer to the nameplate capacity at

all, we've seen two contexts in terms of the Siting Committee, and then in the EIA data that you're required -- you file that form annually, correct?

MS. HILL: That's correct.

CHMN STAFFORD: And they also track what the output was, emission, the total amount of kilowatt hours generated?

MS. HILL: I believe so, I would have to have one of the reports in front of me again, sir, and --

CHMN STAFFORD: I don't have to know the peak load, I'm just saying generally that's what's contained in these reports with the EIA?

MS. HILL: As I recall, yes.

CHMN STAFFORD: All right.

Anything further, Ms. Johnson.

MS. JOHNSON: Oh, yes.

Q. Okay. So back to the EIA forms, when did you commence filing the EIA forms that would have reflected 61 megawatts for Black Mountain Generating Station?

MS. HILL: I'm sorry, I'm answering this as counsel, which is that I am unaware of any time that we were out of compliance, and I'm not sure if the EIA-860s were required or some form of that, back when they were acquired in 2007, so I can check our archives and get back to Ms. Johnson on that, but I don't believe that's

relevant to the issue of statutory interpretation.

CHMN STAFFORD: Yeah, we've already established that the nameplate rating is 61 megawatts for each of the two existing units. So do you have any other questions that don't involve the 61 megawatts?

MS. JOHNSON: I do think it's relevant how long they've knowingly been operating the plant in violation of the statute, but I can move on.

MS. GRABEL: I object.

CHMN STAFFORD: Yeah, I'm going to state that -- what we're trying to determine today is whether -- what the statute means, so I guess the Company has its own interpretation. It's up to this Committee and the Commission and potentially the courts to decide who is right.

But I guess if, ultimately, the decision is that that their interpretation of the statute is wrong, then it would be in violation of the statute, but we haven't determined that yet. And that's not -- and this is the first step towards that, because there's this Committee, then there's the Commission, and potentially the courts after that, but that's going to be the ultimate conclusion. And I think your question's a little conclusory.

MS. JOHNSON: I'll move on either way.

Q. Are you aware of the Commission ever disclaiming jurisdiction over a project because the individual turbines were under 100 megawatts?

A. (MR. BRYNER) So I think I said earlier that I'm not aware of anybody filing for a disclaimer of jurisdiction.

Q. Has UNSE or TEP ever asked it to disclaim jurisdiction over a project because the individual turbines were under 100 megawatts?

MS. GRABEL: Mr. Chairman, we've been through this before. I thought we were going to kind of streamline --

CHMN STAFFORD: Yes, I think the answer to that question is no, this is the first time someone's asked for a disclaimer of jurisdiction for a plant, correct?

MS. GRABEL: Correct.

CHMN STAFFORD: All right.

BY MS. JOHNSON:

Q. Okay. Let's turn to the plant operations. Will each turbine need its own CEC?

CHMN STAFFORD: No.

MR. BEARCE: And I think that --

MS. GRABEL: Yeah, I'm going to object to that, I mean, it calls for a --

CHMN STAFFORD: That's a legal conclusion.

MS. GRABEL: -- legal conclusion as to whether or not they are required to have a CEC under the definition of plant.

CHMN STAFFORD: Sustained.

MS. JOHNSON: Okay. Well, it is in a data response which are factual. We can turn to that, if you like. AriSEIA-2, question 1.8.

CHMN STAFFORD: Ms. Johnson, about how much more cross-examination do you have left?

MS. JOHNSON: About three questions, I think. Well, like five questions.

CHMN STAFFORD: All right. Well, it's been another 90 minutes, so we're going to take a break for the court reporter. We'll take an approximately 10- to 15-minute break and then come back.

We stand in recess.

(Recessed from 5:00 p.m. until 5:14 p.m.)

CHMN STAFFORD: Let's go back on the record.

Ms. Johnson, you were almost done with your cross?

MS. JOHNSON: I am almost done. Thank you.

Q. If we can please turn to AriSEIA-2.

This is UNSE's Supplemental Response to

AriSEIA's First Data Request and AriSEIA question 1.8.

A. (MR. BRYNER) I'm there.

Q. Okay. So question 1.8 is, "If each turbine is its own unit under ARS Section 40-360.09, does each unit need its own CEC for which separate hearings would be required?" And the UNSE response is "No"; is that correct?

A. (MR. BRYNER) That's correct.

Q. Okay. And how close together are the turbines?

A. (MR. BRYNER) Can you clarify which turbines we're talking about?

Q. The ones for the expansion project?

A. (MR. BRYNER) I haven't measured that out, but in our schematic, I would say they're roughly the same as the existing units, which is 1- to 200 feet.

Q. Okay. So firmly within one mile of each other, correct?

A. (MR. BRYNER) Yes.

Q. Okay. Will each turbine have its own interconnection request?

A. (MR. BRYNER) No.

Q. Okay. Will each turbine have its own air permit?

A. (MR. BRYNER) So, again, I think we've covered these questions, that the generating station would have

an air permit. The interconnection request has to do with the station, not each unit.

Q. Okay.

CHMN STAFFORD: And just to clarify, I believe you testified that the air permit would be for both the existing -- would cover both the existing and the expansion. You would have one air permit for all six units at some point. The other four would get built, correct?

MR. BRYNER: Yeah, Mr. Chairman, so it's a permit for the generating station, so it would be a modification to that existing air permit.

CHMN STAFFORD: Okay. Please continue.

MS. JOHNSON: I believe that my last two questions have been covered elsewhere, and so I actually can conclude now.

CHMN STAFFORD: All right. Well, it has become apparent that we're not going to finish this today. I think we can -- we will go into -- we will recess until tomorrow at 11:00, and we will take -- continue back tomorrow in the same room at 11:00. And we will start with WRA's cross-examination and then SWEEP's and then Staff's.

And then I believe that Sierra Club and WRA have -- each have one witness that they're going to

present as a panel; is that correct?

MR. SHRINATH: That's correct, your Honor -- or, Mr. Chairman, but our witness is unavailable tomorrow.

CHMN STAFFORD: Well, I guess -- what is the scope of her testimony going to be? Please remind me.

MR. SHRINATH: The scope of her testimony is she's going to testify as to the connectedness of the various facilities at the plant. She's going to testify as to the classification of the generating station in various state, federal, and other permitting contexts. And then she was also going to, you know, from a class system perspective testify as to, you know, the normal classification of the BMGS units, such as those proposed by BMGS as well.

CHMN STAFFORD: All right. I'm not hearing anything that hasn't already been covered.

MR. WOOLSEY: So Mr. Chairman, if I might add, there are a number of specific issues related to what Mr. Shrinath just summarized that have not been covered today. We'd like to have Ms. Fogler testify to her opinion.

MS. GRABEL: Mr. Chairman, if I might suggest, perhaps their witness could offer an affidavit

and file it in the docket tomorrow, and we will, you know, waive the ability to cross-examine her. And I understand that it is a panel with the WRA witness, so perhaps he can address any additional issues that Sierra Club has.

MR. SHRINATH: With all due respect, Mr. Chairman, I feel like this is a major due process issue. Our cross has been winnowed down over -- our direct testimony has been winnowed down over the course of today to make sure there isn't overlap. And I can assure you that we don't intend to create overlap with what's been said today. And we're not sure an affidavit would suffice. But, you know, we understand there are, you know, obviously procedural and logistical issues here, and we'll make do, but I do think there's a major due process issue here since we thought April 24th was the hearing date and our witnesses have, you know, other commitments.

CHMN STAFFORD: Well, everyone does, but we have to come back tomorrow because we didn't finish today. In other cases before the Commission, witnesses have to be on standby unless they specifically get authorization from the ALJ that they're going to testify on a specific day. They have to be ready to be called upon to fill the space as the hearing permits.

So we will be coming back tomorrow. I suggest you try to get ahold of your witness and work something out. Mr. -- Dr. Routhier, I assume, will be here tomorrow?

MS. DOERFLER: Yes, Dr. Routhier will be here tomorrow. Although WRA does want to state that it also would object to this as a due process issue. We have prepared for this case in the panel structure, and we believe that Dr. Routhier's testimony is complementary to Sierra Club's witness's testimony. And so I don't find that to be an efficient or appropriate replacement for that testimony.

CHMN STAFFORD: So noted.

All right. With that, we will recess this hearing until tomorrow at 11:00 a.m.

We stand in recess.

(The hearing concluded at 5:21 p.m.)

STATE OF ARIZONA)
COUNTY OF MARICOPA)

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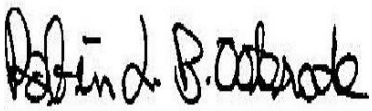

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