BEFORE THE ARIZONA POWER PLANT AND TRANSMISSION LINE SITING COMMITTEE

LS-322

IN THE MATTER OF THE APPLICATION OF RWE RENEWABLES DEVELOPMENT, LLC, IN CONFORMANCE WITH THE REQUIREMENTS OF ARIZONA REVISED STATUTES, SECTIONS 40-360, ET. SEQ., FOR PREHEARING CONFERENCE CERTIFICATES OF ENVIRONMENTAL COMPATIBILITY AUTHORIZING THE FORGED ETHIC WIND ENERGY INTERCONNECTION PROJECT LOCATED IN COCONINO COUNTY, ARIZONA.	DOCKET NO. L-21261A-23-0219-00225 LS CASE NO. 225 EVIDENTIARY HEARING

At: Flagstaff, Arizona

Date: September 5, 2023

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REPORTER'S TRANSCRIPT OF PROCEEDINGS
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BE IT REMEMBERED that the above-entitled and numbered matter came on regularly to be heard before the Arizona Power Plant and Transmission Line Siting Committee at High Country Conference Center, 1899 Ballroom, 307 West DuPont Avenue, Flagstaff, Arizona, commencing at 1:00 p.m. on September 5, 2023.

BEFORE: ADAM STAFFORD, Chairman

GABRIELA S. MERCER, Arizona Corporation Commission
LEONARD DRAGO, Department of Environmental Quality
DAVID FRENCH, Arizona Department of Water Resources
R. DAVID KRYDER, Agriculture Interests
SCOTT SOMERS, Incorporated Cities and Towns
(Via Videoconference)
MARGARET "TOBY" LITTLE, PE, General Public
DAVE RICHINS, General Public
(Via Videoconference)
COL. JON H. GOLD, General Public

APPEARANCES:

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PINNACLE WEST CAPITAL CORPORATION
Linda J. Benally, Senior Attorney
Jennifer Spina
(Via Zoom Videoconference)
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CHMN STAFFORD: Let's go on the record. Can you hear me?

All right. Now is the time set for the hearing in the matter of the application of RWE Renewables Development, LLC, for a Certificate of Environmental Compatibility, Docket Number L21261A-23-0219-00225, henceforth known as "line siting case 225."

Let's take the role of the members.

Member Little?

MEMBER LITTLE: Present.

CHMN STAFFORD: Member Drago?

MEMBER DRAGO: Present.

CHMN STAFFORD: Member French?

MEMBER FRENCH: Present.

CHMN STAFFORD: Member Kryder?

MEMBER KRYDER: Present.

CHMN STAFFORD: Member Mercer?

MEMBER MERCER: Present.

CHMN STAFFORD: Member Gold?

MEMBER GOLD: Present.

CHMN STAFFORD: And I believe on Zoom we have Member Somers.

MEMBER SOMERS: Present.

CHMN STAFFORD: Thank you.

Let's take appearances, please. Let's start with the applicant.

MR. ACKEN: Good afternoon, Chairman, and Members of the Committee, Bert Acken of Acken Law on behalf of the applicant RWE Renewables Development, LLC.

MS. BENALLY: Good afternoon, Mr. Chairman -- is my mic on?

CHMN STAFFORD: I don't hear it.

MS. BENALLY: Mr. Chairman, thank you. Good afternoon to Mr. Chairman, Members of the Committee. Linda Benally appearing on behalf of Arizona Public Service company. Also appearing on behalf of APS is Jennifer Spina. Ms. Spina is appearing virtually today and I believe she's signed in and may be appearing on the screen as we move through the -- through the session today. Thank you.

CHMN STAFFORD: Thank you.

All right. Members, before us we have an application to intervene by APS. I think the process would be aided by having them as a party. Can I get a motion to grant their request for intervention?

MEMBER KRYDER: Mr. Chairman?

CHMN STAFFORD: Yes, Member Kryder.

MEMBER KRYDER: I move that we grant the request by APS to intervene.

MEMBER FRENCH: Second.

CHMN STAFFORD: All in favor say "aye."

(Chorus of ayes.)

CHMN STAFFORD: Opposed?

(No response.)

CHMN STAFFORD: Hearing none, APS is admitted as an intervenor.

Mr. Acken, would you like to begin with an opening statement?

MR. ACKEN: Thank you, Mr. Chairman. I would appreciate the opportunity to just to kind of explain what our plan is and orient the Committee. We really appreciate the opportunity to present the Forged Ethic Wind Interconnection project. RWE Development -- Renewables Development, LLC, which is a subsidiary of RWE is requesting approval for the project and -- and on the screen in front of you, you see some details and we will present testimony.

But let me tell you a little bit about it. It's a 5-mile 500kV AC generation-tie transmission line, between a new project substation that will be located on the site of the wind project, and you see the POI is the point of interconnection. The point of interconnection is -- is interesting in this project, it is a planned APS Switchyard on the existing Moenkopi-to-Cedar Mountain

500kV transmission line. That's a regional transmission line owned by a number of entities, and operated by APS.

Because of the need to construct a new switchyard, and we're referring to it as the APS Switchyard because they will operate it, it's going to be a switchyard that serves multiple projects, not just this one. We are requesting, as a result, two CECs for this project as the Committee has seen. Several times CEC-1 will cover the interconnection project, CEC-2 will cover the APS Switchyard.

Again, because APS will construct and operate it. Just to orient you with respect to the map and the area, you'll see the -- see this map a few times. The project area is shown, the study area, excuse me, is shown in the hatch black line, a 1-mile buffer as a standard for these linear transmission lines. You note that this is in an area that is what we call the checkerboard state and private land. State land is shown in blue, private land is shown in white.

A couple -- the corridor is shown in black, with the line in yellow, with the potential location of the APS Switchyard shown in the green hatch. We're requesting approval anywhere in that white section north of the existing two transmission lines in which to place the APS Switchyard as being shown on the screen right

now. Thank you.

The project substation is located just north of the two existing 500kV transmission lines, and then you also see a red access road for access to the site. But you will see this proj- -- see this map and others throughout the presentation, so I wanted to give you a little orientation. The last thing I want to point out on here is the wind project boundary, it's -- it's shown there with a little call-out box in the lower central portion of the map, and that runs north to south in this map area. And so, again, the project substation is in the western area of the wind project.

All facilities are located in unincorporated Coconino County. And it's located -- this is kind of an interesting project, it is located on the CO Bar Ranch, which is owned, operated by the Babbitt Ranches. So all of the state and private lands are either owned by -- by the ranch or subject to state lease, in which they have grazing entitlements.

We're going to have a panel of four witnesses, you see them over there, they're eager and ready to get going. Zach Nelson and Kimberly Comacho of RWE, and Dean Hazle and Nick Brasier of SWCA, who are going to provide testimony in support of the CEC application, and you see the topics we're going to cover

there. It's going to include a description of the applicant, the route, the requested right-of-way and corridor.

We'll present a virtual tour, the public notice and outreach process for the project, and the absence of any public concerns raised as a result. The comprehensive environmental resource analyses conducted, and expert opinion regarding the environmental compatibility of this project, which again parallels existing transmission lines.

I did want to point out one thing. We -- while reserving the legal position that the wind project and the large generator interconnection process associated with it are not jurisdictional, we will provide information on the generating project, as is customarily done. I certainly understand it was big news in the line siting bar about case 222, and I understand there's an open question regarding the need for system impact studies conducted in the support of the CEC application.

Now, we take the legal position in this proceeding that power flow and stability analyses are not required and not subject to the Committee's jurisdiction. But the good news is you don't need to answer that question in this proceeding. The testimony will show

that the applicant has commissioned a third-party power flow and stability analysis. That power flow and stability analysis has been presented to Commission Staff, who was able to opine on the safety and reliability of this interconnection, just as they would for any project with a System Impact Study.

The last thing I want to do is just orient you, we've got the application, should be on the tablets, and there's a handful of -- handful of copies around the room. This is kind of a beefy application, beefier than many that you might see, and we'll explain why, there's a lot of studies that have gone into this project in support of the wind project.

And then we have our hearing exhibits. We have a binder that includes the application, witness slides for this panel. We have witness slides for another witness, if necessary, who can testify about -- in detail about the power flow and stability study, and then customary exhibits, such as your public outreach, witness summaries, proposed CEC, response to ACC Staff data request, a route tour should the Committee decide to do that, and as well as RWE-11, which is Commission Staff's response on the question of reliability. There's one exhibit, 8, which is an amendment to one of the exhibits in the CEC application that Mr. Hazle will

explain as well.

So with that, we look forward to presenting this case, and I'm ready to get started. If you have any questions before we do so, I'm happy to answer them.

CHMN STAFFORD: Thank you, Mr. Acken.

Ms. Benally, do you care to give opening remarks?

MS. BENALLY: Thank you, Mr. Chairman.

I really don't have a lot in the way of opening remarks; however, I would like to say that on behalf of APS, we certainly do appreciate the Committee granting APS's intervention in this case. As counsel mentioned, there are two CECs that are being contemplated by the applicant, CEC-2 is the CEC that will eventually or at least planned to be transferred to APS and as it relates to the proposed 500kV switchyard, which is the location of where the planned interconnection will occur.

We're here to participate only to the extent that you need us to address any questions regarding CEC-2 or to answer any questions relating to the interconnection at the switchyard. So unless there are questions that our witness may be called to testify about, we don't plan on putting on a direct case. He is available -- let me rephrase that -- he's unavailable this afternoon between 1:00 and 3:00, but after that time

will be available in the need that there's a need to call him in. Thank you.

CHMN STAFFORD: Thank you.

Mr. Acken, would you like to call your panel of witnesses?

MR. ACKEN: Thank you, Mr. Chairman.

The applicant calls Zachary Nelson, Kimberly Comacho, Dean Hazle, and Nicholas Brasier.

CHMN STAFFORD: All right. Start with you, Ms. Comacho, do you prefer an oath or affirmation?

MS. COMACHO: An affirmation.

(Kimberly Comacho was duly affirmed by the Chairman.)

CHMN STAFFORD: Mr. Nelson, oath or affirmation?

MR. NELSON: Affirmation, please.

(Zachary Nelson was duly affirmed by the Chairman.)

CHMN STAFFORD: Mr. Hazle, oath or affirmation?

MR. HAZLE: Affirmation, please.

(Dean Hazle was duly affirmed by the Chairman.)

CHMN STAFFORD: Mr. Brasier -- I'm not pronouncing that right.

MR. BRASIER: That's okay. Brasier.

CHMN STAFFORD: Brasier.

Okay. Would you prefer an oath or affirmation?

MR. BRASIER: Affirmation, please.

(Nicholas Brasier was duly affirmed by the Chairman.)

CHMN STAFFORD: Thank you. The witnesses have been sworn. Please begin your direct, Mr. Acken.

MR. ACKEN: Thank you, Mr. Chairman. And Mr. Brasier told me how to pronounce his name correctly four times and I still can't get it right. I have a long history of that.

If you want to follow along with the slides, this is hearing exhibit that's been marked for identification as RWE-2.

MR. HAZLE: Quick note for the Peaks team, my clicker isn't advancing slides on the screens yet.

AUDIOVISUAL TECHNICIAN: Should be good now.

MR. HAZLE: Thank you.

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KIMBERLY COMACHO, ZACHARY NELSON, DEAN HAZLE,
NICHOLAS BRASIER
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 MR. ACKEN:

Q. All right. We're going to start with Mr. Nelson. Please state your name, employer, and business address for the record.

A. (MR. NELSON) Yes.

First of all, good afternoon, Chairman Stafford, Members of the Committee; my name is Zach Nelson, I'm with RWE, and my business address is 101 West Broadway, Suite 1120, San Diego, California. But I would like to add that I am local to Phoenix; I do live in Chandler.

CHMN STAFFORD: Thank you. One second before you continue.

Mr. Acken, Member Richins is trying to dial in; he needs the call-in information, he's having trouble -- trouble with the link.

MR. ACKEN: If you can give us one minute, and we'll get that to him. Should we send it to Tod or

what's the best way to get it to him as fast as possible?

CHMN STAFFORD: Probably send it to him directly, but you can go through Tod, if you don't have contact info for Member Richins.

AUDIOVISUAL TECHNICIAN: It looks like Mr. Richins is on. He is in the meeting.

CHMN STAFFORD: Member Richins, can you hear us?

MEMBER RICHINS: I can hear you.

CHMN STAFFORD: Excellent.

MEMBER RICHINS: Can you hear me?

CHMN STAFFORD: Yes, we can hear you. Thank you.

MEMBER RICHINS: All right. Thank you for your patience.

CHMN STAFFORD: Technology, huh?

All right. Mr. Acken, we're ready, please proceed.

MR. ACKEN: Thank you, Chairman. And, Member Richins, you missed my thrilling opening, but that's -- that's the -- that's the only thing you've missed. We're just now starting with testimony.

Q. Mr. Nelson, let's go back, state your name, employer, and business address for the record.

A. (MR. NELSON) Yes.

Zach Nelson, address is 101 West Broadway, Suite 1120, in San Diego, California, although I am local; I live in Chandler, Arizona. And I am with RWE.

Q. And in what capacity do you work for RWE?

A. (MR. NELSON) I am director of utility-scale development for the West region with RWE.

Q. All right. And next I'd like you to provide background of your education and professional experience.

A. (MR. NELSON) Yeah.

So by education I have an undergraduate and graduate degree in urban planning, as you can see from -- from two universities in Minnesota. And at present I am enrolled at ASU in the master of legal studies in law and sustainability.

Q. Tell me a little bit more or tell the Committee a little bit more about that ASU program that you're in.

A. (MR. NELSON) Sure.

So it's a program in the Sandra O'Connor College of Law, it's a -- it's for working professionals mostly that want to advance their, kind of career in legal aspects, but not necessarily become a full-fledged attorney, so contract law, environmental law, water law, energy law, kind of classes like that.

Q. And what is your role in the interconnection project that's before the Committee today?

A. (MR. NELSON) Yeah.

So my role as director is to oversee this project and other projects kind of in the western region.

Q. And what topics are you going to cover in your testimony?

A. (MR. NELSON) In my testimony, I will be giving the company overview, the project overview, and an overview of the interconnection process.

Q. Thank you.

Ms. Comacho, please state your name, employer, and business address for the record?

A. (MS. COMACHO) Of course.

And first, good afternoon, Mr. Chairman and Members of the Committee. My name is Kimberly Comacho, my employer is RWE Clean Energy, and my business address is 101 West Broadway, Suite 1120, San Diego, California 92101.

Q. In what capacity do you work for RWE?

A. (MS. COMACHO) I'm a manager of utility-scale development in the West region.

Q. And next summarize your education and professional experience.

A. (MS. COMACHO) Of course.

I have a B.S. in public policy and management from USC. Professionally, I have worked as an

environmental consultant for 16-plus years and within that time I focused on renewable energy projects for the past 8 years. And this experience includes preparing CEQA and NEPA documents and permitting -- permitting these types of projects.

For the past half year I've been working as development manager with the RWE. And in this role I focus on projects in Arizona, and I'm currently working on seven projects throughout the state in various stages of development.

Q. Talk a little bit more about your role in this project.

A. (MS. COMACHO) Okay. So as development manager for this project, I collaborate with cross-functional staff from within RWE, with our consultants and project stakeholders to obtain information and resolve project-specific issues. This includes, but is not limited to, assisting with site due diligence, environmental and permitting, securing land control agreements, and working closely with our subject matter experts in interconnection engineering and pre-construction.

Q. And what topics will you cover in your testimony?

A. (MS. COMACHO) Today I'll be discussing our

permitting approvals, but I've also been working on this project for a while now, so whatever questions that the Committee has on stakeholder knowledge or the day-to-day process, I can answer those.

Q. Thank you.

Mr. Hazle, please state your name, employer, and address.

A. (MR. HAZLE) My name is Dean Hazle. I work for SWCA Environmental Consultants. My business address is 1645 South Plaza Way here in Flagstaff.

Q. And what is your role with SWCA?

A. (MR. HAZLE) I'm the planning team lead for Northern Arizona and a project manager. I predominantly support renewable energy developer -- developers and utility clients with siting, permitting, and compliance for transmission line projects such as this.

Q. Next, provide an overview of your education and professional experience.

A. (MR. HAZLE) Yeah.

I hold a bachelor's of science in geology from Hope College in Holland, Michigan. I have about 11 years of professional experience focused in environmental and regulatory compliance for various types of infrastructure siting initiatives. I've held technical and management positions in state government consulting and industry,

including a period as the assistant director of the Massachusetts Energy Facility Siting Board.

Q. And have you testified previously before this Committee?

A. (MR. HAZLE) I have. I've testified in six cases since 2022, each of those cases were focused on generation-tie transmission lines of varying lengths, including projects similar to this, in terms of the voltage and the environmental setting.

Q. And what is your role and SWCA's role in this project?

A. (MR. HAZLE) SWCA has provided comprehensive environmental support for both the wind project and the interconnection line here. My role has been to serve as the task lead for the Certificate of Environmental Compatibility. SWCA's been involved in the Forged Ethic Wind Energy project since approximately 2022, mainly conducting specific wildlife use inventories and surveys, avian use surveys, things like that.

We kicked off the CEC analysis in earnest in the spring of 2023. And for the CEC application, we conducted the environmental resource studies that were specifically focused on the interconnection project. And those are contained in Exhibits A through J of the application.

I personally oversaw the compilation of the information contained in each exhibit of the CEC application.

Q. What are you going to cover in your testimony today?

A. (MR. HAZLE) My testimony will cover the virtual route tour, which will orient the Committee for both the project scale and length and the general setting of the area. I'll cover public involvement and the public notice activities conducted for the interconnection project, and then several of the environmental topics contained in the application exhibits.

I'll specifically cover land use, visual resources, noise and interference. My colleague, Mr. Brasier, will cover biological resources and recreation. And, finally, I will offer my opinion as to the overall compatibility of the interconnection project.

Q. Thank you.

Last but not least, Mr. Brasier, please state your name, employer, and business address for the record.

A. (MR. BRASIER) Sure.

My name is Nicholas Brasier, with SWCA Environmental Consultants, located at 1645 South Plaza Way, in Flagstaff, Arizona.

Q. And what do you do for SWCA?

A. (MR. BRASIER) I am an environmental planner and project manager. I've been with SWCA since July 21st. I primarily support federal, state, and local permitting for renewable energy development, and I also lead biological resource investigations reporting and analysis and consultation with U.S. Fish & Wildlife Service, Arizona Game & Fish Department, and other wildlife agencies.

Q. And just so the record is clear, I think you said you started with SWCA July 21st, is that July of 2021?

A. (MR. BRASIER) Oh, yes, July of 2021.

Q. Next provide a summary of your education and professional experience.

A. (MR. BRASIER) Yes.

I have a bachelor of science in environmental biology and a bachelor of arts in environmental studies from Tulane University. I've been working as an environmental planner for four years, and prior to that I had nearly a decade of experience working at state and federal agencies working in vegetation and range management, outdoor recreation development. And these positions included time as the assistant manager of the Methow Wildlife refuge in Washington State and a position on the National Park Service's exotic plant management

team.

Q. And Mr. Hazle testified that you would be covering the analyses of biological resources and recreation; is that correct?

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

Q. Okay. Thank you.

We're going to start off with a discussion of the applicant. For that, Mr. Nelson, please describe RWE Renewables Development, LLC, and its parent company, RWE?

A. (MR. NELSON) Yes. Thank you. RWE is a global, independent power producer, specifically in North America. We have an operating base of about 8 gigawatts, so that's solar, wind, and battery storage projects. We have about 1,500 people scattered across North America, and our entire project pipeline is over 24 gigawatts, so a very large -- we're a very large player in this space. And just with wind -- onshore wind, we have about 5 gigawatts of operating onshore wind at present.

And as you can see, there's a map of North America that show some of our wind projects scattered across the country. A key point here is that we do develop, own, and operate projects, so we are not a -- we are not a develop-and-flip shop; we are in it for the long term. So we do own and operate projects. We operate over 3,000 wind turbines across the country,

which makes up about 30 projects in North America.

And RWE, as a company, has a goal of 25 gigawatts by 2035. So this project is a big component and key for that -- for that goal.

Q. What projects do you have, specifically in Arizona?

A. (MR. NELSON) Yeah.

So focusing here on the state of Arizona, we have the light green projects, so Forged Ethic falls in the light green, that is the in-development project, so there's four there. We also have six solar and battery storage projects that are currently operating, so Mesquite Solar 1 through 3, Tech Park, Valencia, and Iron Horse, those are all operating. And then we have two more, the Mesquite Solar Plus Battery Storage 4 and 5, are under construction and will be commercially operational by the end of this year.

Q. So as I mentioned in my opening, we take the position and I believe it's -- well, I know it's consistent with very long-standing precedent of the Committee and Commission, that the renewable generating facilities associated with an interconnection project are not jurisdictional, not subject to the Committee's review.

However, we recognize there's interest in

providing context for the interconnection project, and so we do have some slides and some testimony here on the wind project itself with that reservation of rights.

So with that background, Mr. Nelson, provide the Committee with an overview of the non-jurisdictional wind project.

A. (MR. NELSON) Sure.

So the wind facility itself is a planned up-to-323-megawatt facility. The major equipment involved, obviously you have the wind turbines, you also have MET towers that collect wind speeds and various wind data. There will be access roads, underground collection lines. There will be a project step-up substation that you'll see multiple times here when we walk through the project. There will be a lay-down yard, it's a temporary lay-down yard that is used for turbine components during construction and there will also be an operations and maintenance facility.

The project itself is located in unincorporated Coconino County, approximately 25 miles north of where we're sitting today. And in terms of the start of construction, we'd be looking at possibly as early as -- as start of construction in 2024, with a commercial operations date as early as late 2025.

MR. HAZLE: Quick note for the Peaks team.

I think the right-hand screen accidentally jumped to slide 30; it should be on slide 28.

Please continue, Mr. Nelson.

MR. NELSON: Continuing with project details, the project is located on CO Bar Ranch land, it's a checkerboard of private and state land. The current land use is an active cattle ranch. I do want to highlight that the ranching activities will continue even when the wind farm becomes operational.

CO Bar Ranch, as many of you know, probably, is managed by Babbitt Ranches; they're a pretty prominent family-owned business here locally. They're involved in livestock, natural resources, and just kind of very involved in the community.

In terms of total acreage, the project covers about 29,106 acres, but of that 29,106, only about 5 percent, even less than 5 percent, will be disturbed by the project. So a relatively small amount of land disturbance for this project.

BY MR. ACKEN:

Q. One of the things that an applicant must do in preparing a CEC application is make an effort to identify existing plans in the vicinity of the project, and Mr. Hazle provided a little more context for that later on, but we thought it made sense now to at least explain

how this project is near other existing renewable energy developments.

So with that intro, Mr. Hazle, could you please describe those?

A. (MR. HAZLE) There are at least four renewable energy projects in planning or construction located on the CO Bar Ranch, north of Flagstaff. As Mr. Acken and Ms. Benally mentioned in their opening remarks, there are several projects that will interconnect to the same APS Switchyard, so each of these four projects that I have shown on the left and right screen are all connecting into the Moenkopi-Cedar Mountain 500kV line through this planned APS Switchyard.

So that's why we thought it was important to provide this establishing context on kind of what the neighboring developments are on the CO Bar Ranch. So farthest west is Forged Ethic, which Mr. Nelson just covered. Moving one step to the west, closer to 180, is a project called the Babbitt Ranch Energy Center. This project sited its step-up substation immediately outside of the APS Switchyard, and therefore, did not go through the CEC process, but it did go through its Coconino County Land Use Entitlements, and it is under construction today.

A step farther to the west is a project called

the CO Bar Solar Complex. As its name implies, this is a pure solar development, whereas the Babbitt Ranch Energy Center contemplates both wind energy and also solar facilities.

Finally, one more step out to the west, we have the 1886 Solar Energy Station, this is under development by Stellar Renewable Power, and Stellar's CEC will be before the Committee on Thursday and Friday. So a fairly large swath of the CO Bar Ranch under various stages of permitting, development, and construction in the vicinity of the Forged Ethic Wind Energy Project.

MEMBER LITTLE: Mr. Chairman?

CHMN STAFFORD: Yes, Member Little.

MEMBER LITTLE: I have a couple of questions: One of the questions I had when I was reading through the application was why the switchyard was located so far. I mean, you're just putting it along the existing Moenkopi line, why it was located 5 miles from your project and I guess because you're also considering -- you and APS are also considering the other projects that are being developed in locating that switchyard?

MR. HAZLE: I was not personally involved in siting the switchyard, but it seems like a reasonable conclusion that maybe some of these other developers were

in their planning stages first and kind of got the choice pick of the substation location. And then the later developers have longer generation-tie lines as a result of coming into the process a little bit later.

MEMBER LITTLE: Okay. And you said this wind project, not the project we're looking at today, but the other one, they sited their step-up substation close enough to the switchyard that they're not going to require a CEC; is that correct?

MR. HAZLE: That's correct, yeah.

MEMBER LITTLE: I'm just curious why the switchyard was linked particularly to this project, as opposed to any of the other projects.

MR. ACKEN: Let me -- let me take a swing at it from a legal standpoint, and then I'll ask the witness panel to clean up any factual claims I make. But as Mr. Hazle pointed out, you have four projects, right, that's his testimony, you have four projects east to west, the easternmost project -- just to clarify one thing in this project, the project before you is the eastern-most project -- and then next to that you have two projects that do not need to go through siting, because they are centrally located and are able to put their project substations immediately adjacent to the proposed switchyard, and thus, do not need a CEC.

Further west is the project you'll see Thursday and Friday, and because it's the furthest-most west, it needs basically the mirror image gen-tie to what is before you today, 5 miles to that centrally located switchyard when you look at the switchyard in the context of all four developments.

And, then, remember, the definition of a transmission line today is a series of above-ground structures and associated switchyards. So you have to have a transmission line in order to site a switchyard. And if you don't have a transmission line, you don't need to site the switchyard. It's only when you're siting a transmission line that you then have the obligation to site the switchyard.

So that's an artifact of the statutory regime, you know, the recent changes don't really affect this fact pattern, because these projects were so close, they didn't need it anyway, but -- when I say "these two," I'm talking about the two, that Babbitt Ranch Energy Center, and what is the other name, the CO Bar Solar, but because they're far less than a mile, but even if they were a mile, under the new statutory regime they would not need authority. And they would not even need authority for -- to build a switchyard; it's only because you have jurisdictional transmission lines that you have

an obligation to site the switchyard.

MEMBER LITTLE: So --

MR. ACKEN: That's the legal answer.

MEMBER LITTLE: -- from a legal perspective, if you guys had not come along and needed to site the switchyard with the transmission line, these other guys wouldn't have had a switchyard to -- to --

MR. ACKEN: They may very well may have had -- oh, I'm sorry -- they may very well have had to build a switchyard, but it would not have had to be reviewed by you.

And -- and so -- and to put it even further in context, if this project were not here today, the project coming Thursday and Friday would have had to site the switchyard.

MEMBER LITTLE: Right, that -- that --

MR. ACKEN: So it's just a function of timing.

MEMBER LITTLE: And I just have one other question that I'm curious about, the solar project here that's shown on the right-hand side of the slide on the left, it -- it's checkerboard also. Is it just going to be built on the private property, but not on the -- do you know, not on the state property?

MR. HAZLE: Yeah, the map -- the map that

we're showing here today is, yeah, showing only solar facilities on private property. This map was taken from the U.S. Bureau of Reclamations Environmental Assessment, which was released earlier this month in August. It does look like there are what we call butterfly crossings across state trust parcels. And those are just easements on the corners of the state trust sections, so that the developer can place access roads and collector circuits, things like that.

MEMBER LITTLE: It's interesting.

How big are each of the checkerboards, how many acres.

MR. BRASIER: I believe there's about 640 acres.

MEMBER LITTLE: Thank you.

BY MR. ACKEN:

Q. Each square represents a section; is that correct?

A. (MR. BRASIER) yes, that's correct.

Q. And a section is 640 acres, generally?

A. (MR. BRASIER) I'm pretty sure that's right.

MR. ACKEN: Thank you.

Member Little, is that responsive to your questions, before I move on I want to make sure I was responsive.

MEMBER LITTLE: Absolutely. Thank you.

BY MR. ACKEN:

Q. Mr. Nelson, in light of -- let's go back to the map shown in the other projects -- in light of these other developments, is RWE associated with them in any way other then you're interconnecting at the same switchyard?

A. (MR. NELSON) No, we are not.

Q. Next I'd like you to talk about the development status for your non-jurisdictional wind project?

A. (MR. NELSON) Sure. So some of the -- some of the key development statuses here we have site control for the wind project; we've completed multiple due diligence studies to which we'll get to a little bit in greater detail further on, but high level, we've completed a critical issue analysis, biological studies, such as avian, bats, eagles, and raptors. We've done cultural resource assessments, and an aquatic resource study up there as well.

We've also completed or we have about one year worth of wind resource data from the on-site meteorological tower, and we did submit to APS May of 2021 our large generator interconnection application, and we are bidding into the APS RFP that is due tomorrow.

Q. Let's talk about the status of your

interconnection process, but I think, first off, provide a high-level overview of the federally regulated large generator interconnection process.

A. (MR. NELSON) Sure.

So, generally, any -- any state in the country when you want to build a renewable project or any -- any generation facility, for that matter, you must submit a generator interconnection application to the utility or in some cases the RTO or ISO. It varies jurisdictionally, but -- so we did that May of 2021. RWE submitted our interconnection application to APS in May of 2021, with the original target date for our System Impact Study to be January of 2023.

That was delayed and pushed out to what we thought was going to be October of 2023, but we have just realized or we were just updated last week that that will be pushed out once again to January of 2024.

Q. So -- and I should have prefaced this by, again, just as a remainder we're providing this testimony for context, but subject to the reservation of rights as to relevance.

So in light of the delays in obtaining a System Impact Study, what steps has RWE taken to address?

A. (MR. NELSON) So we -- RWE, we commissioned a power flow and stability analysis with a third party

called KR Saline. We commissioned that in July of 2023, and then we did an update in August of 2024. And what that -- what that report -- or what that analysis does is it studies voltage and thermal aspects of the grid operations. It looks at a variety of circumstances, including with our wind project in the analysis.

So it includes the generation of our wind project. The total -- total megawatts that it assessed was over 4,100 megawatts, in addition to our 323 megawatts.

Q. And I want to stop you there. That 4,100-plus megawatts, that's a future additional capacity, not -- so that's in addition to what's currently on the system, correct?

A. (MR. NELSON) Correct. That's in addition to what's currently on the system.

CHMN STAFFORD: So, Mr. Acken and Mr. Nelson, that's -- that's the 4,000 megawatt cluster that's already been through the System Impact Study, and I'm assuming that means that this project is in the 2,000 megawatts cluster that's ongoing.

MR. ACKEN: You know, I don't know if Mr. Nelson can answer that question. It's certainly addressed in -- in the report and could be addressed by Mr. Foster of KR Saline, if we need to call him. My

understanding is that, you know, they made judgment calls on, you know, what's expected, based on what's moved past the System Impact Study into the feasibility study, what are real projects, and that's where they come up with the 4100 megawatts, but that's me testifying.

Q. Mr. Nelson, is that your understanding as well?

A. (MR. NELSON) That is also my understanding.

MEMBER LITTLE: Mr. Chairman?

CHMN STAFFORD: Yes, Ms. Benally.

MEMBER LITTLE: No, it's me.

CHMN STAFFORD: Oh, I'm sorry, is that -- Member Little.

MEMBER LITTLE: Just to clarify for the record, you stated that RWE commissioned a power flow and stability analysis from KR Saline. The Staff letter said that they got a preliminary feasibility study. Just for the record, to confirm, Staff actually looked at the power flow and stability analysis, not a preliminary feasibility study?

MR. ACKEN: Thank you, Member Little. It's terminology.

Q. Mr. Nelson, can you confirm that that's correct?

A. (MR. NELSON) That is correct.

MEMBER LITTLE: Thank you.

MR. ACKEN: But yes, the report that

Commission Staff reviewed was entitled, "Preliminary Feasibility Study," but, as you heard the testimony, it included a power flow and stability analysis.

MEMBER LITTLE: Thank you.

BY MR. ACKEN:

Q. Okay. So tell us about the conclusions of that power flow and stability analysis.

A. (MR. NELSON) Sure.

So the ultimate conclusions were that no significant network upgrades are anticipated except for the APS 500kV switchyard that we're here before you today as CEC-2. Also highlighting that the ACC Staff concluded that the project could improve the reliability, safety of the grid, and delivery of power in Arizona.

MEMBER GOLD: Mr. Chairman?

CHMN STAFFORD: Member Gold.

MEMBER GOLD: I have a question, because you're talking about safety of the grid. Lightning hits one of your wind turbines or lightning hits something, what does it do?

MR. NELSON: If lightning hits a single turbine that -- that turbine will just shut down and not be operational. The rest of the project and the turbines are still fully functional.

MEMBER GOLD: What stops the power of the

lightning from going from that wind turbine to another one?

MR. NELSON: I'm not a -- not an electrical engineer by any means, but there are various switches and automatic shut-off switches that -- that if something like -- an event like that occurs, it will automatically just trip off, go from online to offline.

MEMBER GOLD: So, in effect, a circuit breaker of a sort?

MR. NELSON: That's correct.

MEMBER GOLD: Next question, I know you're not a physicist, maybe APS would be a better one to answer this, what if it's something stronger than lightning? What if it's an electromagnetic pulse? Do we have anything that would stop an electromagnetic pulse from traversing our lines and wiping out an entire system?

MR. NELSON: So I won't speak on behalf of APS, but from our standpoint, as I mentioned earlier, we are an operator of wind projects, so we are well aware of -- of those potential issues. So we're -- we're, you know, meeting all the standards that we can meet, and it's something that our operations team is -- is always kind of looking at in how to keep things secure.

MEMBER GOLD: When you say you're looking

at it, what does that mean?

MR. NELSON: Studying it, understanding what technology is out there and just how to best mitigate it. And I'm not on the operations side, so that's about all I can speak to, but it is something we're well aware of.

BY MR. ACKEN:

Q. Is it safe to say in a follow-up to that, that RWE is a leader and wind generation is implementing all appropriate industry standards with respect to safety and reliability of whatever risk, whether natural or human, may be out there?

A. (MR. NELSON) Yes, that is very accurate.

Q. Okay.

MEMBER GOLD: I'm sorry, Mr. Kryder -- I yield to Mr. Kryder.

CHMN STAFFORD: Member Kryder.

MEMBER KRYDER: That was an area I was going to speak to a little later, but since it's come up, let me -- later in the study, and I don't have -- I'm not at my question that I was planning to ask, but it talks about where there are certain standards and regulations and such, which you follow with regard to natural gas and other sorts of transmission lines and crossing them and being properly grounded, et cetera, et cetera, et cetera,

with the end goal and -- and, in fact, in that, as I recall reading it, there were some requirements to basically try to shut the thing down and see what it would do to the natural gas line and would that impact natural gas customers on the left or the right, so to speak.

Following up on Member Gold's question about the EMPs, and your comment that, yes, we're looking at it, are there any national regulations or anything? Is anybody writing anything about EMPs as they impact a project like this one?

MR. NELSON: I will have to follow up with my -- my operations team. I just don't know off the top of my head.

MEMBER KRYDER: The -- obviously, the gen-tie lines that we're talking about are lovely antennae to collect anything in the unfortunate event of an EMP. I mean, it would have the impact that we heard of a lightning strike on one of the turbines, and hopefully you've got an interruption process of some sort.

Would you be able to talk with someone and at least bring me up to speed, I feel like I'm in the dark without a flashlight here, okay?

MR. NELSON: Yes, absolutely.

MEMBER KRYDER: Many thanks.

BY MR. ACKEN:

Q. And just to follow up on Member Kryder's questions, is it -- and we'll get additional details, but is it standard practice and will the interconnection facilities include circuit breakers to trip off the generation at a point where it would not then, whatever issues were associated might be associated would then go on to the larger regional grid?

A. (MR. NELSON) That's right. That's correct.

Q. And that's built in in standard practice; is that correct?

A. (MR. NELSON) That is correct, yes.

MEMBER GOLD: Mr. Chairman?

CHMN STAFFORD: Yes, Member Gold.

MEMBER GOLD: When you say it's built into the standard practice, where do we find that? The reason I'm concerned about it is I've lived through two regional blackouts, and my background is military. And to the best of my knowledge, only one state has employed protection against electromagnetic pulse.

MR. ACKEN: So --

MEMBER GOLD: Arizona is not that state.

MR. ACKEN: Do you prefer, "Member Gold" or "Col. Gold"?

MEMBER GOLD: "Jon" would even be fine.

MR. ACKEN: I want to make sure I'm respectful. Well, Member Gold, a couple thoughts, when we start talking about reliability, I want to also again reserve the legal position that that's not this Committee's review, but I understand the questions and I understand the interest.

I will point out that there are a number of conditions in the CEC that address these types of things that have been developed over time. Standard conditions such as Condition 17, which addresses -- this was actually a request of Commission Staff 15 years ago to make sure that grounding and cathodic protection studies are performed whenever you're parallel to and with 100 feet -- within 100 feet of a natural gas pipeline.

So that's one provision I think is responsible -- responsive to that. I think where you can take a lot of comfort in ensuring that this project will comply with all those federal and industry standards is Condition 15. This is a standard condition that requires all applicants to follow most current Western Electricity Coordinating Council, or WECC, and North American Electric Reliability Corporation, NERC, planning standards, as approved by the Federal Energy Regulatory Commission, FERC, National Electrical Safety Code, NESC,

standards, as well as Federal Aviation Administration regulations.

So Condition 15 really captures the universe of industry and regulatory requirements and best practices with respect to the safety -- safe, reliable integration into the grid.

MEMBER GOLD: Mr. Chairman, may I -- may I continue?

CHMN STAFFORD: Yes, Member Gold.

MEMBER GOLD: I understand what you're saying. The question is, times are changing. We're in a dangerous world at the moment with new technologies and new weapons systems. Are these regulatory commissions keeping up with the times or is this something that we're looking at the -- for instance, in a military terminology, fighting the last war instead of the next war?

I mean, I'm not criticizing your group for what they're doing. What I'm asking is, is anyone looking to take this to the next level, because this is new. This is not something that is 100 years old. Electromagnetic pulse from a solar flare may have happened 150 years ago, and it's rare, and it didn't affect much. We didn't have much electricity at the time, but 40 years ago, our adversaries were developing

weapons you could put in a truck that could create an electromagnetic pulse. Today I'm sure it's been miniaturized to a case that's smaller.

You're doing a very expensive project, very necessary project that I'm in favor of, I'm just saying are we protecting against it being targeted, and that target's spreading, and the reason I'm concerned is in the state of Arizona, the majority of our population relies on electricity for water.

And if you lose electricity, if we have an electrical grid blackout that lasts more than, you know, a lightning strike, a couple of days, you're talking something that could last a couple of years until it's repaired if we don't protect against something like that.

I'm asking that you consider it, you know, for the future for the companies you work with. More important, I'm asking APS to look into it. I know you have a physicist who was supposed to have been notified of this; has he been? I mean, you're an attorney, you're not a physicist; I'm not picking on you. I'm simply saying this should be raised to another level. Maybe it will start at this Committee.

And I don't want to belabor the point because this is something I'd like to see passed quickly, but something that I think should be moved up the chain,

and someone should do it.

MR. ACKEN: I'll give Ms. -- I'll give Ms. Benally an opportunity, but let me -- let me address first, Member Gold, we understand the interest. Again, it's my position that it's outside the scope.

But with that said, and I will say a couple of things, I mean, this -- Mr. Nelson can speak to the -- RWE, as you point out, has a vested interest in making sure this project is built reliably and safely and for the long haul. And so we'll take it as an action item to see, you know, if we can provide additional context for those safety standards, and if I understood, make sure that I'm being responsive to your request is, are those organizations, you know, those myriad of acronyms that I just used, are they looking -- are they continuing to look into these new frontier risks, basically.

MEMBER GOLD: Thank you.

MR. ACKEN: Is that the question?

MEMBER GOLD: Yes.

MR. ACKEN: Okay. We will take that as an action item to follow up with.

MEMBER KRYDER: Mr. Chairman?

CHMN STAFFORD: Yes, Member Kryder.

MEMBER KRYDER: Mr. Acken, I sure appreciate your comment, and you made it very clear and

you've done it several times that this is beyond the scope of this Committee. Condition 17 that talks about the gas transmission lines and such as that, apparently is not beyond the scope of this Committee, because it's a condition there. And it says something about "The applicant shall take appropriate steps to ensure that any material adverse impacts are mitigated."

Hmm, sounds to me like there's -- could at least be, you know, I'm long -- a long way from being a lawyer, I can scarcely spell the name -- the word, but it seems to me that there would be a template that could overlay if -- if the desire was there, that there certainly is the beginning of language there that could say, yes, in fact, this could be under the auspices of the Line Siting Committee, because those 5-mile lines that we have are lovely antennae, as we've established, to take the EMP that Member Gold spoke about, and kind of give everybody a bite of that sandwich.

And it's clearly stated here that there's the concern with the gas pipelines, my goodness, if we're concerned about gas pipelines, I'm certainly a little more interested in the water if I can turn on the tap, following up on Member Gold's -- I yield with that, I'll zip my lip.

CHMN STAFFORD: Thank you, Member Kryder.

Ms. Benally, did you have a response to make? I know maybe -- I don't know if you had something to say or if you wanted to wait until you had your witnesses on the stand to provide comment on those questions.

MS. BENALLY: Mr. Chairman, thank you.

We would like to have our witness respond to the question to the point that he is knowledgeable on this issue. I also would just like to state that the interest that APS has in this case is really related to the switchyard and not necessarily the 5-mile gen-tie line that the applicant is proceeding with. So with that caveat, certainly we've made a note and we will see if Mr. Spitzkoff is able to address that.

On a secondary note, Member Gold, we did take your question from the last sidebar discussion on this issue and have raised it internally, so it did not fall on silent ears. We just have not had the opportunity to follow up on the particular question.

Thank you.

MEMBER LITTLE: Mr. Chairman?

CHMN STAFFORD: Yes, Member Little.

MEMBER LITTLE: May I address the issue just briefly? I am an electrical engineer, and I worked in the utility business for many years. And although the

issues that have been raised here today are -- the issue of electromagnetic pulse is not a new one. The delivery of that electromagnetic pulse is what is new. Lightning is an electromagnetic pulse. And, you know, I think, along with the other issue of cyber security, these -- these things are -- the utilities, in general, are very much aware of the dangers and the potential for some pretty disastrous stuff to happen.

And they're looking at them, they're studying them industrywide. You know, the meetings that I have been to, the things that I have read over the last few years, this is at the forefront of many of the things that are being looked at in the industry.

I think that any particular project -- any particular utility, before they would allow any project to interconnect with them, would make sure that the project is following whatever the latest knowledge and information is about, you know, all of these issues.

CHMN STAFFORD: Thank you, Member Little.

Mr. Acken, please proceed.

MR. ACKEN: Thank you, Chairman and thank you Committee Members for the robust discussion and everyone's perspective. We're going to turn to the jurisdictional facilities, and Member Kryder, you'll be glad to hear I'm not going to have any more objections,

so we're -- we're going to talk about the project. So thank you for your patience with me, and let's dive in.

Q. Mr. Nelson, provide an overview of the interconnection project, including the 5-mile transmission line.

A. (MR. NELSON) Sure.

So the generation transmission tie is approximately 5 miles; it's a 500kV alternating current line that will start at the project substation, and go to the point of interconnection, which is the APS-owned switchyard. It's along the existing Moenkopi-to-Cedar Mountain 500kV transmission line. And the Moenkopi-to-Cedar -- Cedar Mountain is part of the regional transmission system owned by the Navajo Southern Transmission system and operated by APS.

CHMN STAFFORD: Is that the line that runs up to the Navajo Generating Station, the Moenkopi-to-Cedar Mountain?

MR. HAZLE: Yeah. On RWE-3, the final page of that exhibit has a generalized map of the transmission system in Arizona, and that does, indeed, show the 500kV line running from Navajo near Glen Canyon -- the Navajo Generating Station near Glen Canyon.

CHMN STAFFORD: Okay. I see.

And then I can see the Cedar Mountain to

Moenkopi, that's the segment you're talking -- that's the line there, right?

MR. HAZLE: The Peaks team is on it and pulled up that exhibit very quickly.

So here's Navajo Generating Station near Glen Canyon, Moenkopi Switchyard, I believe, and Cedar Mountain Switchyard, and so --

MEMBER LITTLE: Mr. Chairman?

CHMN STAFFORD: Yes, Member Little.

MEMBER LITTLE: That line -- that substation and that line were originally built from Four Corners to go across over into California. And, as you can see, it originates at Four Corners, went through Moenkopi and then over to Mead. And then when Navajo was built, the -- it came into Moenkopi. And then from Moenkopi, the Four Corners -- some of the Four Corners power also came down the other 500kV line that comes down south. Just a little history there.

CHMN STAFFORD: Thank you. Thank you very much, Member Little.

Mr. Hazle, please proceed.

MR. HAZLE: Did that answer your question, Mr. Chairman?

CHMN STAFFORD: Yes, it did, thanks.

MR. HAZLE: I'm all set.

BY MR. ACKEN:

Q. Mr. Nelson, please continue.

A. (MR. NELSON) Yes.

And we are before you, as we mentioned, for two CECs. CEC-1 will cover the interconnection project, and CEC-2 will cover the APS Switchyard.

CEC-2, the APS Switchyard, will be constructed and operated by APS.

Q. Next, describe the route and requested CEC corridor and right-of-way.

A. (MR. NELSON) Yeah, so the -- the route starts, as I mentioned earlier, from the project substation that goes south about 3/10ths of a mile, and then will proceed for approximately 4.4 miles to the Southwest to the APS Switchyard, which is also the point of interconnection.

What we are looking for approval today is for a 300-foot wide corridor, and then within that 300-foot corridor is where we'll site the 200-foot-wide right-of-way.

Q. And the 300-foot corridor and 200-foot right-of-way is specifically for the transmission line; is that correct?

A. (MR. NELSON) That is correct, for the transmission line.

Q. And then for the switchyard, it's all of the

area north of the two existing lines in that private land section that's shown right now with the laser pointer; is that correct?

A. (MR. NELSON) That is correct.

Q. So I have sited many projects, many, many projects before this Committee. I don't believe I have ever asked for a corridor as narrow as 300 feet. I almost always have had applicants request a minimum of 500, usually a thousand feet or more.

Are you confident that the 300-foot-wide corridor you're requesting here will be sufficient?

A. (MR. NELSON) Yes, we are confident.

Q. And why is that?

A. (MR. NELSON) Due to the existing infrastructure that is already out there, we are confident that 300-foot will be sufficient.

Q. And is that because you're paralleling the existing infrastructure.

A. (MR. NELSON) Yeah, because we're paralleling the existing infrastructure.

Q. And -- and what about the underlying landowner, both the Babbitt Ranches and state land, do you think they're supportive of that?

A. (MR. NELSON) Yes, they're absolutely supportive.

Q. Okay. And you've been working with them closely

throughout; is that correct?

A. (MR. NELSON) That is correct.

Q. Next, I'd like you to talk about the purpose and need for the interconnection project.

A. (MR. NELSON) The purpose and need is to allow for the delivery of renewable energy onto the regional transmission system here in the Southwest U.S., adding additional renewable energy to the region is a goal, not only for APS, but also, as I mentioned, for RWE.

The wind project will generate just locally over $30 million in new tax revenue over 35 years, which is what we're assuming for the operational life of the project. And then the landowner payments, obviously, will go to Babbitt Ranches and then the state trust beneficiaries for the state land.

Q. What type of transmission structures will the inter- -- interconnection project use?

A. (MR. NELSON) So we're looking at two structures, one is a steel H-frame and one is a three-pole structure. The steel H-frame is predominantly what you would see in the transmission corridor. So that's where the 500kV transmission lines will be strung upon and then the -- yes, as you can see on the left, and then the middle and the right pictures up on the diagram, those are generally for the turning structures and the dead-end

structures, which are typically kind of near the project substation and the point of interconnection switchyard.

Generally, the max height of these are up to 165 feet, so that would be the highest point, and the clearance from the ground to the line would be about 32 feet. And then in terms of span length between poles, depending upon the pole structure, it's anywhere between 600 and 13 [sic] feet.

MEMBER KRYDER: Mr. Chairman?

CHMN STAFFORD: Member Kryder.

MEMBER KRYDER: Just to follow up on your numbers here, the line specification, the 165 feet and the 32 feet for minimum clearance, is that similar to the existent line that's parallel to it, do you know?

MR. NELSON: I don't know.

MEMBER KRYDER: The reason for my question goes back to the cattle grazing under it, okay? How is that all impacted? And if it's similar to what's already there, you know, we've got a good database that says it works out. But if it's significantly different, that would be an interesting question for me to know.

MR. NELSON: Sure.

MEMBER KRYDER: Okay. Thanks.

Thank you, Mr. Chairman.

CHMN STAFFORD: Mr. Acken, please proceed.

One second, Member Gold, do you have a question.

MEMBER GOLD: No, sir.

CHMN STAFFORD: Okay. Mr. Acken, please proceed.

MR. ACKEN: And, Member Kryder, we're keeping track, we'll follow up on that.

MEMBER KRYDER: Terrific. Thanks. Takes another question off my list.

MR. ACKEN: We try to anticipate as many as we can.

MEMBER KRYDER: Thank you.

MR. ACKEN: Next, we're going to talk about the status of permitting for the interconnection process.

Q. Ms. Comacho, please describe the various permits and the status thereof for the Committee?

A. (MS. COMACHO) Okay. So for permits and approvals, we have four main -- or four main project milestones. These include our approval of a NEPA environmental assessment, prepared for the interconnection project through the Bureau of Reclamation. The Bureau of Reclamation is involved in the project because they're part owner of the Navajo Southern Transmission System, or NSTS, line. We will execute a LGIA with APS and the NSTS members, and as such

as part of the interconnection agreement process Reclamation will need to approve the LGIA.

The EA is currently under preparation and will be submitted once we receive the SIS. So far we've completed the tier 1 preliminary site evaluation and the tier 2 site characterization report. And also the biological evaluation is expected to be finalized in Q-4 of this year.

We'll also need approval of a Certificate of Environmental Compatibility for the interconnection project through the Arizona Corporation Commission, which are here today to discuss. Next, we'll need approval of our State Trust Land right-of-way easement for both the interconnection project and the wind project through the Arizona State Land Department.

For this effort, we have a number of reports in process, both the native plant inventory and cultural resource reports. We have already completed our field studies, and the reports are currently underway.

And, last, approval of a Conditional Use Permit for both the interconnection project and wind project through Coconino County. The CUP package is currently being prepared and we're anticipating submitting it in Q-4 of this year. As a part of this package, we prepared a number of biological resource surveys, including avian

use surveys, aquatic resource assessment, and a number of others, which you'll hear more about later in this presentation. A cultural resources inventory, a visual resources assessment, in addition to a variety of other reports that provide support for these approvals.

Q. As a follow-up to the County entitlement process, I throw this to the panel, is there a need for a comprehensive plan amendment? Many projects, some members of the Committee know, require both a comprehensive plan amendment in addition to their rezone. Does anyone on the panel know whether a comprehensive plan amendment is required?

A. (MR. HAZLE) This project is permitted use in the current zoning district, which is the general zoning district for Coconino County, therefore, no rezone is required for either the transmission line or the wind project. Therefore, no comprehensive plan amendment is required to permit this process through the County.

Q. Thank you.

Next, Mr. Chairman, we're going to switch gears and go to the virtual tour. If you give us a minute to get it loaded, and Mr. Hazle will present that.

A. (MR. HAZLE) All right. And for the Peaks team, I may periodically request a pause. Thank you.

Okay. Let's just pause here on this opening

shot. I just want to orient the Committee with a few features that you'll see in the virtual route tour. The highlighted yellow area is the requested CEC corridor. Rectangle down here is the APS Switchyard. We've included just representative facilities that are typical of 500kV switchyards.

Project substation, and the existing Moenkopi-Cedar Mountain transmission lines, which Mr. Nelson has covered in his testimony. Additionally, there is the Arizona Trail, which crosses the CO Bar Ranch in the vicinity of the interconnection project, and you'll see that sort of weaving its way through this portion of the interconnection -- wind project area, excuse me.

Please play.

Another feature, just for the benefit of the Committee, this gray area is the wind project area, and we do have simulated wind turbines just in the sort of representative preliminary layout that RWE has. This is just an establishing shot of a collection substation with the riser structure going up to that typical H-frame, which, as Mr. Nelson testified, is sort of the default line structure -- tangent structure, as it's sometimes called, where the project is just proceeding straight ahead. The orange dashed line is the Arizona Trail, you

can see it crosses beneath --

Please pause for a second.

-- the Arizona Trail crosses beneath the existing Moenkopi lines, and will cross beneath the interconnection project. I cover that in more detail in the land use testimony.

Please play.

MEMBER KRYDER: Could it be possible to back that up just a little bit? I'd like to see where the actual crossing is.

MR. HAZLE: Sure.

Pause right there.

Yup. So here's the Arizona Trail kind of weaving its way through the CO Bar Ranch. Again, the gray area is the limit of the wind project, and the yellow area is the limit of the interconnection project.

MEMBER KRYDER: So the gray area in the center kind of at -- yeah, that's all going to be full of turbines, eventually?

MR. HAZLE: The gray area is sort of a permitting boundary. The wind turbines, you'll see periodically throughout the flyover. I think there's approximately 100 simulated in this virtual flyover. There will most likely be fewer than 100 in the final layout when RWE finishes its engineering.

MEMBER KRYDER: Okay. Thank you so much.

BY MR. ACKEN:

Q. And, Mr. Hazle, remind us again, what's the project area for the wind project?

A. (MR. HAZLE) Approximately 29,000 acres.

Q. And so less than 100 turbines over 29,000 acres?

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

Q. Thank you. Please continue.

A. (MR. HAZLE) Go ahead and play the video.

So we looked at the regional transmission system map a few minutes ago, and these are the location of the Moenkopi-Cedar Mountain 500kV lines. You can see our interconnection project will hug that right-of-way immediately to the north. Same goes to the APS Switchyard, leaving very little space between the inter- -- between the existing lines and the switchyard facility, obviously observing setback distances -- requisite setback distances for electrical safety codes, but not leaving a gratuitous amount of unnecessary space between the facilities.

Just pause real quick.

For Member Kryder, these little individual small white sticks here, those are the wind turbines and kind of gives you a sense for the spacing between turbines there.

MEMBER KRYDER: Yes, I was looking more about proximity to the trail. I know that's, again, not our purview.

MR. HAZLE: Right.

MEMBER KRYDER: But just interest.

MR. HAZLE: Yeah, yeah. I'll cover that in the land use for you.

Please proceed with the flyover.

All right. You can see this area is quite rural, you know, it's range land for cattle grazing. The nearest residential structure is affiliated with Babbitt Ranches and is actually a -- sort of a ranch camp about 3.8 miles from the project itself. We'll cover this in more detail during the visual resources.

Please pause.

But I do have just a preview of each of the visual photo simulations of the project. So this is from U.S. 180 at a distance of about 5.7 miles, and you can see individual wind turbines, but it is very difficult to see individual transmission structures at that distance from the highway.

Please continue.

And that's sort of a flat open view with a low stature vegetation, typical of the CO Bar Ranch and the San Francisco plateau, generally. This next visual

simulation is directly from the Arizona Trail --
BY MR. ACKEN:
Q. Maybe pause right there?
A. (MR. HAZLE) Yup, pause.
Q. To address Member Kryder's question again about the trail and the proximity to the turbines?
MEMBER KRYDER: That's very helpful. Thank you.
MR. HAZLE: Sure. So I -- in this layout of the wind turbines, they have a setback distance of a quarter mile, which is consistent with Coconino County's Renewable Energy Ordinance. The applicant, RWE, is looking at whether they can increase that setback distance, they're in the process of selecting a final wind turbine model for their facility and will likely use a more efficient, larger model that allows them to use fewer turbines for the same generating capacity.
MEMBER LITTLE: Mr. Chairman?
CHMN STAFFORD: Yes, Member Little.
MEMBER LITTLE: I have a question. Why are they painted white or silver as opposed to, you know, transmission tower structures are kind of brownish-grayish, anybody know?
MR. HAZLE: My understanding is that is a FAA -- I don't know if it's a requirement or if it's just

sort of precedent out of past projects, but it has to do with visibility to aircraft.

MEMBER LITTLE: Thank you.

CHMN STAFFORD: I have a quick question. What is the anticipated capacity factor for the wind farm?

MR. NELSON: If I remember correctly, and I will confirm, but we are around, I want to say, 42 percent NCF, I think. I can confirm it, but I think we're somewhere in that.

CHMN STAFFORD: Thank, yeah, just double-check, please. Thanks.

MR. HAZLE: Continue the flyover.

It just gives a preview of the visual resources section, but you can see the existing transmission facilities and then the simulated H-frames and the simulation of the project substation there.

Our third key observation point is also from the Arizona Trail, but a location that's farther to the north just so we capture both perspectives -- perspectives of what a recreationalist might view the project as, if they were using the Arizona Trail.

MEMBER KRYDER: Mr. Chairman?

CHMN STAFFORD: Yes, Member Kryder.

MEMBER KRYDER: Could you pause it there,

yeah, that's a real good picture.

I recall reading, please correct me if I'm wrong, some of the responses about the trail and so on that went from one agency over to another, and I don't remember the acronyms. But they said especially try to avoid fencing, okay? Is there any fencing going on here or how is that --

MR. HAZLE: The project substation and the APS Switchyard will have security fences around them, but there will not be fences along the transmission line nor fences around the wind turbine.

MEMBER KRYDER: And there are none now for the other line that's already existent?

MR. HAZLE: Correct.

MEMBER KRYDER: Okay. Thanks.

MR. HAZLE: Please play the video.

So, again, you know, the wind turbine facility's visible, but the transmission facilities are kind of back here against the more prominent Mesa Butte in that perspective. From here our virtual tour is just going to pan back out to that initial view of the project, and I hope that provided some establishing context for the Committee, and would be happy to answer any questions about the route or the corridor before moving on to public involvement.

CHMN STAFFORD: All right. We're coming up on an hour and a half mark. I think the court reporter is probably ready for a break. I know I am. So let's take a 10-minute recess and come back at about 3 -- no, 2:40.

We stand in recess.

(Recessed from 2:27 p.m. until 2:46 p.m.)

CHMN STAFFORD: Let's go back on the record.

Mr. Acken, please proceed.

MR. ACKEN: Thank you, Mr. Chairman. There were a few items that we had left for follow-up. We still have to run to ground a couple of them, but one that we can answer after that break is the capacity factor.

Q. Mr. Nelson, can you provide an update?

A. (MR. NELSON) Yes.

So I think I said 42 percent for the capacity factor. I was incorrect, it's more like 33 or 34 percent.

CHMN STAFFORD: Thank you.

MR. ACKEN: Thank you. Chairman, Members of the Committee, we're now going to shift and talk about the public outreach and public notice process for this project. And for that, Mr. Hazle will be the primary

testifying witness.

Q. So, Mr. Hazle, let's start off by just kind of giving an overview of the goals and the process for the public involvement.

A. (MR. HAZLE) The overarching goal of the public involvement process was to introduce the project to key stakeholders, both public stakeholders, regulatory agencies, county leadership, property owners, and tribal contacts in the vicinity of the interconnection process.

To get the word out, we used a variety of print and digital media, advertising approaches. Those are detailed on the left here. And one of the main features of the outreach process was an in-person open house. I'll cover each in more detail on the subsequent slides.

Q. Start off by explaining how members of the public could contact the project team?

A. As a general approach for our outreach process, we included contact information for the project team in all of our public-facing communications, that includes a direct e-mail address for a RWE project manager, a Flagstaff-based mailing address for anyone who is interested in submitting written comments to the project team, a project up -- excuse me -- a project website that was updated routinely as new information became available. A screenshot of the project website is shown

on the right-hand side here with its corresponding web address link. As of a couple weeks ago, the website has received approximately 260 unique visitors.

So each of these means of contacting the project team were included in our direct mailings, newspaper, advertisements, and the website was linked to all of our social media outreach.

Q. How did you inform the public of the open house?

A. (MR. HAZLE) The first, and maybe most important outreach method is a direct mailing that we sent out to a mailing list of key stakeholders. There was about 70 contacts on this mailing list. Those included property owners within 10 miles of the interconnection project, stakeholders such as the Arizona Trail Association and the South Rim Property Owners Association.

As far as public agencies and departments, we had contacts at the Grand Canyon National Park, Kaibab and Coconino National Forest, the U.S. Fish & Wildlife Service, Arizona Game & Fish Department, Arizona State Land Department, and several key contacts at Coconino County.

Our mailing list also included tribal contacts, the Navajo Nation, Hopi Tribe, Havasupai Tribe, Hualapai Tribe, and other key tribal contacts in the state of Arizona.

As an additional follow-up point on our tribal outreach, we did provide just an extra stack of about 20 of these outreach letters to the Cameron Chapter House on the Navajo Nation, the Cameron Chapter is the portion of the Navajo Nation closest to the wind energy project. And the purpose of doing that was really just so that anybody who was passing through the chapter house could take home a copy of the open house invitation letter and learn more about the project that way.

Additionally, members of the RWE project team and SWCA did attend the Cameron Chapter House meeting in late July, and provided a short presentation on the wind project and were available to answer questions about its construction and operation and potential wildlife impacts. So that kind of recaps the open house invitation letter and its, you know, sort of related outreach to the, you know, tribal contacts in the Navajo Nation, specifically.

In addition to that direct mailing, we ran newspaper advertisements in the Arizona Daily Sun, which is sort of the main newspaper in the Flagstaff area. That ran twice leading up to the open house on May 10 and 12. And, finally, we ran a Facebook advertisement which was targeted to the interconnection project with a screenshot of that Facebook ad here on the right, you can

see it just has key event details for the open house itself, and, you know, anyone who clicked on this Facebook ad would be directed to the project website where further information was available.

MEMBER LITTLE: Mr. Chairman?

CHMN STAFFORD: Yes, Member Little.

MEMBER LITTLE: I would just like to go on the record as saying that I live here. I read the paper every day. I never saw the legal advertisements. I don't read the little tiny legal advertisements in the classified ads every day. I would have preferred to see a larger advertisement that perhaps other, you know, anybody just reading the paper would have noticed.

Nobody that I've spoken to in town here saw those advertisements. And I was very disappointed, though not surprised, that there was only one person at the -- at the open house. Thank you.

MEMBER RICHINS: Chairman?

CHMN STAFFORD: Yes, Member Richins.

MEMBER RICHINS: Member Little raises an excellent point, which belies probably the issue of -- of how the statute reads for legal notice. And it's not the fault of the applicant that the notices are noticed how they are. It's the fault of the statute. If we need more robust notice, that's a piece of work that we need

to take up probably with the state legislature within the legal framework.

CHMN STAFFORD: It's actually the rule that requires the publication in the newspaper, and the Arizona Corporation Commission has recently opened up a rulemaking docket to modernize the Line Siting Committee rules, which can't come too soon, you know, they're 50-something years old, and so they need to get with the times. I mean, electronic communication is much more effective than the newspaper.

Similarly, 25 paper copies for an application, these are things whose time has gone. I mean --

MEMBER RICHINS: Thank you, Chairman, for clarifying that. I appreciate it. And we need to make sure that that gets done in that rulemaking, because I think it's a really valid point that she raises here. But it's not the fault of the applicant, but thank you for that.

CHMN STAFFORD: Yes, thank you.

Mr. Acken, please proceed.

MR. ACKEN: Thank you, Mr. Chairman.

Q. Mr. Hazle, is there anything else you wanted to say on this before you talked about the open house specifically?

A. (MR. HAZLE) The Facebook advertisement is geographically targeted to the project area. We use something like a 15-mile radius around the gen-tie itself, trying to capture Facebook and Instagram accounts inside that radius. Advertising metrics from Facebook indicate that we reached approximately 2,300 unique accounts. The advertisement was clicked on approximately 21 times, and did receive a comment directly in the Facebook advertisement, which we were able to reply to.

The slide here indicates there were three comments. It was one commenter leaving two remarks with one reply from SWCA.

Q. And you're going to discuss public comments in a bit more detail, but describe the open house next.

A. (MR. HAZLE) The open house was held at the Doubletree Hotel on Route 66 here in Flagstaff with a conventional open house format, poster boards on tripods with project information, covering both the interconnection project and the wind project. We had a sign-in sheet and comment card available for interested members of the public, and representatives from both SWCA and RWE were present at that event.

As Member Little pointed out, we had one attendee at the open house, and no formal comments were left in the comment submittal box, which is on the

right-hand side of the screen there.

Q. Let's talk about the public comments that you did receive as a result of your pre-application public outreach.

A. (MR. HAZLE) We received comment letters from the U.S. Forest Service, which primarily focused on the Arizona Trail and their management responsibilities for that trail. I'll cover that in more detail in the land use testimony.

We also received a comment letter from the Grand Canyon National Park. That comment did not raise issue with the wind -- excuse me -- did not raise issue with the transmission line, but did pose a number of questions about the potential visual impacts of the wind farm itself.

RWE offered to set up an in-person meeting with Grand Canyon National Park staff, but ultimately couldn't decide on a date or get ahold of Grand Canyon's staff. The RWE team is in the process of finalizing its wind turbine layout, and since the wind turbine layout is a key feature of the wind project's visual impacts, they are waiting to finalize that layout before providing a formal comment reply to Grand Canyon.

Additionally, we received the one comment from the Facebook advertisement, that individual appears to

have confused the Forged Ethic Wind Energy project with a neighboring renewable energy development, which is already under construction, and we -- we pointed that out and offered to speak with that individual if they had further questions.

Q. Thank you.

Next I'd like you to talk about the public notice activities conducted specifically for this hearing, including the statutory requirements for publication and notice to affected jurisdictions, as well as the additional notice that was done pursuant to the procedural order and the applicant's additional efforts.

A. (MR. HAZLE) We filed the CEC application on July 24, 2023, and of course, that kicks off the public notice process for these hearings here today. The first step is to publish the notice of hearing in the newspaper of general circulation. We use the Arizona Daily Sun for the CEC notice, same as we did for the general outreach advertisement ahead of the open house.

That advertisement ran on July 29 and August 1st. The Arizona Daily Sun, of course, is the newspaper of record for Coconino County. The notice of hearing itself identifies a number of locations where interested members of the public could go to read physical copies of the CEC application, if they so chose.

Those locations are the Flagstaff Library Downtown near City Hall, and the East Flagstaff Community Library on the east side of town here. The library branch managers confirmed receipt of the physical applications on July 31st, and that e-mail screen grab on the far right here is their confirmation that those applications were received.

The notice of hearing was also sent to areas of affected jurisdiction by certified mail. The areas of affected jurisdiction are the Arizona State Land Department and Coconino County. The certified mail return receipts are in the public outreach summary exhibit, which I believe is RWE-6.

Q. 4.

A. (MR. HAZLE) 4. Thank you, Mr. Acken. And those are docketed on the file room as well.

Not specifically required by the administrative rules, but as a general practice, we send out a prehearing newsletter to the same mailing list that we used for the open house. That prehearing notification letter screenshotted on the right-hand screen basically says CEC hearings are scheduled, they are coming up, we include the date, time, and place, and a link to the project website where interested individuals could find the remote participation information.

Finally, we had two public notice signs installed for this project, photographed here on the right-hand screen. The public notice signs also included the date, time, and place of CEC hearings, the docket number, the project website. One of them was installed on East Tubb Ranch Road, which is the main access road off of U.S. 89 if you were going to travel back to the wind project area.

The second public notice sign that we had installed is actually located just off of the Arizona Trail, which is why we kind of have this smaller format sign here, given that we're not targeting motorists driving 65, we kind of have a lower-key sign here adjacent to the Arizona Trail.

Finally, we ran another prehearing Facebook advertisement using the same target area to again try and contact individuals in the area about CEC hearings. This was linked to the project website, again, where the remote participation links were available. This ad reached approximately 1,700 unique accounts, was clicked on 21 times, and shared once.

The last feature of our sort of the public notice process is to update the project website with all of the information that I've recapped so far, remote participation links, date, time, and place of the CEC

application -- excuse me, CEC hearings. And also CEC documents or key documents related to the process, so that's, like, the application, the route tour, should -- should one happen, the prehearing conference transcripts, pre-filing conference transcripts, those are all available for direct download from the project website.

Q. Thank you, Mr. Hazle.

That concludes our testimony on public outreach prior to the application and public notice in support of the application. We're going to turn now to the final subject of our testimony of our direct case, the environmental resource analyses conducted in support of the CEC application.

Mr. Hazle, provide an overview of the resource analyses that your team conducted?

A. (MR. HAZLE) The resource analyses we conducted are contained in the CEC application Exhibits A through I. Those are -- oops, excuse me -- shown on the left-hand screen here. I'll cover land use, visual, cultural, and noise. And Mr. Brasier will cover biological resources and recreation resources. Finally, I'll offer my opinion as to the overall compatibility of the interconnection project.

Q. Starting with land use, describe land ownership and jurisdiction in the vicinity of the transmission line

project.

A. (MR. HAZLE) The Committee's heard some of this in the overview testimony, but for the sake of the record, we can provide a quick overview here. The interconnection project and the wind project are both in unincorporated Coconino County. So the County planning and zoning board and County Board of Supervisors approve land use entitlements for this project.

The project is sited on the CO Bar Ranch managed by the Babbitt family here in Flagstaff. This is just a portion of the CO Bar Ranch shown here on the right-hand side. The Babbitt Ranch, of course, is comprised of a checkerboard of state trust parcels and private property. By area, the CEC corridor being the black outlined polygon on the far right here is about 20 percent State Trust Land, 80 percent private property.

The predominant land use in the vicinity of the interconnection project is grazing range land associated with the CO Bar Ranch. The next most prominent land use is utilities, both renewable energy generation and transmission. Earlier we described how there's another wind energy project immediately to the west of the Forged Ethic project, which is already under construction, so you can see the sort of gray hatched area is designated utilities under construction and the green area is range

land for the existing land uses. The County zoning district is general, which is the zoning district that the County uses for rural areas that are not designated for more specific uses. Wind projects and transmission lines are permissible in the general zoning district through the County's Conditional Use Permit, and the County's recently enacted Renewable Energy Ordinance, which applies specifically to utility-scale renewable energy projects.

As Ms. Comacho testified, we're in the process of finalizing our CUP application and plan to submit that in the coming months.

Q. Mr. Hazle, recently a new national monument was designated near the Grand Canyon. Has your team evaluated the potential effects, if any, associated with that designation on the transmission line project?

A. The recent designation of the ancestral footprints of the Grand Canyon National Monument, is a topic that both SWCA and the RWE team are tracking closely. As the Committee members are likely aware that national monument was designated on August 8 and includes tracks of national forest, both south and north of Grand Canyon National Park.

This map excerpt here is directly from the White House press release on the national monument designation

and outlines the portion of the Kaibab National Forest, which was designated as the national monument.

The national monument designation does not include any private property for Arizona State Trust Land. The closest point of the interconnection project to the national monument boundary is approximately six miles, although, as you can see here, the wind project boundary does border the national monument, as does the CO Bar Ranch.

The County land use entitlement process, or CUP process, does address setbacks from lands not otherwise zoned by the County, which would include the national monument. And setbacks from the national monument limits will be addressed to the County's entitlement process.

It's our understanding that the federal agencies involved in the national monument, including the Forest Service and Bureau of Land Management will -- have yet to begin the process of drafting and implementing a monument management plan, which will articulate the specific priorities and objectives that the federal government has for this recently designated national monument.

Q. In preparing Exhibit A and the other exhibits in the application, did you review Coconino County's plans to evaluate future land uses in the area?

A. The main planning document that we review for

looking at planned land use is the Coconino County 2015 Comprehensive Plan. Like all of the comprehensive plans in -- or for counties in Arizona, the comprehensive plan is a policy document that sets aside or establishes what the County's priorities are for long-range planning and land development in its unincorporated area where the County has jurisdiction.

To that end, the comprehensive plan designates various land use prescriptions for unincorporated areas of the county and the land use prescription for the interconnection project is ranchland land uses. The overarching policy objective for this land use designation is to conserve working ranches, unfragmented landscapes, and the county's rural character.

RWE is working closely with the Babbitt family to site the interconnection project in a manner that is consistent with the ongoing use of the CO Bar Ranch for cattle grazing. The comprehensive plan also has a section on energy policies, one of which bulleted here on the left-hand screen is a statement that reliable, clean energy is critical to the health, safety, and welfare of residents in Coconino County. The interconnection project is consistent with these key policy objectives articulated in the comprehensive plan. And as I previously mentioned there are no amendments to the

comprehensive plan required to permit and construct this project.

Q. So Exhibit H to the Commission's rules governing CEC applications requires applicants to identify, "The existing plans of the state, local government, and private entities for other developments at or in the vicinity of the proposed route."

You touched on this earlier in discussing the other renewable energy developments in the project area, but just -- so now maybe just provide a real high overview of those projects.

A. (MR. HAZLE) The other three renewable energy projects are, again, west of the Forged Ethic Wind Energy Project, so on the CO Bar Ranch between Forged Ethic and U.S. 180. Each of these projects are in different stages of planning and permitting and construction.

Again, Babbitt Ranch Energy Center is under construction with CO Bar Solar Complex and the 1886 energy station, both in planning and permitting. Of course, all three of these projects or rather all four of them have the same point of interconnection to the APS Switchyard.

With respect to plans of the local and state government, the way we endeavor to identify those plans is by sending a direct outreach letter to, you know, a

broad stakeholder group of private -- or, excuse me, of public entities, and we just ask them, what -- what -- do you have any knowledge of plans for development in the vicinity of this project?

So the stakeholder list is again repeated here on the right-hand screen. That letter was sent on May 26th, and we received a reply from the Arizona Game & Fish Department. Their reply did not include any known plans for development, but included, rather, sort of a standard set of mitigation measures that the Game & Fish Department tends to recommend on utility-scale energy projects. Mr. Brasier will cover that comment letter in his testimony.

The U.S. Forest Service provided a comment letter that was predominantly concerned with the Arizona Trail. The Forest Service has management responsibilities for the Arizona Trail where the trail is on Forest Service land. So you can see on this map here the Arizona Trail is this darker green trace, and it -- you know, it trends north/south across the extent of this map. Where it crosses the CO Bar Ranch, the Arizona Trail sort of weaves through private sections of property, so the Babbitt family accommodated the Arizona Trail where it crossed their ranchland.

The Forest Service letter did acknowledge that

the interconnection project and wind project would be constructed on State Trust Land and private property where their management authority and responsibilities don't extend. Nevertheless, the Forest Service noted that they're in the process of developing a comprehensive plan for the Arizona Trail, which they anticipate will be released in early 2024.

And the Forest Service noted that as part of that comprehensive plan, they're going to have a planning corridor, which extends a half mile on each side of the Arizona Trail. The Forest Service requested that project facilities be located outside of that planning corridor, to the extent possible. As we've noted in our earlier testimony today, RWE's in the process of selecting newer, more efficient wind turbine, which will allow RWE to use fewer turbine locations than are shown on this preliminary layout here on the right-hand screen.

RWE's going through a process of what they call down-selecting the turbine array. And that basically means only going with the priority turbine locations. As part of that down-selecting process, RWE is looking at, you know, how far they can set back their turbine locations from the Arizona Trail.

This current preliminary layout does show all of the turbines set back a quarter mile from the Arizona

Trail, which is consistent with the Coconino County Renewable Energy Ordinance.

CHMN STAFFORD: Member Kryder, you had a question.

MEMBER KRYDER: One very quick question, Mr. Hazle. When you're setting your structures for the gen-tie line and the trail is now going to potentially have a (inaudible) --

THE REPORTER: I'm sorry?

CHMN STAFFORD: Microphone.

MEMBER KRYDER: Oh, I'm sorry, thank you.

The trail was going to get a corridor of how wide?

MR. HAZLE: One-half mile on each side of the trail.

MEMBER KRYDER: Okay. And your structures will avoid that wherever possible, I mean, you'll get as far away from it as you can or how do you do that?

MR. HAZLE: Yeah, so there's two components here. There's the transmission project, so the gen-tie structure is in the project substation, and then the wind turbines themselves. So the transmission line will have, you know, structured space at that distance that Mr. Nelson testified, approximately 600 feet apart to 1,300 feet, so the transmission structures will

necessarily be within that one-mile planning corridor that the Forest Service is establishing.

MEMBER KRYDER: Okay. So with the 1,300 feet you can pretty easily straddle this thing and not touch it? Okay.

MR. HAZLE: Yes, the conductors themselves will go overhead and will be immediately adjacent to where the existing transmission lines already cross the path.

MEMBER KRYDER: Okay. Thank you very much.

MEMBER GOLD: Mr. Chairman?

CHMN STAFFORD: Member Gold.

MEMBER GOLD: Just a dumb question, what is the Arizona Trail?

MR. HAZLE: The Arizona Trail is a -- I think it's actually a national scenic trail that traverses the whole state of Arizona north to south.

MEMBER GOLD: It says it's on private property --

MR. HAZLE: Well, this segment here -- oh, excuse me?

MEMBER GOLD: Does that mean people are not allowed on it?

MR. HAZLE: The trail through the Babbitt Ranches is on private property. And the Babbitt family,

you know, allows recreationists to cross their ranch on the Arizona Trail through an agreement that the Babbitts reached with the Arizona Trail Association.

MEMBER GOLD: Doesn't seem to be a major issue. Is it used much?

MR. HAZLE: Yeah, it is used. And, you know, I didn't want to make a big issue out of it, I was more just disclosing the comment letters that we received as part of our outreach.

MEMBER GOLD: Okay. Thank you.

MEMBER KRYDER: Member Gold, the Anza Trail that goes down through Tucson and down to the Mexico border is a part of this overall thing.

MEMBER GOLD: Is it used much was my question.

MEMBER KRYDER: Oh, depends on whether you're on horseback, or bicycle or foot. Yes, all sorts.

MEMBER GOLD: Okay.

BY MR. ACKEN:

Q. And if I could follow up on the Committee members' questions, I thought that question about the private land was interesting.

So just to confirm, the Arizona Trail is located on private lands owned by Babbitt Ranches; is that correct?

A. (MR. HAZLE) Yes.

Q. And Babbitt Ranches is supportive of the trail on their lands, otherwise it wouldn't be there; is that correct?

A. (MR. HAZLE) Yes.

Q. And Babbitt Ranches is also very supportive of this project; is that correct?

A. (MR. HAZLE) Yes.

MEMBER GOLD: Seems like everybody is in support.

BY MR. ACKEN:

Q. Thank you.

Please continue.

A. (MR. HAZLE) Overall, the project is consistent with both planned and existing land uses in the vicinity of the transmission -- or excuse me -- in the vicinity of the interconnection project. It would be immediately adjacent to two -- oops -- two existing transmission lines and, you know, represent an overall consolidation of electrical infrastructure.

The project is compatible with the planned land use or, rather, the sort of transitioning from planned to reality of the neighboring energy project to the west. And, finally, the project is compatible with the range land -- range land grazing use of the CO Bar Ranch.

Q. Thank you, Mr. Hazle, for presenting your resource analyses regarding land use that are covered in Exhibits A, somewhat in B, and then H.

Let's talk about what else is covered in Exhibit B, which requires applicants to provide any other studies prepared or obtained in connection with the proposed development. As I mentioned in my opening, that this is a rather robust application, so I'm hopeful that you can establish testimony to support that statement.

A. (MR. HAZLE) In keeping with the requirement of Exhibit B to disclose other environmental studies related to the gen-tie, we included several of the past environmental studies that SWCA's completed since 2020, when we first started studying the area for the wind project.

Many of these studies are focused on the wind project itself, but have project areas that overlap with the generation-tie corridor or outright include the gen-tie corridor. Generally, if a study -- if a study area overlapped this gen-tie corridor, we included it in Exhibit B simply because the information contained in those studies informs the overall characterization of the environment.

So you can see we have a pretty extensive list of past studies. Many of these are specific avian use

studies that we conduct in keeping with U.S. Fish & Wildlife Service, guidance for wind energy projects, or land-based wind energy projects. So we've studied eagle and raptor movements and nests. We've looked at bat patterns in the area. We've done habitat characterizations. We've looked at, you know, wash features, aquatic features that are jurisdictional to the Clean Water Act. We've done native plant inventories, and we've inventoried cultural resources out here.

So the CEC application that we have, you know, focuses on the gen-tie corridor itself, but is really drawing on a deep foundation of environmental studies that have been going on for quite some time to support the wind project overall.

Ms. Comacho touched on the NEPA requirement. That's specifically called out in the requirement for Exhibit B. The U.S. Bureau of Reclamation is the lead agency for the NEPA process, and they will formally kickoff the EA, or what we expect will be an environmental assessment, as soon as the System Impact Study is released. The reason that Reclamation waits for the SIS is because, you know, if there's other transmission system upgrades that are triggered by the project, those are, you know, considered connected to the main project being the transmission line and will be

included in the scope of the environmental analysis for NEPA review.

SWCA is preparing that environmental assessment. We've done as much leg work as we can to get that document prepared ahead of Reclamation's formal kickoff of the process.

Q. Thank you, Mr. Hazle.

Mr. Brasier, you've been very patient. Will you describe for the Committee the biological resource analyses you conducted for the project?

A. (MR. BRASIER) Sure.

So Mr. Hazle listed off a number of the studies we did. Before going out into the field for these, we typically begin with a desktop review. That involves consulting public databases, including the U.S. Fish & Wildlife Service's information for planning and consultation, and the Arizona Game & Fish Department's online environmental review tool. Those reports are used to identify the potential for areas of biological wealth and special status species.

After the desktop reviews, we go out to do our field work, which began in 2020. As Mr. Hazle mentioned, these studies included the wind project, as well as the gen-tie corridor, in most cases. You can see a complete list of them there on the right-hand side of the screen,

and they've been included with the CEC application as Exhibit B.

Q. Mr. Brasier, Mr. Hazle referenced a comment letter received from Game & Fish, and said that you would provide some testimony regarding that, so please do. Please describe Game & Fish correspondence and the further communications with the agency.

A. (MR. BRASIER) Yes, so as previously mentioned, AGFD was included in the mailing list for the project -- excuse me -- and they provided a response to the letter they were sent on July 13, 2023, which is included as Exhibit H-3. The comment letter from AGFD largely focused on the wind facility, but it also included general best management practices for construction.

Many of AGFD's recommended best management practices, such as complying with APLIC guidelines, are incorporated into the mitigation measures identified in Exhibit C.

Q. Now I'd like you to take a few moments and paint the picture of the biological setting of this area for the Committee.

A. (MR. BRASIER) Yes.

The interconnection project is situated in a semi-desert shrub-step landscape, which is interspersed with patches of juniper woodlands and arid grasslands.

There are no perennial surface waters present in the study area or surrounding 20 miles. There is one ephemeral earthen stock tank that intersects the gen-tie corridor, and there are several other stock tanks scattered throughout the surrounding ranchland.

Q. Did you identify any areas of biological wealth in the study area?

A. (MR. BRASIER) There are no designated critical habitats or ESA-listed species in the study area nor are there any important bird areas. The AGFD online environmental review tool identified several wildlife movement corridors that intersect the interconnection project.

The AGFD also noted in their comment letter that the area between the San Francisco Peaks and the south rim of the Grand Canyon is an important wildlife movement corridor for large mammals, such as mule deer and pronghorn. Given that the interconnection project will not involve a perimeter fence along the right-of-way, the gen-tie is not expected to inhibit wildlife movement.

MEMBER KRYDER: Mr. Chairman?

CHMN STAFFORD: Yes, Member Kryder.

MEMBER KRYDER: I have one informational piece. How big is big? How small is small?

MR. BRASIER: In relation to what, sir?

MEMBER KRYDER: In relation to -- I'm looking at page C-13 of Exhibit Charlie, C, where it talks about the Monarch butterfly and some of the things that were caught in the letter from Fish & Wildlife, I guess. And it makes two statements that I found interesting, and thus, the basis of my question. It says, as you just stated, "No areas of biological wealth were identified within the study area." Okay, that's interesting. And then under Monarch butterfly it says, "A relatively small amount of suitable habitat for the Monarch butterfly would be permanently lost, because of the interconnection project."

And then going down below it talks again under burrow-dwelling species, that there would be some permanent losing of relatively small amount of habitat. So that was my question. How big is big; how small is small?

MR. BRASIER: I see. I can clarify it. We'll have some more testimony coming up on the Monarch butterfly shortly, but in general, when we refer to a small amount of permanent habitat loss, we're speaking specifically about infrastructure that would be on the landscape over the 35-year operations period, so in this case for a gen-tie line permanent impacts would typically be limited to the footprint of the gen-tie structures

themselves.

MEMBER KRYDER: And as we were looking at the virtual picture of it going through, under the existing lines and I'm making a leap to assume, please correct me if I'm wrong, the same would take place under the proposed gen-tie line, it would -- it looked like an end loader went through and took all of the vegetation out, and so on, and then maybe -- and then I got some confusing information. It said that there would be, after that was done, then there would be some native grasses put back or something in an attempt to not scatter the weed seed from hither to yon, this -- play some of that for me.

MR. BRASIER: No, that's correct. So typically we would think of those as temporary construction impacts. So during construction there will be much more grading and clearing to provide work sites for the structure installation, as well as conductor stringing and other activities, and that will certainly remove a larger amount of vegetation. But you're correct that after construction the plan would be to rehabilitate and revegetate those temporarily disturbed areas. We usually use a native weeds -- weed-free seed mix that would help reestablish that native vegetation.

It may look a little bit altered as you saw

with the existing transmission lines, but it certainly provides some vegetation, and over time you would expect that to recover.

MEMBER KRYDER: I do some hunting out in that area under some transmission lines, I'm not even sure which one, or which ones, and mesquite, of course, is the hot dog that seems to jump in and want to take over. So whoever's managing that section comes through from time to time and clears the mesquite out. Is that all a part of this sort of a plan too, that on -- you're looking at, what, a 30-year line I believe we've talked about, will somebody in 10 years say, "Well, it's time to go out and clear the mesquite and some of the other trash and so on"? What's the long -- longer term than immediately getting the line in place?

MR. BRASIER: Sure.

RWE might be able to speak to some of those requirements better. I know vegetation management around transmission lines is regulated to a certain extent to provide clearances for fire safety and then, of course, typically implement noxious weed control measures and the sort, but if you want to add anything to that.

MR. NELSON: Yeah, I guess I don't have much to add, but as -- as the long-term owner/operator that would be -- that would fall under the RWE, kind of,

to do over the long term is to do exactly what was just said.

MEMBER KRYDER: And there are regulations that say you've got to keep it down at this level or is it just common sense or what -- how does that work?

MR. NELSON: I think we're confirming if there is specific in the ordinance or not. We'll confirm if there's specific requirements in the ordinance.

MEMBER KRYDER: Thanks so much. I wondered what caused the guys to get out there and they'd cut the mesquite and lay it aside and I take it home and burn it, heck of a deal.

MR. BRASIER: Sure. In this case it might also be helpful to note that the existing area under the proposed gen-tie route is currently pretty sparsely vegetated. There is some pinyon-juniper woodlands in the surrounding area, but I wouldn't expect much in the way of tree removal or large vegetation to clear out space for this gen-tie.

MEMBER KRYDER: Thank you. Thank you so much.

MR. BRASIER: No problem.

MR. ACKEN: Thank you, Chairman Kryder. And I think -- I don't want to jump ahead in the presentation too much, but when we get to the discussion

of visual resources and Mr. Hazle's testimony and some of the simulations and photos, we'll again show what the vegetation looks like in this area, as opposed to some more heavily forested areas that you would have to take out more vegetation.

Q. I wanted to follow up, I think, and it's a great segue, on the question about Monarchs. Talk about endangered species generally and then Monarchs as a candidate species.

A. (MR. BRASIER) Sure.

So the interconnection project is either outside the known range of listed, threatened, and endangered species or it does not contain suitable habitat for them. ESA-listed species will also be evaluated as part of the NEPA process.

Monarch butterfly, which is a candidate for ESA listing, may occur in the study area. Milkweed, which is important for egg laying for Monarchs, as well as for foraging resources have been observed in the area. As we discussed, there would be some impacts during construction from vegetation clearing, but we would not expect this to impact Monarchs at a population level, although individual Monarchs could be impacted by that. But we would mostly expect individual Monarchs to shift their habitat use to nearby undisturbed areas.

Q. What about bald and golden eagles?

A. (MR. BRASIER) So the interconnection project is within the year-round range for the golden eagle, and foraging habitat for the species is present. The golden eagle has been observed in the study area during the avian use surveys and other investigations for the wind project.

It's important to note that most of Northern Arizona is considered year-round range for golden eagles, however, we generally expect more golden eagles in this area during the fall and winter. As for bald eagles, the study area does not contain any characteristic nesting or roosting habitat, which typically consists of large trees or cliffs within one mile of large open bodies of water.

However, bald eagles have been observed in the study area during the avian use surveys for the wind project. And secondary food resources, such as carrion may be present in the study area. Overall, bald eagles are less likely to occur in the study area than golden eagles are.

And with the implementation of mitigation measures, such as the APLIC guidelines, which will be described on the next slide, there's a low potential for the interconnection project to impact either the bald or golden eagle.

Q. Let's discuss those mitigation measures. You touched on them earlier in response to Committee member questions, but I'd like you to go into more depth on what those proposed measures are.

A. (MR. BRASIER) Yes. RWE plans to implement mitigation measures, such as pre-construction burrow surveys and migratory bird nest surveys, installing wildlife escape ramps and trenches. And as I mentioned, designing the transmission line in accordance with APLIC guidelines, as well as a number of other construction best management practices listed in Exhibit C.

Q. With the implementation of those mitigation measures and the resource analyses you conducted, what are your conclusions with regards to this project's compatibility for biological resources?

A. (MR. BRASIER) The interconnection project is not likely to significantly impact any special status species or areas of biological wealth. It's not expected that the gen-tie line would inhibit wildlife movement through the area. And other than the wildlife linkages identified by AGFD, there are no other areas of biological wealth in the study area and surrounding vicinity.

As I mentioned, RWE plans to implement appropriate mitigation measures, including construction

best management practices, therefore, the interconnection project is compatible with biological resources.

MEMBER LITTLE: Mr. Chairman?

CHMN STAFFORD: Yes, Member Little.

MEMBER LITTLE: I just have a question just for my own edification, what are accipiters and buteos?

MR. BRASIER: Oh, sure. I'm the resident bird nerd, so I'm the right person to ask. Accipiters and buteos are basically a subgroup of raptors or large birds of prey. So accipiters would be small falcons like prairie falcons or American kestrels. And buteos are large round-winged hawks, like a red-tailed hawk or a Swainson's hawk, something like that.

MEMBER LITTLE: Thank you.

MR. BRASIER: Uh-huh.

MR. ACKEN: Today we learned, right?

MEMBER LITTLE: Yup.

MR. ACKEN: Thank you, Mr. Brasier.

Q. Turning back now to Mr. Hazle. I'd like you to describe your evaluation process for visual resources.

A. (MR. HAZLE) The visual resources analysis follows a typical three-step process, you know, initially we kind of canvassed the area to look for, you know, what sensitive views or viewers might be present in the area. We also characterized the visual setting of the, you

know, vicinity around the project area. And then we physically go to those sensitive viewing locations and take photographs facing toward the project of -- to capture sort of existing conditions and then use computer modeling software to develop realistic scaled models of the project facilities superimposed on those existing conditions photos to give the viewers a sense for, you know, what the project will look like when it's actually constructed in the landscape. We use those photo simulations as the basis for our visual resources analysis in Exhibit E.

Q. Mr. Hazle, before you dive in and present the simulations, I'd like you to describe to the Committee and for the record what is contained in exhibit that has been marked RWE-8, which is entitled, "Technical Memorandum," and it's dated August 23rd, 2023.

A. (MR. HAZLE) Thank you, Mr. Acken.

RWE-8 contains an update to Exhibit E. In preparing for CEC hearings, I identified two corrections that needed to be made, one to our visual resources photo simulations and one to our cultural resources analysis.

After identifying those corrections, I worked with our resource leads to update the photo simulation and revise the cultural resources section to note those updates. For the cultural resources portion, I

personally called the State Historic Preservation Office staff to notify them that, you know, what was contained in the SHPO consultation letter had a minor correction that needed to be made. We'll cover that in more detail in the cultural resources testimony. But the SHPO appreciated the update and did not have any concerns about the error.

So that's contained in RWE-8. Happy to answer any questions about it, but the testimony that I'll give on visual and cultural resources will be inclusive of the updates described in that exhibit.

Q. And just as a reminder for the Committee, it's a bit odd that Exhibit E includes both visual and cultural resources; is that correct, Mr. Hazle?

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

Q. All right. Please continue with your discussion of the visual simulations.

MEMBER RICHINS: Chairman?

CHMN STAFFORD: Yes, Member Richins.

MEMBER RICHINS: I was just wondering if I could get a quick clarification. I know I missed your opening, Mr. Acken, and I'm assuming that you probably referenced this in your opening, but there's several exhibits that are labeled "Zeus," and I'm assuming that's a former working title for this project, but there's

still dangling participles of that within the project record, and I just wanted to make sure we got on the record the clarification that the exhibits labeled "Zeus" were indeed for Forged Ethic that we're reviewing today.

MR. ACKEN: Member Richins, thank you for catching that. It's funny, you know, I started calling this project Zeus initially, but now it's been Forged Ethic for so long, I glide right by that. So no, I didn't address it in my opening, nor did I ask one of my witnesses to explain that.

Q. So I would ask at this time for the RWE team to explain the name change and what I think is a pretty cool story for the name "Forged Ethic."

MS. COMACHO: Sure.

MEMBER RICHINS: Thank you.

MS. COMACHO: So the project -- the project name changed before my time, but it's my understanding that, in conversations with the landowner, their family motto is "Forged Ethic." So it was requested that we change the name to the Forged Ethic, and so we went ahead and did that. So it really has a great history with the family, and with the project, so --

BY MR. ACKEN:

Q. Thank you, Ms. Comacho.

And Forged Ethic it's basically the ranch

slogan, if you will?

A. (MS. COMACHO) Yeah. The family motto and ranch slogan.

Q. Family motto. Thank you.

MEMBER RICHINS: Very good. So for the record, all exhibits labeled "Zeus" were the working title of the original, but all of that research is indeed applied to the Forged Ethic project; is that correct?

MS. COMACHO: That's correct.

MEMBER RICHINS: Thank you.

MR. ACKEN: Thank you, Mr. Richins for helping us with the record. Yes, we can -- it's Forged Ethic, formerly known as Zeus. We will refer to it as Forged Ethic. But no, thank you so much for making sure our record is clear on that point.

MEMBER KRYDER: Mr. Chairman?

CHMN STAFFORD: Yes, Member Kryder.

MEMBER KRYDER: Just a follow-up on Mr. Richins' comments about the name. I found it a fascinating name. And do you know anything -- I know this is a long way from a gen-tie line question -- what are we trying to say? Are we forging as in I sign a bad check or are we forging as in making horseshoes on a -- on a forge? What's the background? Do you have any idea.

MS. COMACHO: No, unfortunately, I don't have as much background on this as the original developer, but I could certainly ask that question.

MEMBER KRYDER: You don't need to bend the needle and try to find out, but if you do find out, I would be interested. I saw that and I saw, "My goodness, this is one I would throw in the tank, I wouldn't use." But Zeus sounds a whole lot better to me.

Thanks, Mr. Chairman.

MR. ACKEN: Thank you, Member Kryder.

I will avow that it is forged as in forged in steel and associated with the long-term ranch -- ranching use of the area, rather than forging in the negative connotation. But I'll get someone to confirm that on the record for you. But I hadn't thought about that before. That's funny. Thank you.

Q. Okay. Mr. Hazle, please -- please discuss the visual simulation.

A. (MR. HAZLE) Just a quick explanation of the visual setting for this project area. We're out here on the San Francisco plateau, that's the sort of broad -- broad name for the land between the San Francisco Peaks and the Grand Canyon. Sort of the characteristics of that area are small, shallow canyons, rounded hills, flat or gently rolling plains, and

volcanic escarpments.

Additionally, if any of the members are familiar with this area, there's a number of cinder cone land features out here on the CO Bar Ranch that are, in my opinion, pretty cool looking at least. There's a generally low stature vegetation, as Mr. Brasier testified, mainly grasses and pinyon-juniper forest.

The three visual simulations we picked represent recreational views from the Arizona Trail, so both KOP-1 and 3 both focus on, you know, how the project might appear from the Arizona Trail, both facing north and sort of east/southeast, and then one location from U.S. 180, which would represent sort of what drivers on 180 might see as they pass through this area.

The viewing distances from the transmission line are on the left-hand screen here ranging from a quarter mile at KOP-3 to 5.7 miles from U.S. 180. The first key observation point is from the Arizona Trail facing east/southeast. You can see one of those cinder cone features that I mentioned earlier, this is referred to as "Mesa Butte." And the transmission line will pass kind of in front of Mesa Butte here. So even though the structures would be in an open area and would not be screened by intervening vegetation, the structures would be quite difficult to discern against the darker

background of Mesa Butte here.

So overall our conclusions for the KOP-1 photo simulation are that there would be a weak degree of contrast created by the project and low visual impacts.

CHMN STAFFORD: Now, that was the view from the trail?

MR. HAZLE: That's the first of two, correct.

CHMN STAFFORD: Okay. Now, those are the wind turbines you're showing, right? What's the distance of those from the trail in this shot?

MR. HAZLE: I might have that in the application here, if you bear with me for one second. I can look that up on my computer on break, but I don't have that information at hand.

CHMN STAFFORD: Okay. Because I was wondering, because I think I could have sworn I just heard that the trail association's working on a plan and they're going to have a setback, I think a mile on each side of the trail, that obviously, it's not going to apply to the transmission line because it has to cross it. And it's going to cross where the other line's already crossed.

But I was just curious about, like, if that would affect the placement of the turbines, and then if

that -- was that taken into consideration for this photograph or not?

MR. HAZLE: Yeah, I understand. This photograph is -- uses a preliminary layout of the wind turbine array. And the preliminary layout uses a quarter mile setback from the Arizona Trail, so half-mile corridor on each side -- or, you know, around the trail with quarter mile on each side.

That's what the Coconino County Renewable Energy Ordinance requires. The Forest Service is developing a comprehensive plan that includes that wider half mile on each side of the trail. And as RWE finalizes its updated turbine array, they will attempt to set those turbine locations outside of the Forest Service-requested half-mile setback.

CHMN STAFFORD: Okay. So that came after this was projected, though --

MR. HAZLE: Thank you.

CHMN STAFFORD: -- so it seems like these ones are probably likely a quarter mile from the trail, then?

MR. HAZLE: Yeah, what you're seeing in the CEC application and on the screen is a quarter mile from the trail.

CHMN STAFFORD: Thank you.

BY MR. ACKEN:

Q. And, Mr. Hazle, I think you got this, but I want to make sure the record is real clear on this point, because I was confused initially. The Arizona Trail planning corridor is how wide?

A. (MR. HAZLE) One mile wide.

Q. So that's a half mile on either side of the trail; is that correct?

A. (MR. HAZLE) Yes.

Q. Okay. Thank you.

And then when you're describing the simulations, there's a couple things I want to follow up with, one, you know, there was the question from Member Kryder regarding the vegetation and the biology discussion. Is the vegetation that will be shown in these simulations representative of the vegetation in this area?

A. (MR. HAZLE) It is, yeah. This is grasslands with low stature -- Mr. Brasier, what would you call these?

A. (MR. BRASIER) Those look like juniper from here. It's hard to tell.

A. (MR. HAZLE) And that's very typical of the vicinity of the interconnection project.

Q. Okay. Please continue.

A. KOP-2 is from U.S. 180, so it's sort of a key

travel route in the area and, you know, we endeavored to find a location along U.S. 180 where the project would be visible. So we have a viewing distance of about 6 miles here, and, you know, for the Committee's benefit, you know, we have the sort of regular scale of the project area where you can see, you know, wind turbines on the horizon, and then we have sort of a zoom-in capture area that goes in about 50 percent and just tries to highlight, you know, the difficulty of discerning individual transmission structures.

My hope here was that you would be able to actually see some of the individual transmission structures, but I guess you need to be on a laptop screen and really zoom in on it. But there are structures simulated into the horizon here.

Our conclusion for travel route viewers on 180 is that, again, the interconnection project would be difficult to discern at this location, and would have low visual impacts. The other factor that's important to consider for travel route viewers is their speed that they're traveling down the highway, as we call that like a short duration view, and that makes it even more difficult to sort of pick out individual features on the horizon at farther distances.

The third, and perhaps most interesting

simulation, is from the Arizona Trail facing north, and this is right where the trail would cross beneath the existing Moenkopi lines and will cross beneath the Forged Ethic gen-tie. So you can see we have the Moenkopi structure here and then a simulated H-frame for the transmission structure -- excuse me -- for the interconnection project. And then a little farther out on the horizon are simulated structures for the collection substation.

So at this location the new features would be plainly visible and would, in fact, be skylined, as we would call that, so it's like the structures are visible against the horizon, which makes them a little bit more apparent. However, given that there are already transmission structures in the viewshed from this portion of the Arizona Trail, we feel that we've minimized visual resources by siting the interconnection project as close to the existing Moenkopi line as we could.

So, overall, at this location we would have a moderate degree of contrast and moderate visual impacts, however, the new structures would appear similar to the existing transmission infrastructure.

Q. What are your overall conclusions with respect to the project's compatibility for visual resources?

A. (MR. HAZLE) The interconnection project would be

similar in form, scale, and color as the existing Moenkopi-to-Cedar Mountain transmission line structures. From the vantage points that represent sensitive views described in the CEC application, we would have low visual impacts and the interconnection project overall would be compatible with visual resources.

Q. Thank you.

Let's turn next to the other resource that's addressed in Exhibit E, cultural resources, and describe your evaluation.

A. (MR. HAZLE) The CEC application, Exhibit E, contains a summary of past cultural resources inventories within one mile of the CEC corridor. So that's that one-mile study area. Table E-2 of the CEC application identifies all of the eligible cultural sites within that one-mile study area and the distances between those sites and the CEC corridor.

The correction I mentioned in Exhibit E was that, as filed in the application, I mistakenly noted that a site was 500 feet outside of the CEC corridor when, in fact, it is just inside of the CEC corridor. RW --

CHMN STAFFORD: Corridor or study area?

MR. HAZLE: Corridor. So the corridor being the black area -- black polygon that we're

requesting approval for today.

CHMN STAFFORD: Okay. That's -- oh, for the switchyard, because that's a bigger corridor than 300 feet for the line, correct?

MR. HAZLE: Yeah, correct. The corridor gets a little wider here at the west end.

So there's one site inside of the CEC corridor, and RWE has confirmed that they plan to avoid that site through project design. So they will place transmission structures and other permanent facilities outside the limits of that known cultural site. The other important feature to note about the resource study for Exhibit E here is that 100 percent of the CEC corridor has been surveyed to modern standards for cultural resources.

So within the corridor we are requesting today, we have an extremely high degree of confidence in the location and presence of cultural resources, and have a high degree of confidence in our ability to say that we will avoid cultural resources for this project.

It's also worth noting that cultural resources will be -- a cultural resources report will be submitted to ASLD as part of the right-of-way application. And prior to issuing a right-of-way, the ASLD will consult with the SHPO prior to taking that

action. So SHPO will see this project multiple times from different contexts.

Q. And, Mr. Hazle, before you get to your conclusions, talk about Exhibit -- what's been marked RWE-9, which is SHPO correspondence.

A. (MR. HAZLE) We submitted a SHPO consultation letter on July 21, shortly before filing our CEC application. The SHPO has a checklist for, you know, information that they want as it relates to CEC applications, and we packaged all that information up into a letter, sent it to their office for review.

This letter contains the same information as was in Exhibit E of the CEC application. The only difference is that when we send the SHPO consultation letter, we actually include maps of where those sites are, whereas in the application we do not include maps of cultural resources.

The SHPO replied to our consultation letter a couple of weeks ago in August, noting that they have no concerns with the CEC being issued, and stating that they look forward to reviewing the full cultural resources report as a portion of the ASLD right-of-way process.

Q. So what are your conclusions with respect to the project's compatibility for cultural resources?

A. (MR. HAZLE) Our conclusion is that the

interconnection project is compatible with cultural and historic resources. I spent a lot of time talking about the one site -- the one cultural site that's inside of the CEC corridor. I forgot to mention that there are no historic sites or historic era properties inside of the CEC corridor.

So we look at archaeological sites, historic sites, and historic structures, which is just that one cultural archaeological site. Overall, the project will avoid direct or indirect impacts to historic properties and the project is consistent with cultural resources.

CHMN STAFFORD: And what is that cultural site that is known that's is going to be avoided what actually is it?

MR. HAZLE: I think I can say it's an artifact scatter, prehistoric, so you know, related to the, you know, ancestral Native American tribes' use of the area. Certainly the location and details about it are restricted information that, you know, we provide to the SHPO but try and keep a tight lid on.

BY MR. ACKEN:

Q. And, Mr. Hazle, why is that? Why is that information not provided in a public forum?

A. (MR. HAZLE) The goal is to keep the location of cultural resources confidential so that they're not

vandalized or taken or messed with. I think it's probably codified in the Arizona State -- drawing a blank on the statute's name. It's the law, though, it's not just a best practice. So that's what we follow.

Q. Let the record reflect Mr. Hazle's not a lawyer, but he doesn't need to be. Thank you. Thank you, Mr. Hazle.

Mr. Brasier, going back to you, talk about your evaluation of recreational resources.

A. (MR. BRASIER) Sure.

So as part of the land use inventory, we looked for any designated public recreation resources, and the only facility we identified in the study area is the Arizona National Scenic Trail or Arizona Trail, which we have discussed quite a bit so far.

As we previously mentioned, this trail is open to hikers, bikers, and equestrian users. Beyond the trail there are also dispersed recreation opportunities in the study area, such as off-highway vehicle use, hunting, and sightseeing.

The interconnection project would remain available to the public for recreation after construction, but some temporary access restrictions to work sites would be necessary during construction for public safety.

The interconnection project transmission line would span the Arizona Trail, and impacts to trail users would be minimized by avoiding work sites that overlap with the trail, and by implementing safety measures, such as trail signage and temporary detours around construction sites.

And, in addition, the applicant has no plans to develop any recreational opportunities in the area.

Q. Thank you, Mr. Brasier.

Back to you, Mr. Hazle, for the discussion of noise and communication interference.

A. (MR. HAZLE) For noise, audible noise from the project, we think about construction noise and operational noise, and then as a separate topic signal interference, which is also grouped into Exhibit I.

The nearest noise sensitive receptors would be recreationists on the Arizona Trail. The nearest residential facility, I guess you would call it, is referred to as the TUBB Ranch Camp, and that is a ranch-hand facility house, I guess you would call it, that's affiliated with the CO Bar Ranch. It's about 3.8 miles away from the project.

Construction noise would be temporary and occur primarily during daylight hours. Operational noise would be limited to the sort of corona discharge crackling

noise. With respect to the corona discharge audible noises during operations, this project would be immediately adjacent to two other 500kV transmission lines, and, you know, because of that fact, adding a third line of, you know, similar magnitude of noise would not result in a significant increase to the audible noise conditions.

So notwithstanding the quite far distance to permanent noise receptors, the operational noise to users of the Arizona Trail would be minimal.

MEMBER KRYDER: Mr. Chairman?

CHMN STAFFORD: Yes, Member Kryder.

MEMBER KRYDER: I have one question. I should have raised it earlier, I think, and I don't recall reading it in the materials we received. Are there any battery series involved in this? I know this is not a gen-tie question, but it's just curious to me.

MR. NELSON: No, there are no batteries planned.

MEMBER KRYDER: Okay. Thank you.

MEMBER LITTLE: Mr. Chairman?

CHMN STAFFORD: Yes, Member Little.

MEMBER LITTLE: Does anybody know whether there have been studies done about the corona discharge crackling sound and the operational noise whether it

bothers cows?

MR. HAZLE: I'm not aware of any studies about, you know, whether cows are sort of scared or spooked by transmission lines. You know, I guess I would just repeat that, you know, the RWE team is working closely with the Babbitt families to develop a project that's consistent with the ongoing use of the ranch.

MEMBER LITTLE: Yeah, I would imagine if they had any anecdotal information they would pass that along. Thanks.

CHMN STAFFORD: Do you know, how long has the Babbitt Ranch been there?

MR. HAZLE: I only know this because of the other project we're doing, which is called the 1899 interconnection project.

MR. ACKEN: 1886.

MR. HAZLE: Excuse me, we're in the 1899 room.

1886 is the date of the CO Bar Ranch founding or initial operation.

CHMN STAFFORD: Right. And the transmission lines have been there since at least, what, the '60s?

MR. HAZLE: '70s, I think I heard my colleague say.

MEMBER LITTLE: '60s.

CHMN STAFFORD: So I guess we can probably reasonably infer that there's not an adverse impact from those two 500kV lines from the cows that have been ranging there since before the lines were installed, and if anybody is in a position to make a call about whether there's an impact to the cattle, it would be the ranchers at the CO Bar Ranch.

And seeing how they're in support of the project, it seems unlikely that those lines would have any effect on the cattle whatsoever. So I'm just going from the -- the general to the specific.

MEMBER KRYDER: Mr. Chairman?

CHMN STAFFORD: Yes, Mr. Kryder.

MEMBER KRYDER: Wikipedia knows it all, and it says "Do power lines affect cows?" Not cattle, cows. "Researchers who reported last year that most cows and deer tend to orient themselves in a north/south alignment have now found that power lines can disorient the animals." Ain't that something. Thank you.

MR. ACKEN: I'm not going to ask the chairman to take administrative notice of Wikipedia.

CHMN STAFFORD: I don't intend to. Thank you.

BY MR. ACKEN:

Q. I will -- this is a really interesting conversation, and I think the Committee's on point with it, but I do think it's worth just confirming for the record, have the landowners expressed any concerns with respect to the proposed facilities associated with this project, how that might impact their cattle grazing operations?

A. (MR. HAZLE) No, they have not.

Q. Okay. Thank you.

I think that brings us to the conclusion of the environmental testimony. And so, Mr. Hazle, I would like you to kind of sum it up for the Committee and provide your overall conclusions with respect to the project's environmental compatibility.

A. (MR. HAZLE) When looking at the total environment of the area, the interconnection project would have minimal effects to existing and planned land uses, recreation, visual, cultural, and biological resources. The project is consistent with the local zoning designations and land use planning documents, including the Coconino County Comprehensive Plan.

In my professional opinion, and based on the analysis contained in the CEC application, the interconnection project is environmentally compatible with the factors set forth in Arizona Revised Statutes

Section 40-360.06, and is consistent with previous projects approved by this Committee.

MEMBER LITTLE: Mr. Chairman?

CHMN STAFFORD: Yes, Member Little.

MEMBER LITTLE: I did have one question. I noticed that one of the things that the Grand Canyon National Park mentioned in their public -- or in their comment had to do with lighting. And since it's out in the middle of nowhere, I'm -- there hasn't been any mention during this hearing about lighting, and what it says here on page J-4 is, "The applicant is coordinating to provide Grand Canyon National Park with further information, completed visual analyses, and planned visual mitigation for the wind project."

And I guess I would just -- my question is whether or not -- I believe I heard you mention that the setting up a meeting with them has not yet been possible, you're still working on that; is that correct?

MR. HAZLE: That's correct, yeah. The transmission structures are below the FAA height limit for requiring, you know, a blinking light on top of the transmission structures, that's for the gen-tie. For the wind turbines themselves, RWE plans to use a system called the Aircraft Detection Lighting System. It's a newer technology that basically uses radar to detect when

aircraft are in the vicinity of the interconnection project, and it would only turn on the turbine blinking lights when that ADLS system identifies an aircraft in the immediate vicinity. So that really tries to minimize the nighttime lighting impacts of the wind turbines.

MEMBER LITTLE: Oh, that's great. Thank you.

MR. ACKEN: At this point we just have a few cleanup items, I believe, and so I want to make sure --

CHMN STAFFORD: I know one of those is the tour.

MR. ACKEN: Sure.

CHMN STAFFORD: You want to go to that and let's put that to bed?

MR. ACKEN: You bet. So can we show RWE-10 on the screen? Is that possible?

Q. And then I would ask Mr. Hazle to provide an overview of the in-person route tour should the Committee elect to do it.

A. (MR. HAZLE) The in-person route tour would be pretty straightforward and circumspect for this project. Basically, we would just drive out to East Tubb Ranch Road on U.S. 89, and that's where the route tour would stop and turn around.

East Tubb Ranch Road is public access, at least for a portion heading out toward the wind project, but that road gets really rugged and has some pretty steep parts on it and would not be conducive to a route tour for the Committee.

CHMN STAFFORD: Let alone the access road, huh?

MR. HAZLE: Correct.

CHMN STAFFORD: Well, members --

MEMBER LITTLE: Chairman?

CHMN STAFFORD: -- I'd like to hear from my fellow members if they think a tour would be beneficial. I'm inclined to think no, but I'd like to hear from the members.

MEMBER LITTLE: Mr. Chairman, I move that we do not go on a tour -- a project tour.

MEMBER KRYDER: Mr. Chairman, I'd second that.

CHMN STAFFORD: All in favor say "aye."

(A chorus of ayes.)

CHMN STAFFORD: Opposed?

(No response.)

CHMN STAFFORD: Hearing none, there will not be a tour.

Thank you. Please proceed, Mr. Acken.

MEMBER LITTLE: Although we could go a little further and go to the Flintstone place out there.

MR. ACKEN: Mr. Hazle should have added that to the tour itinerary, a stop there for drinks. Thank you.

CHMN STAFFORD: Maybe you would have gotten some votes for a tour if you'd put that in there. It's too late now, but --

MR. HAZLE: Noted.

CHMN STAFFORD: Please continue, Mr. Acken.

MR. ACKEN: Okay. Thank you, Mr. Chairman.

Q. So on my notes we have three items that we're going to see if we can get answers to tonight. One is a little more additional information on the EMP consideration. A second question was the sag on the existing 500kV lines. And then third was the origin of Forged Ethic, which I want to hear. So I think we want to share that before we conclude our direct case.

I don't have anything else to present today. I would -- I can -- I would like to move some -- offer some exhibits at this time, if that makes sense, because I'm not going to offer all of them at this time, and see if that makes sense to you, Mr. Chairman.

CHMN STAFFORD: Yes, certainly. Go ahead. Move your exhibits and I'll rule on them.

MR. ACKEN: So I would move exhibits RWE-1, which is the application itself, RWE-2, which is the witness presentation slides that this panel presented. I would not move RWE-3, which was only -- that was for another witness in the event that there was a desire to call him. RW -- I would move RWE-5 and 6, which are the witness summaries and proposed CECs.

We didn't really discuss the RWE response to ACC Staff data request, so I wouldn't move 7. I would move 8 through 11. And 11 is, again, the Utilities Division correspondence. So I would move all, I guess -- a better way to say it I would move all but RWE-3 and RWE-7. I would offer those.

CHMN STAFFORD: Okay. So you are offering 4, then, okay?

MR. ACKEN: Yes, I'm sorry if I missed that. Absolutely, 4 is the public outreach summary.

CHMN STAFFORD: So Exhibits RWE-1, 2, 4, 5, 6, 8, 9, 10, and 11 are admitted.

(Exhibits RWE-1, RWE-2, RWE-4 through RWE-6 and RWE-8 through RWE-11 were admitted into evidence.)

MR. ACKEN: And I guess the only other thing is RWE-3 is associated with the KR Saline witness. It is not my intention to call him as part of our direct

case, but we did have him available. You know, I'm hopeful the Committee is satisfied with the information provided today, but if not, please let me know and we can make him available to testify tomorrow.

CHMN STAFFORD: All right. And then, Ms. Benally, you'll have your witness available tomorrow?

MS. BENALLY: Mr. Chairman, our witness is available this afternoon if the Committee does have any questions that they'd like to pose to him.

CHMN STAFFORD: All right. Members, I think I would like to hear from the RK [sic] Saline witness, and then after that perhaps we'll -- I would have some questions for APS's witness.

Thoughts, Members?

MEMBER LITTLE: Agreed.

CHMN STAFFORD: All right. It looks like that will be the plan, Mr. Acken. We'd like to hear from your RK Saline -- is it KR or RK?

MR. ACKEN: KR.

CHMN STAFFORD: KR Saline witness tomorrow and then after the conclusion of their testimony, I think we might have some follow-up for your witness, Ms. Benally, but -- and you said you had no intent to put on a direct case, correct?

MS. BENALLY: That's correct, Mr. Chairman.

CHMN STAFFORD: So I think we'll look to -- and this concludes this panel's testimony?

MR. ACKEN: Other than the cleanup. I'll probably start with this panel tomorrow morning to answer those cleanup questions that we have before we go on to the next panel.

CHMN STAFFORD: Okay.

MR. ACKEN: Is there a strong preference of the Committee as to whether Mr. Foster appears virtually or in person? We can accommodate either, but I don't know if there's a strong preference one way or the either.

MEMBER KRYDER: I prefer in person.

CHMN STAFFORD: Member Kryder prefers in person, but is he -- is he a local witness or is he going to have to fly in from, you know, New York tonight?

MR. ACKEN: Oh, he's in Phoenix. He just has to drive up the hill.

CHMN STAFFORD: All right. Well, then I don't feel bad about having him attend in person if he's only coming from Phoenix. All right. Thank you.

MR. ACKEN: Okay. Thank you.

CHMN STAFFORD: Now, is that everything for this afternoon until we come back for the public comment session at 5:30? You have nothing further at this point?

MR. ACKEN: I don't. Thank you.
CHMN STAFFORD: Members, do you have any additional questions for this panel at this time?
(No response.)
CHMN STAFFORD: All right. Well, with that I think we will go into recess until 5:30, at which time we'll come back for public comment.
We stand in recess.
(Recessed from 4:20 p.m. until 5:31 p.m.)
CHMN STAFFORD: Let's go back on the record. It is 5:30. This is the time set for public comment for line siting case 225.
Are there any members of the public online who wish to speak?
AUDIOVISUAL TECHNICIAN: Mr. Chairman, we do not have any members of the public online.
CHMN STAFFORD: And there are no members of the public here in person to speak either. So with that, we will go off the record. And if someone shows up, we will come back on the record and hear their comments. Otherwise, we will remain here and available to take comments until 6:00.
With that, we'll go off the record.
(Recessed from 5:31 p.m. until 6:00 p.m.)
CHMN STAFFORD: Let's go back on the

record. No members of the public have appeared in person to make comment and none have called in on the Zoom or the phone. So with that, we will take a recess and come back tomorrow morning at 9:00 to conclude the evidentiary hearing.

With that we are in recess, thanks.

(The hearing recessed at 6:03 p.m.)

STATE OF ARIZONA)
COUNTY OF MARICOPA)

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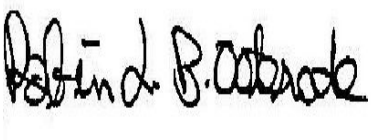
I CERTIFY that I have complied with the ethical obligations set forth in ACJA 7-206(F)(3) and ACJA 7-206 (J)(1)(g)(1) and (2). Dated at Phoenix, Arizona, this 10th day of September, 2023.



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