BEFORE THE ARIZONA POWER PLANT

AND TRANSMISSION LINE SITING COMMITTEE

IN THE MATTER OF THE APPLICATION OF HASHKNIFE ENERGY CENTER LLC, IN CONFORMANCE WITH THE REQUIREMENTS OF ARIZONA REVISED STATUTES 40-360, ET SEQ., FOR CERTIFICATES OF ENVIRONMENTAL COMPATIBILITY AUTHORIZING THE HASHKNIFE ENERGY CENTER GEN-TIE PROJECT, WHICH INCLUDES THE CONSTRUCTION OF A NEW 500 KV TRANSMISSION LINE AND ASSOCIATED FACILITIES INTERCONNECTING WITH THE EXISTING APS 500 KV CHOLLA SUBSTATION IN NAVAJO COUNTY, ARIZONA.	DOCKET NO. L-21126A-20-0300-00187 CASE NO. 187

At: Flagstaff, Arizona

Date: November 16, 2020

Filed: November 23, 2020

REPORTER'S TRANSCRIPT OF PROCEEDINGS

VOLUME I
(Pages 1 through 130)

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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 the High Country Conference Center, 201 West Butler Avenue, Flagstaff, Arizona, commencing at 1:27 p.m. on the 16th of November, 2020.

BEFORE: THOMAS K. CHENAL, Chairman

LEONARD DRAGO, Department of Environmental Quality
JOHN RIGGINS, Arizona Department of Water Resources
PATRICIA NOLAND, Public Member
JACK HAENICHEN, Public Member
MARY HAMWAY, Cities and Towns (Videoconference)
ZACHARY BRANUM, Arizona Corporation Commission (Videoconference)
JAMES PALMER, Agriculture (Videoconference)
KARL GENTLES, Public Member (Videoconference, Starting at Page 54)

APPEARANCES:

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CHMN. CHENAL: Good afternoon, everyone. This is the time set to commence the hearing on CEC 187, Invenergy Hashknife solar project.

May I have appearances, please? We'll start with Member Drago and go to the people live, and then we'll go to the people that are appearing -- Members that are appearing by Zoom.

MEMBER DRAGO: Good afternoon, everyone. My name is Len Drago, and I work for the Arizona Department of Environmental Quality.

MEMBER RIGGINS: Good afternoon. My name is John Riggins. I'm with the Arizona Department of Water Resources.

MEMBER NOLAND: My name is Patricia Noland, and I represent the public.

MEMBER HAENICHEN: I'm Jack Haenichen, and I don't work at all. No, I'm kidding. I represent the public and I'm an electrical person.

CHMN. CHENAL: Member Hamway, would you like to introduce yourself?

MEMBER HAMWAY: I think I'm unmuted now. My name is Mary Hamway, and I represent cities and towns. And unfortunately, I can't be there with you today, but I'm doing my best to try to get connected remotely, so here we go.

CHMN. CHENAL: You'll do fine. You'll do fine.

Member Gentles.

(No response.)

CHMN. CHENAL: Is Member Gentles logged in?

(No response.)

CHMN. CHENAL: It doesn't look like Member Gentles has signed in yet.

Member Branum, the newest member of the Committee, I understand you've logged in. Could you introduce yourself, please.

MEMBER BRANUM: Yes. Good afternoon, Chairman, Members. My name is Zachary Branum. I work for the Arizona Corporation Commission. Thank you all for having me virtually. Excited to participate and learn a thing or two. Thank you.

CHMN. CHENAL: All right. Well, thank you very much and welcome.

And of course, Mr. -- Member Palmer, who arrived just in the nick of time.

MEMBER PALMER: Thank you, Mr. Chairman. Sorry I was a little late. Had a little road construction between here and Safford and I had a supervisor meeting this morning and here I am.

CHMN. CHENAL: Okay. Well, thank you. Thank

you for arriving in the nick of time.

My name is Tom Chenal, and I'm with the Attorney General's Office.

And we are -- we're interested in this project. And it's the brave new world. It's the meeting that we're going to have, you know, both live and remote with Zoom.

We have a quorum, so we're going to begin the hearing. We've got some housekeeping items, but just a couple things I would just like to emphasize. We have a crack audio crew, audio visual crew. You can see that they know what they're doing. But just to reemphasize, the mics are all live. So when you have your little sidebar conversations or you mutter stuff under your breath, at me or otherwise, it's going to be heard by I don't know how many -- we have 28 participants, so everyone will hear it.

The second thing is, we are limited to the number of people we're allowed to have in the room. And I think the Committee is allowed to have five, including myself, so I think I'm going to check with Ms. Innis and Mr. Acken to see if we have to have one of our Members go to the board room upstairs or whether, based on the requirements of NAU, which is where this meeting is being held. Mr. Acken, would

you...

MR. ACKEN: Thank you, Mr. Chairman. Bert Acken on behalf of the applicant, Hashknife Energy Center.

Unfortunately, yes, the maximum number of Committee Members we can have right now is five, because we're going to have three people from the applicant, one from APS, and the court reporter. The facility's AV folks don't count, so that means five Committee Members at any one time.

We do have a conference room upstairs that someone can go and watch, participate, speak -- and be aware that you are live mic'ed up there -- and we're hopeful that you'll have the same experience that you would in the room. But given the restrictions on the number of people in the room, we do have to limit it to five during the evidentiary portion of the hearing.

CHMN. CHENAL: So I just wanted to leave it up to -- see if there's a Member that would volunteer. And I think we just have to rotate, so tomorrow we'll switch it up. So I don't know if there's someone who --

MEMBER NOLAND: I'll go.

CHMN. CHENAL: It's a very nice facility.

MEMBER NOLAND: I'll go.

MEMBER PALMER: I'm the last one in. If you want me to go up, I'll be glad to.

CHMN. CHENAL: Well, I'd just rather leave it up to the Members.

MEMBER NOLAND: Well, he hasn't gotten settled, so let him go. I'll go tomorrow.

MEMBER PALMER: Okay.

CHMN. CHENAL: Okay. I'm going to ask that we take just a couple-minute pause here to get Member Palmer situated upstairs and logged in. We'll go off the record for a few minutes.

(Off the record from 1:33 p.m. to 1:38 p.m.)

CHMN. CHENAL: Thank you, Member Palmer, for agreeing to go upstairs in the conference room upstairs, which has a Zoom feed.

One more thing to note. Another requirement of the venue is that we have our masks on at all times, even when we're speaking. So just a reminder that we have to adhere to that.

Let's start with -- the next step would be enter the appearances of the applicant and the party that filed the motion, APS, the motion to intervene. So let's start with appearances.

MR. ACKEN: Thank you, Mr. Chairman. Bert Acken of Dickinson Wright on behalf of the applicant,

Hashknife Energy Center. With me up front here is Susan Innis, project manager for Invenergy, and Derek Holscher of Burns McDonnell.

CHMN. CHENAL: Thank you very much.

Ms. Benally, would you enter your appearance?

MS. BENALLY: Good afternoon, Chairman Chenal, Committee Members. Linda Benally, regulatory counsel with APS, and Matt Derstine, Snell & Wilmer, representing APS.

CHMN. CHENAL: All right. Thank you. And I'll note that Mr. Derstine is here on the premises, but he's in the conference room upstairs.

Preliminary matters. We'll take a break about every 90 minutes. We anticipate the hearing going, obviously, this afternoon. This evening at 6:00 there's going to be a call to the public. We have made arrangements for people to appear and provide public comment either here or in -- by Zoom.

The hearing we expect to continue, obviously, tomorrow morning. And maybe, depending on when we finish tomorrow, we either start deliberations or we wait until Wednesday morning. I know my preference and I know the preference of a number of the Members -- not every one, but a number of the Members -- is that we start the deliberations fresh in the morning. And in

this case, as we know, there's going to be two CECs, so it's going to take a fair amount of time to get through it, so let's just see where we are tomorrow. But I think in the meetings that I've had -- we've had a number of meetings before today with the applicant and with APS because of the unique times we're in and how to conduct this hearing, and I think we will expect this meeting -- that this hearing will conclude certainly on Wednesday.

So one item of -- we need to address is the motion to intervene that was filed by APS. That's a motion we have to vote on. It's not as a matter of right. APS is involved with this project based upon the application.

Ms. Benally, would you like to say a few words as to the reason why you believe intervention is appropriate in this case for APS, or Mr. Derstine? I'm not sure who is going to speak. But Ms. Benally, if it's you, just a short statement of why you believe intervention would be appropriate for APS.

MS. BENALLY: Thank you, Mr. Chairman. I appreciate the opportunity to be here. APS does have an interest in this case and this proceeding for a number of -- pardon me -- a number of reasons, and I'll walk through them very briefly.

First, the proposed Gen-Tie line will interconnect directly into the APS-owned 500 kV Cholla substation, which is located in Joseph City, Arizona. It's also going to be located within the controlled area at the Cholla power plant.

CEC-2, as it's described in the applicant's application, describes the Gen-Tie line to be spanning 0.3 miles, and it will be crossing APS property and also involve a combination of single and double circuit structures and it will be about three or four structures.

APS also, as a part of the interconnection, will be rebuilding an existing 230 kV transmission line so that it becomes a 500/230 kV double circuit line to carry the new 500 kV Gen-Tie line.

The applicant has requested two Certificates of Environmental Compatibility to address areas -- pardon me -- ownership of specific portions of the Gen-Tie line. So you have CEC-1, which is intended to cover the applicant's facilities, and CEC-2 is intended to cover the facilities that will be constructed within APS's controlled area at the Cholla power plant and in the future will be owned by APS.

The intent is for Invenergy, the applicant in this case, to transfer the CEC-2 and for APS to accept

transfer of that CEC-2 at a future date if the Line Siting Committee and the Arizona Corporation Commission grant the two CECs.

So it's for these reasons that APS has a significant interest in the terms and conditions of CEC-2. It's imperative that APS have standing of an intervenor to timely respond to developments that may occur during the course of the hearing and at the time that this matter is heard by the Commissioners at the Open Meeting. So based on these reasons, APS certainly would be substantially affected by any decision that comes out of this Committee, and ultimately the Commission, so we ask that this Committee grant APS's motion to intervene. Thank you.

CHMN. CHENAL: Member Noland.

MEMBER NOLAND: Chairman Chenal, I move that we grant the intervenor status to APS.

MEMBER HAENICHEN: Second.

CHMN. CHENAL: Is there any discussion?

(No response.)

CHMN. CHENAL: All in favor say aye.

(A chorus of ayes.)

CHMN. CHENAL: This is going to be interesting, I just realized. How is the court reporter going to know who is saying "aye" if people

are appearing by video?

MEMBER NOLAND: It doesn't matter, unless we take --

CHMN. CHENAL: Oh, sure.

MEMBER NOLAND: -- a voice vote.

CHMN. CHENAL: Right.

Any nays?

(No response.)

CHMN. CHENAL: Okay. So the motion is approved.

And I assume the applicant has no objection to the intervention of APS in this case?

MR. ACKEN: We support the intervention. Thank you.

CHMN. CHENAL: All right. So the motion is granted. APS is now allowed to intervene in the action -- in the matter.

MS. BENALLY: Thank you.

CHMN. CHENAL: I don't have any other requests for intervention by any other parties. There's been no notices of intervention by parties of right under the statute. So the two parties to this proceeding will be the applicant and APS.

And based on the meetings we had, I know the parties, including the intervenor, APS, have complied

with the procedural order. And we'll get into the -- in the evidence, we'll talk about the posting and the notice that was given, but the exhibits have been exchanged and testimony. So are there any matters that the applicant or APS wish to discuss before we open the hearing to the applicant?

MR. ACKEN: No, Mr. Chair.

MS. BENALLY: No, Mr. Chair.

CHMN. CHENAL: Okay. Before we start with the opening statements, let me just make a note that based on the virus and the situation we're in, I kind of decided that a tour would not be appropriate, at least a tour with a bus with all the Members as we normally do. But I have asked the applicant to come up with a more robust flyover, a Google flyover or however they want to do it, so we'll have the benefit of that. But in this case and the next case we'll be hearing the week after next, I think a tour would be inappropriate given the times. So there won't be a tour in this case, but we'll have a more expanded Google flyover.

All right. Let's begin next with -- or, start next with the opening statements, Mr. Acken.

MR. ACKEN: Thank you, Mr. Chairman. And I just have a couple brief remarks, if we would go to the next slide. So this is Figure 2 from the application.

It shows the solar facility in yellow, the proposed transmission line in blue, the alternate transmission line in orange, and then you see a variety of other lines coming from the Cholla substation. All of this land is unincorporated Navajo County. The Gen-Tie in both the preferred and alternate route are on private land. A small portion of the solar facility is located on State lands, but it is otherwise under private land ownership as well.

MR. DERSTINE: Mr. Chairman.

CHMN. CHENAL: Yes.

MR. DERSTINE: This is Matt Derstine. I'm sorry. I'm viewing the remote screen -- okay. There, it's been fixed. We're just seeing Mr. Acken and we're not seeing the map, but it looks like we just switched over, so I appreciate that. Thank you.

CHMN. CHENAL: Okay, good.

MR. ACKEN: Thank you. You definitely want to look at the map and not my face, so we'll try to make sure that we have that squared away.

So just again, to orient those who had the unfortunate experience of just watching me, the solar field is in yellow, the preferred route is in blue, the alternate route is in orange, and it follows existing transmission lines from, I would say, the southeastern

portion of the project. Both of those interconnect at the Cholla substation. You see the Cholla facility in green on this map. And then again, from that Cholla location, you see numerous power lines that come out of the Cholla substation. And so we're requesting approval for, again, the preferred or the alternative route, a 3-mile -- approximately 3-mile transmission line, all on private land, with the support of the landowner.

Next slide. So you heard Ms. Benally mention this in her request for intervention on behalf of APS. The one unique factor of this project is the request for two CECs. You see a schematic on the screen here. This is Figure G-1 from the application. We'll have other figures as well. But as Ms. Benally mentioned in her request to intervene, there's going to have to be two CECs for this one Gen-Tie. And the CEC-1 will cover the new project substation at the solar facility to the point of ownership change; those will be owned by Hashknife. And then from the point of ownership change to the interconnection at Cholla, those facilities will ultimately be owned by APS.

Next slide. So Ms. Innis, in her testimony, will cover the topics that I just mentioned. She'll be providing an overview of the project, a virtual tour.

She'll also touch on the project benefits associated with this project. You see them listed there: Quite a number of construction jobs, full-time jobs as well, property tax revenue, economic activity, and minimal impact. This is why, you'll see in the testimony, that this project has the support of the local community, it has its entitlements from Navajo County, and the support of the landowner.

Next slide. This is our summary of environmental compatibility. Mr. Holscher will provide the summary. As you see here, as I mentioned earlier, complies with local land use planning. It's a great location. I mean, it's within 3 miles to an existing coal-fired power plant substation with all the existing infrastructure you could ever want or need, minimal impacts to land uses, cultural resources, and visual resources.

And for those reasons, our witnesses will testify that this project is environmentally compatible, and we will ask that you agree and reach that conclusion.

We have four witnesses. As I mentioned, Susan Innis is the project manager for Invenergy. We have three witnesses to discuss environmental resources. Tom Koronkiewicz will be appearing remotely

to discuss biological and cultural resources, Randy Simpson will be discussing visual resources, and Derek Holscher will be discussing land use and cultural and providing the summary and overview regarding environmental compatibility.

We have our hearing notebook that you should all have that are here, and I hope those of you who are participating remotely received it. We have premarked six hearing exhibits. 1 is the application. INV-2 is the testimony slides. Public notice documentation is INV-3. The two Certificates -- the two proposed Certificates of Environmental Compatibility are INV-4 and 5. And then there's a letter from the ACC Utility Division that's been marked as -- premarked as INV-6.

We really appreciate all of you coming here in person or appearing virtually. We're obviously in uncharted waters and appreciate your patience and understanding and willingness to go forward and hear about this project. It's a cool project, it's an exciting project, and in a location that really could benefit from having this solar resource in the area.

So with that, I'd be happy to take any questions, and thank you again for your time.

CHMN. CHENAL: Any questions from any of the Members of Mr. Acken?

(No response.)

CHMN. CHENAL: Okay. Ms. Benally, will you be providing an opening statement on behalf of APS?

MS. BENALLY: Thank you, Mr. Chair. I do have a couple of comments. First of all, I'd like to thank the Committee for granting intervention in this case to APS. I have pretty much covered the -- APS's interest in my comment supporting intervention, and I believe that that provided a good understanding of why APS is intervening -- why APS has intervened in the case.

I'd also like to just state that we do -- pardon me -- we have worked with the applicant, Hashknife, over the last four, six weeks, or so in the CEC-2, which will be discussed later, and they have incorporated many of the comments and feedback that APS has provided. However, we would like to be -- reserve the right to present a witness. Brad Larsen is the project manager from the APS line siting team. And we'd like to do so in the event that there's some information that we believe should be covered in the record that perhaps the applicant has not covered. And certainly, we're also happy to present the witness if the Chair or the Committee deem it necessary and appropriate for APS to present its witness, but we are

really just reserving the right to do so if we feel it's necessary. Thank you.

CHMN. CHENAL: Well, we're always happy to hear from Mr. Larsen. He's well known to the Committee.

All right. Any questions from the Committee regarding anything mentioned by Ms. Benally?

(No response.)

CHMN. CHENAL: Okay. With that, Mr. Acken, if you'd like to begin with the presentation of your case.

MR. ACKEN: Thank you, Chairman Chenal. Hashknife calls Susan Innis, project manager for Invenergy.

CHMN. CHENAL: Let me know when you're ready, Ms. Innis. I will swear you in as a witness. Would you prefer an oath or an affirmation?

MS. INNIS: An oath is fine.

CHMN. CHENAL: Okay. Would you please raise your right hand.

(Susan Innis was duly sworn by the Chairman.)

CHMN. CHENAL: Thank you.

Mr. Acken.

MR. ACKEN: Thank you, Mr. Chairman.

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SUSAN INNIS,

called as a witness on behalf of the Applicant, having been previously sworn by the Chairman to speak the truth and nothing but the truth, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. ACKEN:

Q. Ms. Innis, please state your name and business address for the record.

A. My name is Susan Innis. My business address is 1401 17th Street, Suite 1100, Denver, Colorado 80202.

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

A. I work as senior manager, renewable development, for Invenergy. I manage our project development across the southwestern United States.

Q. Please provide a summary of your educational background and work experience.

A. I've been working in the renewable energy industry for more than 20 years, mainly in public affairs and project management. I have provided testimony as an expert witness in regulatory proceedings in several western states on behalf of

previous employers, including Xcel Energy, the Colorado Governor's Energy Office, and Western Resource Advocates.

My education includes a master's degree in public administration from the University of Colorado Denver, a graduate certificate in energy planning and sustainable development from the University of Oslo in Norway, and a bachelor of science in biology from McGill University in Montreal, Canada.

MR. ACKEN: And if we could, for the slide deck, if you guys could move forward just to the overview and then the next one that has Ms. Innis -- thank you.

BY MR. ACKEN:

Q. Describe your role in the Hashknife Energy Center project.

A. I'm Invenergy's project developer for the Hashknife Energy Center. My role includes all aspects of development, from working with landowners on lease agreements to engaging with local stakeholders, obtaining local entitlements and permits, and coordinating with environmental and engineering colleagues on site-specific due diligence activities.

Q. Provide an overview of your testimony here this afternoon.

A. In my testimony I'll provide background information about Invenergy as a company and describe the transmission project for which we're seeking approval from the Line Siting Committee. I'll present the virtual video tour, a Google Earth flyover, to give an overview of the project location. And I'll also describe our public notice and outreach efforts around this project and provide a summary of the need and benefit this project meets.

Q. Who are Hashknife and Invenergy? I don't believe they've presented before the Committee before.

A. Could I have the next slide, please.

Invenergy is the world's private -- largest privately held sustainable energy developer and operator. Hashknife Energy Center, the applicant for this proceeding, is a wholly owned subsidiary of Invenergy. To date, Invenergy has developed more than 24,600 megawatts of large-scale wind, solar, natural gas, and battery energy storage facilities across the globe.

Next slide, please.

This map shows our projects that are online worldwide across North America, Latin America, Japan, and Europe. In addition to this generation portfolio, Invenergy has proven experience building

transmission lines and electric substations. We've constructed over 400 miles of transmission lines and currently operate 230 miles of transmission.

Q. Describe the Hashknife Gen-Tie project.

A. Next slide, please.

CHMN. CHENAL: Let me just interject for a second. That's a lot of material on that slide. I was halfway through reading it, and we're going to the next slide already. Let's just slow it down a little and give us an opportunity to read the slides.

MS. INNIS: Yes, sir. Let's go back.

CHMN. CHENAL: Maybe I'm a slow reader, but if it's up there, it's there for a reason, I want to read it.

MS. INNIS: Of course, Mr. Chairman. I will take it slow.

I can highlight a couple of the projects that are listed on here. The Grand Ridge Energy Center in Illinois is a unique project that features solar, wind, and battery energy storage all at the same location. We're also very proud of our Santa Rita East Wind Farm in Texas, over 300 megawatts there. And as I mentioned, in addition to solar, wind, and battery energy storage, we also have experience developing natural gas-fired power plants. The Lackawanna Energy

Center is highlighted in Pennsylvania there.

CHMN. CHENAL: Thank you.

MS. INNIS: Next slide, please.

To give you an overview of the Hashknife Energy Center and generation tie line project, let me just first walk through what you're seeing on the slide here. This is Figure 2 from our application. This area is right adjacent to the Cholla energy plant that APS owns. We're just outside Joseph City, just on the south side of Interstate 10. Our solar project area is in the yellow boundary here. This is primarily private land owned by Aztec Land & Cattle, with one section with a lease pending with Arizona State Land Department.

In our application, we are requesting approval for two CECs, and we'll provide more detailed maps later. We're also asking approval for a preferred route shown here in blue. The project substation would be located in this portion of the solar project area, and this would be just over 3 miles into the Cholla substation.

We're also requesting approval for an alternative route that would come from the southern portion of the solar project area, with the project substation located here, and parallel existing

transmission lines up to the Cholla substation here.

The Hashknife Energy Center is a solar photovoltaic power plant proposed to be up to 400 megawatts nameplate capacity that would be paired with a battery energy storage system. This project site was selected to take advantage of access to existing transmission infrastructure and capacity, tap into Arizona's excellent solar resources, compatibility with the local environment and land uses, and our ability to work with willing landowners.

BY MR. ACKEN:

Q. So why are you requesting two CECs for one Gen-Tie?

A. We believe two Certificates of Environmental Compatibility would be required to address ultimate ownership of specific portions of this generation tie line. The applicant, Hashknife Energy Center, will ultimately own the portion of the transmission from the solar generating source up to the point of ownership change outside the Cholla substation. This is the area we call CEC-1.

The applicant is also requesting a separate CEC, which we would intend to transfer to Arizona Public Service, as they would ultimately own the portion of the transmission line inside the fence and

property line of the Cholla substation, and that would be CEC-2.

Q. And you may have already described this, but using Figure 1, can you show which portion of the project each CEC includes?

A. Sure. We have a one-line diagram here. Shown in green is CEC-1. This represents the area that would go out to the solar project area over here. On our maps and diagrams here, we refer to this as the point of ownership change. And CEC-2 would cover the wires from this transmission structure through the facilities into the existing Cholla 500 kV substation.

CHMN. CHENAL: Quick question, Ms. Innis. Oh, your laser pointer is much larger, the dot is much larger. Yeah. But what is the -- I can't read what those letters are. What does that signify? Because CEC-2 seems to terminate at that point.

MS. INNIS: Thank you for the question, Mr. Chairman. This is the point of interconnection, or POI, as shown on that diagram.

CHMN. CHENAL: Thank you.

MEMBER HAENICHEN: Mr. Chairman.

CHMN. CHENAL: Member Haenichen.

MEMBER HAENICHEN: Thank you.

Just so I understand, you mentioned earlier

you were looking for a CEC on the preferred line, and then I believe the language you used was we're also looking for approval of a CEC for the alternate line. Do you intend to walk out of here with approval for both lines?

MS. INNIS: That's our intention.

MR. ACKEN: Mr. Chairman and Member Haenichen, let's make sure we understand the question. We do -- are hopeful to have approval for both CEC-1 and CEC-2. If your question is do we want approval for both the preferred and the alternate, the answer is no. We're bringing --

MEMBER HAENICHEN: Oh, okay. Well, that was the language that Ms. Innis used.

MR. ACKEN: Yeah, we're bringing forward two alternatives. The preferred is the applicant's preferred, and Ms. Innis will explain why that is. But no, we're not asking for the flexibility to have both.

MEMBER HAENICHEN: Thank you.

BY MR. ACKEN:

Q. Ms. Innis, what is the project timeline?

A. We're expecting Hashknife Energy Center to be operational by the end of 2023.

Q. Next, I'd like you to describe landownership along both the proposed and alternate route.

A. Could I have the next slide, please.

This is another diagram of the project area so you can orient yourselves again. This is Figure A-1 from our application, and here we're showing the different categories of landownership. In gray we have private land; that's the bulk of the land class you see on this chart. In blue, those are State-owned lands. And then the tan color is Bureau of Land Management. Our project area for the solar project and the generation tie lines is entirely within Navajo County. And you can see, the transmission line preferred path is entirely on private land, as well as the alternate is entirely on private land here.

CHMN. CHENAL: Ms. Innis, is any of the project, either the preferred or the alternate route and the substation, on BLM land?

MS. INNIS: No, there is no BLM land in this project area. All of the BLM land is on the north side of the highway shown here.

CHMN. CHENAL: Thanks.

BY MR. ACKEN:

Q. With respect to landownership, what is the position of Aztec Land & Cattle? You said that they were the landowner in the area.

A. Aztec Land & Cattle is the primary landowner

in our project area. We have a lease agreement with them for both the solar project area, as well as the transmission line easements needed for both the preferred and the alternative route.

Q. Let's next talk about jurisdiction. What jurisdictions does the proposed and alternate routes cross?

A. These are both entirely within Navajo County, an unincorporated part of Navajo County.

Q. And following up on Member Haenichen's question, why is the preferred route preferred?

A. The preferred route has several advantages. First off, it is a shorter route --

Q. Oh, I'm sorry. I may have -- I may have jumped ahead here. Let's have you first describe the requested corridors.

A. Sure. Let's have the next slide, please.

Here is the another drawing showing the CEC-1 preferred corridor. Again, these are the facilities that the applicant, Hashknife Energy Center, would ultimately own. Just to orient you to what you're seeing on the screen, this is the solar project area here, and then the preferred transmission line route is shown here. Again, the project substation would be in this area, and the approximately 3-mile transmission

corridor is here.

We are requesting a corridor width of a thousand feet. Ultimately, we would plan to build on approximately 200 feet right-of-way within that 1,000-foot corridor. The width of that corridor would allow us some flexibility in engineering design, particularly related to the river crossing and crossing railroad to get from the project area up to the Cholla substation.

You can see CEC-1, again, goes from the solar project substation up to the point of ownership change, or what we label here the point of physical demarcation. That would be the end of CEC-1 portion of the facilities and the start of CEC-2 portion of the facilities there.

We'll go to the next slide.

And then for the alternate requested corridor, again, here is the solar project area. In this case, the solar project substation would be in this area, and the alternate transmission corridor would come up here and into the Cholla substation. This is a little bit longer of a route than the preferred, but we are requesting the same thousand-foot-wide corridor with the intention for an ultimate 200-foot-wide right-of-way for the 500 kV

transmission line.

MEMBER NOLAND: Mr. Chairman.

CHMN. CHENAL: Member Noland.

MEMBER NOLAND: Mr. Chairman, I'm having trouble seeing those widths on these particular exhibits. Can you point me to them? They're not...

MS. INNIS: Yeah. These exhibits are both from our proposed CECs.

Bert, maybe you can help me out with the exact exhibit number.

MR. ACKEN: Sure. So you can find these on Slide 8 and 9 of INV-2, if you want to look at the hard copy of the slide presentation. And as Ms. Innis indicated, these come directly -- are intended to match precisely the proposed maps that we have included with the proposed forms of order. So when she's referring to CEC-1, both the proposed and alternate corridor, if you look at INV-4, at the very end of INV-4, you will also see that same graphic depiction.

To your question about the width, you know, the testimony is that it's a thousand-foot width for the entire length of the 3-, 3-and-a-half-mile route.

MEMBER NOLAND: Mr. Chairman, Mr. Acken, if we are going to put maps with the CEC, I'm going to want to see those widths on the maps directly --

MR. ACKEN: Understood.
MEMBER NOLAND: -- on the routes.
MR. ACKEN: Understood.
MEMBER NOLAND: Thank you. I might as well tell you now, rather than at the end and have to scramble.
MR. ACKEN: We appreciate that. Thank you.
MEMBER NOLAND: One other question.
MR. ACKEN: Sure.
MEMBER NOLAND: The Cholla plant is due to close in, I think, two phases. Are you aware of those plans?
MS. INNIS: Yes, I am.
MEMBER NOLAND: And will that then provide more space on lines that are owned by APS in delivering services, electrical services?
MS. INNIS: I think that's fair to say. We have a large generator interconnection agreement with APS for this facility, so they've shown us what the transmission upgrade cost would be to accommodate this project. And we've reviewed the available transmission capacity both before and after the power plant goes offline and retires, so we believe there's ample capacity at this location.
MEMBER NOLAND: And if I remember right -- I

live in Navajo County, so I kind of keep track of this -- I think one of the generators at the Cholla plant is due to be closed down the end of this year and then the others by the end of 2025?

MS. INNIS: I would have to double-check the specific dates, but that sounds correct to me.

MEMBER NOLAND: Okay, thank you.

BY MR. ACKEN:

Q. Okay. Ms. Innis, I may have gotten us a little out of order. Before you turn to CEC-2, now that you have shown both of the proposed corridors for the preferred and alternate route, this may be a good time to explain why the preferred is the preferred.

A. Sure. The preferred route has several advantages. First off, it's an overall shorter distance with fewer line losses, which means it would be more efficient and more economical to operate. The shorter route, by nature, has fewer overall impacts and reduces the potential conflicts with constructing and operating around other existing transmission lines.

The preferred route also, as you'll see when we get into some more of the drawings, in addition to being shorter, it's a little bit more of a direct route into the Cholla substation. The alternate route actually has a number of sharp turns once we get across

the river crossing and over the railroad tracks. To get into the substation, we have to make sort of a very sharp right turn. So we believe the preferred route is going to be easier to construct and own and operate.

We'll have additional testimony about the preferred versus alternative routes from Derek Holscher and Tom Koronkiewicz.

Q. We talked about the 1,000-foot corridor width. Can you state again the requested right-of-way?

A. Correct. For CEC-1 we're requesting approval for a thousand-foot-wide corridor, and the right-of-way would be 200 feet within that thousand-foot corridor.

CHMN. CHENAL: Ms. Innis, a quick question on the alternate route, if you go back a slide. There's existing transmission lines, are there not, coming from Cholla substation?

MS. INNIS: Correct.

CHMN. CHENAL: So what's the distance between the alternate line, if that were chosen, and the existing transmission lines?

MS. INNIS: We would obviously be outside of the APS right-of-way for those existing transmission lines. Within the thousand-foot corridor we'd have some flexibility to maximize spacing. The engineering design would likely take into account the distance

needed to ensure safe operation of the new line, given the existing lines in that area.

CHMN. CHENAL: Can you just approximate, though, generally, how far apart the two lines would be?

MS. INNIS: I would have to double-check exactly what the APS right-of-way is there. Assuming it's at least 200 feet, and their center line is 100 feet from either side of the edge of their right-of-way, you've got their line, plus a hundred feet, the edge of our right-of-way, it would be at least 200 feet between the two lines.

CHMN. CHENAL: Okay, thank you.

BY MR. ACKEN:

Q. If you would, turn to Slide 10 and describe the requested corridor for CEC-2.

A. Thank you. Here is a diagram showing, again, CEC-2. So this is the short segment. After we have the point of physical demarcation or point of ownership change here, this is the portion that APS would ultimately own on their property into their substation. Because of the infrastructure that is already here in this area, a thousand-foot-wide corridor just isn't feasible, so here we're asking for a 500-foot-wide corridor. And that would give us flexibility, given

the current uses on the property, to construct the facility within that 500-foot. Here we would also expect a 200-foot nominal right-of-way.

Q. What type of --

CHMN. CHENAL: Not to speak for Member Noland, but I'm sure her comment regarding wanting to see the corridor width depicted on CEC-1 would apply to CEC-2.

MR. ACKEN: Understood.

BY MR. ACKEN:

Q. What are the typical transmission structures that will be used for the project?

A. Next slide, please.

So here I'm going to show you typical transmission structures. In our application, we provided a number of example structure types that could be used for this sort of facility. Today I just wanted to highlight for you typical transmission structures. These would most likely be either steel monopoles, steel H-frames, 3-pole, or lattice structures.

That final selection of structure type will be in our final engineering, but lattice structures are the most typical for a 500 kV facility of this kind. So for CEC-1, where it's just the 500 kV, this is the example structure. We've got some representative

dimensions here for height and width.

MEMBER HAENICHEN: Mr. Chairman.

CHMN. CHENAL: Yes, Member Haenichen.

MEMBER HAENICHEN: Looking at CEC-1, it looks like that's for three-phase, is that right? Do I see three lines there?

MS. INNIS: Correct.

MEMBER HAENICHEN: And the tower on the right does not have three lines, is that correct?

MS. INNIS: That's correct.

MEMBER HAENICHEN: Well, which one is going to -- how is it going to be done?

MS. INNIS: Give me just one second. Sorry, I'm just getting a more close-up view of what you're seeing on the screen, because my eyes aren't good enough to see quite that far.

So you asked -- here we've got Figure G-3, the typical single circuit 500 kV structure here. And I think I just misspoke. We are planning single circuit 500 kV for CEC-1.

And then the drawing for Figure G-2 for CEC-2 here, this is the double circuit. One circuit would be the existing 230 kV, and then we would add the 500 kV there single circuit.

MEMBER HAENICHEN: Okay. So the phases go

vertically on the right-hand drawing and horizontally on the other?

MS. INNIS: Yes, thank you.

MEMBER HAENICHEN: That's what was confusing me. Okay, thank you.

BY MR. ACKEN:

Q. Ms. Innis, before you switch to the next diagram, you referenced Figure G-2 for CEC-2. Is that Figure G-12, just for the record?

A. Yes. It was Figure G-12 for the double circuit for CEC-2 and Figure G-3 for CEC-1.

Q. Thank you. Next, describe monopoles if they are used.

A. Next slide, please.

And just to show you an alternative transmission structure that could be used for this project, on the left side is a steel monopole design that could be used for CEC-1. That comes from Figure G-5. And again, this is a typical single circuit 500 kV steel monopole for CEC-1.

And then on the right side here, from our application Figure G-11, this is the typical 500 kV 230 steel monopole here for the double circuit for that CEC-2 portion of the project.

Q. Describe the new substation.

A. Next slide, please.

This is the proposed project substation, the 500 kV substation that will take the solar-generated electricity from the solar project and step it up from 34.5 kV up to 500 kV to meet the interconnection voltage.

I can walk you through some of the equipment here. We're expecting to have up to two main power transformers, two sets of 500 kV circuit breakers, approximately 10 or 12 34.5 kV breakers, switches, a control house, buswork, jumper conductors, lightning protection masts, and then it will all be enclosed in an approximately 7-foot-tall chain-link fence.

MR. ACKEN: We're going to shift, Mr. Chairman, to the virtual tour at this time, if you'd like us to proceed.

CHMN. CHENAL: Yeah. Just a question on the fence, 7-foot fence. I would have assumed it was a higher fence, I guess, than 7 feet. More of, I guess, a comment. It just seems like a pretty expensive and very important, you know, piece of equipment -- I mean, of a system. So it just seems -- is this substation within the solar facility, so it's -- there's other protections as to the substation?

MS. INNIS: Thanks for the question. We do

comply with NERC guidelines, the National Electric Regulatory -- I can't remember what NERC stands for -- NERC safety requirements for electric facilities. Those are typically a 6- or 7-foot-tall fence, chain link, with usually razor or concertina wire on top. So that's pretty typical for an electric substation.

This substation would be within the solar plant. Our typical security measures include a perimeter fence around the entire solar project area, we usually use key card gated access, and we typically have security cameras on our facilities monitoring 24/7, 365.

CHMN. CHENAL: And the perimeter fence around the solar facility is how high?

MS. INNIS: Typically, about 6 or 7 feet.

MEMBER HAENICHEN: Mr. Chairman.

CHMN. CHENAL: Yes, Member Haenichen.

MEMBER HAENICHEN: Question for you. Something seems to be missing in this diagram. The energy coming out of the solar array is DC. 35 kV, is that what you said?

MS. INNIS: 34.5 kV.

MEMBER HAENICHEN: And those two boxes on the bottom are transformers. So how do you make the AC from the DC and where is that done?

MS. INNIS: Thank you for the question. We don't show the solar facility drawings in this application, but the --

MEMBER HAENICHEN: Yeah, but we need to know that, because I have further questions about power quality.

MS. INNIS: Sure. I'm happy to walk through that. The electricity generated by the individual solar panels is taken to inverters, where we change from DC to AC. That's where that happens. We have a number of inverter boxes throughout the solar project area. Those connect, then, through to the project substation, where the 34.5 AC is stepped up to 500 kV AC.

MEMBER HAENICHEN: So the inverters are in the field of collectors?

MS. INNIS: Yes. They would be outside of the project substation.

MEMBER HAENICHEN: And how many inverters are there? Is it a 450-megawatt array, is that what I recall?

MS. INNIS: 400.

MEMBER HAENICHEN: 400. How many inverters are there?

MS. INNIS: That's a good question. I do not

know the answer to that off the top of my head. I'll have to double-check on that.

MEMBER HAENICHEN: Yeah. Okay, we need to have that answer.

MS. INNIS: Okay.

MEMBER HAENICHEN: I have a further question for right now. Is there any DC storage on the project site?

MS. INNIS: We haven't designed the storage component yet; that would come in final engineering for the project. We can do both AC coupled or DC coupled battery energy storage.

MEMBER HAENICHEN: Well, is the answer to that question germane to this hearing or not? I know we have no jurisdiction over the array, but we really have to kind of know about that.

MR. ACKEN: Mr. Chairman, Member Haenichen, if I may, we are happy to provide information addressing the Committee's questions. I would take the position that the solar array and everything outside of the project substation is not subject to Line Siting jurisdiction.

MEMBER HAENICHEN: I understand that.

MR. ACKEN: But certainly to the extent that it's information that helps you in evaluating it, we're

going to provide that to you. But we're asking for approval for the substation, this new substation, and the Gen-Tie to Cholla.

MEMBER HAENICHEN: Okay. I would like to also have some information provided to the Committee about the power quality of the AC signal that comes out of the -- out of the array.

MS. INNIS: Do you have more specific questions about what you want to know about the power quality from the --

MEMBER HAENICHEN: Let me give you a philosophical answer to that question. As time progresses in this century we're in, we're going to see more and more DC generation in projects like this. When they're a very small portion of the total generation mix, the quality of the AC sine wave is not as important. But if it becomes a dominant part, like, say, more than 50 percent, then we have to worry about what impact this kind of generation is going to have on the whole grid.

So those are my questions. That's what I'm aiming at. And I understand we have no jurisdiction over it, but in good faith you should supply that -- some answers to those kind of questions, in my opinion.

CHMN. CHENAL: Member Noland.

MEMBER NOLAND: Thank you, Mr. Chairman. One other thing. Is there an exhibit here that pinpoints where the substation is going to be on a map with relation to the solar arrays and the Cholla -- existing Cholla plant?

MR. ACKEN: Chairman Chenal, Member Noland, the short answer is no. We have a written description of it in both the application and in the form of an order, but we specifically did not say it was going to be within this 5-acre piece within the footprint of the solar field. And that was done to say -- to allow for site-specific movement within the solar field to place the substation. Ms. Innis can explain why it's in the applicant's interest to place it as close to the property boundary of the solar field as possible, and that might be a good question for her to answer, but we did not include -- we did not restrict ourselves in what we have proposed, with the understanding that the applicant has site control of the entire solar generating facility, we have a written description, a written narrative of where it will be, and our intent is to place it within those general areas.

MEMBER NOLAND: Well, I'd like to see, as we get towards the end of this, at least designating within that solar array boundary that the substation

will be placed there, not just a legal description. I think that's going to be important for people to understand and figure out where it's going to be placed, and not -- I'm not saying it has to be absolutely specific, but that it will be placed within that area that you've designated as the solar area. Does that make sense?

CHMN. CHENAL: I think it does, Member Noland. Kind of a corridor for where the substation will be, just like we have a corridor --

MEMBER NOLAND: Yes.

CHMN. CHENAL: -- for those transmission lines?

MEMBER NOLAND: It can't be this vague, we're going to put it somewhere. We need to know it's going to be here or it's going to be on the other side of the freeway by the Cholla plant. That's what people would like to know. That's what I'd like to know.

MR. ACKEN: Mr. Chairman, Member Noland, we understand the question, and we'll take that under advisement about sharpening our pencils and seeing what kind of additional specificity we can provide.

MEMBER NOLAND: Thank you.

CHMN. CHENAL: Thank you.

MR. ACKEN: Are you ready for the virtual

tour?

CHMN. CHENAL: I'm going to ask the Committee if they'd prefer to take a break now or see the virtual tour. It is a break in the testimony.

MEMBER NOLAND: Let's see the tour.

Okay. I have a vote to see the virtual tour.

Keep going? Okay.

MEMBER RIGGINS: Keep going.

CHMN. CHENAL: Mr. Acken, I think we want to see the tour.

MR. ACKEN: Great.

BY MR. ACKEN:

Q. Ms. Innis, with that intro, would you present the virtual tour that you developed for the Committee?

A. Sure. We're excited about showing you this flyover video tour of the project area, since we were not able to take a field trip out there so you could see firsthand.

So the idea of the video is to -- could you pause there, please? The idea of the video is to give you a general overview of the setting in the area of the solar facility and the preferred and alternative routes up to the Cholla substation. This, again, is the overview of the project area. This video is going to focus on the preferred route.

So the project substation would be in this area inside the solar boundary. Thousand-foot-wide requested corridor here shown in blue. What we're going to show you in this video, we're going to start on one end of the line with a quick high-level flyover, and then we're going to go detailed from the project area back to the substation. So you'll get kind of a high-level view and then a more detailed view of the corridor. When we start the video, you'll also see numbers in the corridor; those are mile markers to give you a sense of the distance.

As we go through the video, we'll also pause. If you want us to pause at any point to ask questions, just let us know. But we have several static photographs that were taken in the project area, so we'll stop for a couple of those so you can get a better sense of what the area looks like from the transmission line corridor.

CHMN. CHENAL: And then approximately how long is the video?

MS. INNIS: I think each video is just about 5 minutes. So this should be about a total of 10 minutes, depending how long we stop for any questions.

CHMN. CHENAL: Thank you.

MS. INNIS: Let's go ahead with the video

here. And again, we've got the solar project area here, a transmission line up to the Cholla substation. This is the CEC-1 portion in blue. CEC-2 portion, we'll zoom in a little bit, you'll see that in pink. Then we'll start our high-level flyover from the Cholla substation out back towards the solar project area.

Here you can see the existing Cholla power plant and substation yard, CEC-2 in pink, and the start of the CEC-1 corridor here in this light blue color.

Now, we'll turn back around from the solar project area back towards the substation so you can get a sense for the area. Again, this is a static photo taken from the solar project area up towards Joseph City. This area is currently used for grazing cattle primarily. And again, the mile markers shown here. You can see the Cholla power plant off in the distance here.

Here is a typical photo of the existing ranch roads on the property, kind of informal two-track dirt roads through the property, used to help with the ranching operations that are currently out there.

This is a view looking to the west there. Another typical view here. This is approximately 1 mile west of Obed Road, which is one of the few paved roads in the project area, kind of looking back to the

west from where we've just come in the video.

There are some existing distribution lines that serve at least one residence in the project area here.

Here is that Obed Road. The transmission line will cross this road between the solar project area and the transmission line. I believe this is the only road we'll cross with the transmission line.

Here you can see the Little Colorado River bed, usually typically dry, and then the Cholla power plant there in the background. We would plan our structures to span across this wetland area.

And again, as we cross the river area and get up towards the point of ownership change, you'll see we have railroad tracks here. This is Burlington Northern Santa Fe. This is a close-up picture of the railroad tracks we'll cross.

CHMN. CHENAL: Ms. Innis, what are we looking at to the right in terms of the -- oh, if we can go back to the picture -- the power lines we saw.

MS. INNIS: Those are -- I couldn't see exactly there. Those are either distribution lines along Obed or the 230 coming into Cholla substation. There we go.

CHMN. CHENAL: The ones that are there.

MR. SIMPSON: Those are distribution lines that also feed operations along the railroad tracks, so switching stations and things of that nature.

CHMN. CHENAL: Thank you.

MEMBER NOLAND: Mr. Chairman.

CHMN. CHENAL: Member Noland.

MEMBER NOLAND: Is the ownership change between the Aztec Cattle Company and the railroad?

MS. INNIS: The ownership change? No. That would be between the applicant, Hashknife Energy Center, and APS. It would be the change in ownership of the transmission line.

MEMBER NOLAND: I understand what you're saying.

Also, you said there's one residence. Is that a part of the private landowner's property?

MS. INNIS: No. There's a grazing lessee whose house is outside of the project area.

MEMBER NOLAND: Outside of the project area or the transmission line area?

MS. INNIS: Both.

MEMBER NOLAND: Both?

MS. INNIS: Outside of both.

MEMBER NOLAND: Okay.

MS. INNIS: Thank you for the questions.

And then here you can see, this is the point of ownership change. This last structure is where we would change ownership. Hashknife Energy Center would own this structure, and then APS would take the line into its substation from here.

And this is a photo about as close as we could get to that area. This is kind of just on the west side of the power plant there. And then you can see CEC-2, that corridor is shown in pink here, again, a little bit more narrow corridor, 500-foot corridor here. And then these facilities would really just be a couple of structures --

CHMN. CHENAL: Could we stop?

MS. INNIS: Sure.

CHMN. CHENAL: I just have a question before we go too far. I'm sorry. But I thought I heard earlier or read earlier that there was a fence line. Okay. The fence line is not the change of ownership; the fence line is further in the CEC-2 corridor?

MS. INNIS: Correct. On the image here you're seeing this white line. That's sort of the existing substation fence here. So the point of ownership change will happen here, and then APS will own the wires to the next transmission structure or structures until the point of interconnection inside

the 500 kV bay here.

CHMN. CHENAL: Thank you.

MS. INNIS: And here we've labeled the 500 kV bay. This is where the new interconnection equipment would go to bring that 500 kV line into the substation here.

Do you have any other questions on this video?

CHMN. CHENAL: Members appearing remotely, any questions?

Member Haenichen.

MEMBER HAENICHEN: I don't have a question about the flyover, but hopefully in the next day or two, when you've been able to research this -- your company has built previous large solar arrays, have they not?

MS. INNIS: Yes, we have.

MEMBER HAENICHEN: What's the largest one?

MS. INNIS: I would have to double-check. Probably just under 200 megawatts.

MEMBER HAENICHEN: Okay. So you must have a lot of experience, then, on what the output looks like from the standpoint of harmonics and that kind of thing, in other words, power quality. So I would like you to give a little presentation on that, because I'm

going to assume this will be -- have a similar character, this power plant you're building. I would think APS would be really concerned about this as well.

MS. INNIS: I can tell you the large generator interconnection agreement we have, APS did conduct a number of facility studies, system impact studies, and so forth before agreeing to that arrangement with us. We can definitely talk through some of those issues if you want a walk-through of those studies.

MEMBER HAENICHEN: I want to know how much of the energy that's being generated by the photovoltaics winds up as 60-cycle AC; and then on the various harmonics, what are the percentages. That's really what I'm looking for.

MR. ACKEN: Mr. Chairman, Member Haenichen, I think we understand the line of questioning, and we'll do some homework and be prepared to address.

MEMBER HAENICHEN: Okay, thank you.

CHMN. CHENAL: Good, thank you.

MR. ACKEN: Mr. Chairman, I forgot to mention this earlier. Member Gentles came online too. I don't know if you were able to get him.

CHMN. CHENAL: No, I did not. Okay, very good.

MR. ACKEN: So I do see that he's on there as well, and I think he's been on there for some time.

CHMN. CHENAL: Thank you.

Now, there was not another video, was there?

MS. INNIS: There is another video, yep.

CHMN. CHENAL: Oh, there is?

MS. INNIS: Same kind of thing for the alternative route, so we can just run through that real quick.

CHMN. CHENAL: Yes, Member Noland.

MEMBER NOLAND: Mr. Chairman, for the sake of those that are online, they can't see the green pointer, I don't believe. Is that correct?

MEMBER PALMER: That is correct.

MEMBER NOLAND: So I think you have to be a little more specific in describing, to the west or the east or the right or the left, for those people that can't see the pointer.

MS. INNIS: Thank you very much. I'll make sure to do that.

CHMN. CHENAL: Thank you, Member Noland.

MS. INNIS: Go ahead with the second video?

CHMN. CHENAL: Please. And I know I asked the applicant, because we had a number of meetings about this, that I wanted something more than the

typical Google flyover. I was very impressed with that, and I thank the applicant and the folks associated with putting that together. I think that was very, very well done.

MS. INNIS: Thank you. Appreciate that.

And we'll go ahead now with the alternate route flyover video. Same project area here, and you'll see the alternate route now shown in yellow from the east side of the solar project area paralleling the existing transmission corridor up to the Cholla substation. And again, we'll do this sort of high level from the Cholla substation over towards the solar project area. You can see the existing transmission lines in green adjacent to our yellow alternate route.

MEMBER NOLAND: Mr. Chairman.

CHMN. CHENAL: Member Noland.

MEMBER NOLAND: What is that red line? Go back. Go back just a little. What's the red line that is running parallel to the greens? Can you see that?

MS. INNIS: Yep. That's another existing transmission line.

MEMBER NOLAND: Okay, thank you.

MS. INNIS: Thank you for asking.

And now we're going to do the more detailed flyover and stop for a couple still photographs.

Again, from inside the solar project area, you can see the existing transmission lines on the horizon.

Here is a great example of those steel lattice structures. This is a 345 kV transmission line here.

Again, typical example photograph of the area. This whole project area is used for grazing currently. This is just a little bit of -- west of Obed Road.

Here is a photo of Obed Road showing the crossing of that existing transmission line in the distance here.

And now we're getting a little closer. You can see the Cholla power plant in the background, the existing 345 kV lines here in this photograph.

I mentioned earlier the alternate route had more turning structures, and you can see there's an example where we'd have to make a bit of a sharp turn as we approach the Little Colorado River area.

And again, here is the Burlington Northern tracks.

BY MR. ACKEN:

Q. Ms. Innis, why does the alternate route have so many more turning structures?

A. Just to avoid the existing transmission line

and corridor in the area.

CHMN. CHENAL: Can we go back to the last part of that second video?

MS. INNIS: Sure. Let me know when you want us to stop, how about.

CHMN. CHENAL: That's probably good enough.

MS. INNIS: Stop here?

CHMN. CHENAL: Yeah, that's fine.

Question: On the alternate route, parallel was the 345 kV line?

MS. INNIS: Correct.

CHMN. CHENAL: Okay. Then what is -- is that the transmission line that -- what's the generation source for that line?

MS. INNIS: I believe that leaves the Cholla power plant and heads towards the Phoenix load pocket.

CHMN. CHENAL: Now, we also saw in red a 500 kV line that came in from the southeast or something. Where is -- what is that power source?

MS. INNIS: I believe that is also sort of an exit line from the Cholla power plant.

CHMN. CHENAL: Okay. So with your project, it's going to be 500 kV DC, and we're going to hear more about that, and then it's going to be transferred to -- or, converted to AC. What's the power -- is it

going to be a 500 kV line coming out and coming down to Phoenix, or is it the 345 line you're using? Does that make any sense?

MS. INNIS: Yeah. I'm not sure I can answer that. Our generation tie line, the 500 kV AC line from our solar project, is just going to the Cholla substation. From there, all the power sources get sort of mixed together and dispatched out through APS's system. I don't know if I can provide a whole lot more insight than that.

CHMN. CHENAL: We'd like to hear from APS on where this power goes once it goes into the Cholla substation. Is it going to be 345? Is it going to be 500? Which transmission line -- where is it going? Just as background, just to complete the record, so we have a good record of the case.

MS. BENALLY: Chairman Chenal, that's noted.

CHMN. CHENAL: Okay. Those are good videos. I really appreciate the applicant taking the time to put those together.

MS. INNIS: Thank you very much.

I'll also just make a note, CEC-1 has the preferred and alternative routes. CEC-2 would take the same path from that point of ownership change outside the substation fence into the substation. So it's the

same route.

CHMN. CHENAL: Right.

MEMBER NOLAND: Mr. Chairman.

CHMN. CHENAL: Member Noland.

MEMBER NOLAND: I'd say the only suggestion I'd make is when you're talking substations, you indicate proposed substation and existing substation just for clarification, if you don't mind.

CHMN. CHENAL: Sure.

MR. ACKEN: Chairman Chenal, Member Noland, make sure I understand. So there is the existing substation at Cholla; we are not requesting approval for that. We are requesting approval for the proposed substation that will be within the boundaries of the solar facility. Are you asking that that be clarified in the maps or the text or just in the discussion?

MEMBER NOLAND: Mr. Chairman.

CHMN. CHENAL: Sure, Member Noland.

MEMBER NOLAND: Understand that, again, not all of us are here.

MR. ACKEN: Sure.

MEMBER NOLAND: Though the maps are fairly clear, it's just that I think it gets a little confusing when you just use "substation," like you just did. You were talking about the current Cholla

substation, not the proposed substation. That's what I'm trying to make clear.

MR. ACKEN: Thank you.

MEMBER NOLAND: If you're talking about the current Cholla substation, say Cholla substation; otherwise, it's the proposed Hashknife substation.

MR. ACKEN: Understood. Thank you.

CHMN. CHENAL: And my question related to the existing Cholla substation and how the power coming into the existing Cholla substation from this project is going to be, you know, transmitted from there.

MS. BENALLY: That's noted, Chairman Chenal.

CHMN. CHENAL: So maybe now is the time for the afternoon break. Before we go, I just want to ask the members of the Committee who are remote, Member Hamway, Member Gentles, and Mr. Branum, how is it going from your end so far? Are you able to hear the testimony and see the slides?

MEMBER HAMWAY: Mr. Chairman, Ms. Hamway here. Yes, this worked out great. I had my slides they sent this morning on one side of the screen, I had the meeting on the other, and I'm able to see and hear everything.

CHMN. CHENAL: Great.

Member Gentles.

(No response.)

CHMN. CHENAL: If you're muted, you have to unmute yourself, because we're not hearing you.

(No response.)

CHMN. CHENAL: Well, maybe during the break we can confirm that Member Gentles is on the Zoom.

And then Member Branum, how is it going from your end?

MEMBER BRANUM: Thank you, Chairman. It's going quite fine. I'm using multiple screens and going back and forth, so no issues for me. Thank you.

CHMN. CHENAL: All right. Super. Well, let's -- how about a 20-minute break, afternoon break, and then we'll pick it up after that. Thank you, everyone.

(Off the record from 2:59 p.m. to 3:41 p.m.)

CHMN. CHENAL: Let's resume the hearing and go back on the record. We had a nice video presentation flyover. So Mr. Acken, if you want to proceed with your witness.

MR. ACKEN: Thank you, Mr. Chairman.

BY MR. ACKEN:

Q. We're going to turn to the next portion of Ms. Innis' testimony, public outreach. And so on the screen for everyone should be Slide 16.

Ms. Innis, please describe the public outreach efforts undertaken for the project.

A. Invenergy held a public open house meeting as part of the Navajo County special use permit process for the solar facility. That public open house meeting was held in Joseph City on May 15th, 2019. Invitations were sent by first class mail to all of the property owners within a mile and a half of the proposed facility, and notice was given in the local newspaper. We had approximately 15 people attend, plus seven members of Invenergy's project team.

In addition to that public open house meeting where we discussed the solar project and the transmission line, we've been in regular communications with the primary landowner in the area, Aztec Land & Cattle, with whom we have a lease for the solar facility and easements for the transmission line routes. We've also been in touch with the grazing lessee, J.R. DeSpain.

In addition to that public open house meeting in May 2019, Navajo County held public hearings on the special use permit. The planning and zoning hearing was held October 17th, 2019. The SUP was approved at the Navajo board of supervisors hearing on November 12th, 2019.

And then earlier this year, we submitted an application to Navajo County to amend the special use permit to add additional acreage to the solar facility permit. That approval process went back before the Navajo planning and zoning commission again on May 21st, 2020, and then the permit amendment received final approval from the board of supervisors in June 2020.

And our application Appendix J-1 includes copies of all of those open house materials, and you can see those on this slide here. We provided basic information about the solar project, the construction process, project benefits, timeline, so forth.

Q. Describe the public notice specifically provided for the CEC application.

A. So building on those efforts in 2019 and early 2020, we took additional steps for public involvement and public notice related to this Power Line Siting Committee process. We posted signs on the property advertising today's public hearing, providing contact information for questions about the application. We also advertised in three newspapers. And you'll see on this slide copies of those newspaper ads and proof of publication.

Also, because of the COVID situation, we

would have normally placed copies of the application in public libraries or made them available for the public to access. In lieu of that, we posted the full application document on our website, hashknifesolar.com, so that the public could access it there. We also offered to mail out copies if people called to request one. We did not receive any requests for anybody to receive a printed copy of the application, but we did offer that to folks who were unable to access the application on the website.

To meet the requirements for the CEC process, we also provided public notice via certified mail to the two jurisdictions in the project area, Navajo County and the Arizona State Land Department. And as we mentioned earlier, Arizona State Land Department doesn't own land along the transmission line routes; but because they are a landowner within the solar project area, we've been keeping them apprized of the project and this transmission line process.

Q. What does Slide 18 depict?

A. Slide 18 here shows photographs of the public notice postings on the property. In the image on the left, you can see the project area map showing the locations for where those two signs were posted in the project area.

Q. And you mentioned the public notice, the publication, the certified mail notice. Can that information be found in what's been marked for identification as INV-3?

A. Yes, that's right. INV-3 is the exhibit that contains all of the documentation for this public outreach specific to this Power Line Siting Committee hearing.

Q. Next, we're going to turn to the needs and benefits provided by the project. Describe those for the Committee.

MEMBER DRAGO: Mr. Chairman.

CHMN. CHENAL: Member Drago.

MEMBER DRAGO: Sorry. I had a question back on the public engagement. Relative to tribes, I realize that Navajo is quite some distance away, 130-some miles, but did the project offer consultation to any tribes in the area or tribal listening sessions?

MS. INNIS: Thank you very much for the question.

MEMBER DRAGO: And then follow-up to that, sorry, would be: If not, did any of them show up at the public meeting?

MS. INNIS: Thank you for the question. We did not have any tribes participate in the public open

house meeting or in the SUP hearings through the Navajo County process. We do have testimony coming later on cultural issues from Derek Holscher, and he can speak more specifically about the outreach to the tribes and who responded to letters about the project.

MEMBER DRAGO: Thank you.

MR. ACKEN: Thank you.

BY MR. ACKEN:

Q. What are the needs met and benefits provided by the project?

A. Sure. This transmission line project is needed to connect the associated Hashknife Energy facility to the existing transmission grid at the Cholla substation. The solar project will provide Arizona with a renewable energy resource to help meet its clean energy goals, and this transmission line project is compatible with existing rangeland and industrial uses of the surrounding area.

On this slide, we have estimated some of the project benefits. Over the approximate six-month construction time frame, we would expect to employ between 200 and 400 construction workers. Once the facility is built and operational, we'd expect to have between three and five full-time jobs. Over the life of the project, we expect property tax, sales tax,

landowner payments would total between 30 and $35 million. And during the construction period and operations, we'd expect to see increased local economic activity, for example, construction workers staying in local hotels, eating at local restaurants, purchasing materials from local shops and suppliers.

And all of these benefits come with minimal impact on local infrastructure and services. This facility doesn't produce any noise, doesn't produce traffic on an ongoing basis, and really has minimal impacts in exchange for these benefits.

CHMN. CHENAL: Ms. Innis, quick question. Any idea of the property tax revenue on an annual basis for Navajo County after the project is completed?

MS. INNIS: I don't have that figure handy, no.

CHMN. CHENAL: Any idea? I mean, any range or guesstimate?

MS. INNIS: We estimated property tax, sales tax, plus landowner payments over 25 years would be between 30 and 35 million. So based on that, the property tax revenues may be a million dollars a year, in that ballpark.

CHMN. CHENAL: All right, thank you.

MEMBER GENTLES: Mr. Chairman.

CHMN. CHENAL: Yes. Who is speaking?

MEMBER GENTLES: This is Member Gentles.

CHMN. CHENAL: Yes.

MEMBER GENTLES: Just a quick question. I don't know if I missed it, but could you have them address any information that they received through their website in terms of response or feedback on the project or through any of their social media channels?

CHMN. CHENAL: Ms. Innis.

MS. INNIS: Sure. The only communications we've had about the project have been at that open house meeting in May 2019. We had approximately 15 members of the public attend that open house. Since then, we've been in regular discussions with the landowner and also the grazing lessee. But since we posted the CEC application materials on the hashknifesolar.com website, I have not received any calls or e-mails or inquiries from the local community short of construction contractors who would like work on the project.

MEMBER GENTLES: And just a follow-up question. How many -- how many residents, commercial or residential, are impacted in the -- in the project area?

MS. INNIS: Thank you for the question. We

do have testimony coming a little bit later from Derek Holscher about the exact land uses in the area, so I think he could answer specifically that question.

MEMBER GENTLES: Okay. Well, I'm just trying to get to a -- you know, we always have this conversation during this portion, which is the extent to which the public was actually informed outside of the technical requirements in the CEC, right. So by your account right now, only 15 people really had any conversation about the project based on the open house sign-in sheet, it looks like. Is that basically --

MS. INNIS: Sure. I appreciate the question. We did provide public notice and outreach, including mailers and newspaper ads, for that open house meeting; that went to all landowners within a one-and-a-half-mile radius. That same group of people was notified four times for the public hearings through the Navajo County process.

MEMBER GENTLES: I understand. And I certainly appreciate knowing what that universe is, so we can get to that later on. Thank you.

MS. INNIS: Thank you.

BY MR. ACKEN:

Q. Following up on that line of questioning, what is the local community's perspective on the

project from the feedback you received?

A. From the feedback we received primarily through that open house and the SUP process, it's been positive. I think the community recognizes that the change in generation at the Cholla facility will have some impacts to the local community. While this facility has a modest number of jobs, it is additional economic activity for the local community that they'll appreciate.

MEMBER GENTLES: Mr. Chairman.

CHMN. CHENAL: Yes, Member Gentles.

MEMBER GENTLES: Could you remind us, is the Cholla plant going to be operational for the future, and how long?

CHMN. CHENAL: If you know, Ms. Innis. I think you spoke to this a little earlier.

MEMBER GENTLES: She may have, and my apologies if I missed it.

CHMN. CHENAL: That's okay. That's no problem.

MR. ACKEN: And we may need to follow up, Member Gentles, to get you more specific information. But if Ms. Innis can answer it now, great.

MS. INNIS: Yeah. I believe at least one of the units is in the process of being decommissioned, if

it hasn't already come offline; and then the remainder of the facility, I think it's roughly 2025. We'll double-check on those dates and follow up on that.

MEMBER GENTLES: So the other unit is going to decommission on or around 2025?

MS. INNIS: Off the top of my head, I believe so.

MEMBER GENTLES: So what happens to the -- and again, my apologies if you already discussed this. What happens to the power generation thereafter that's connected into the solar plant?

MS. INNIS: I'm not sure I understand what you're asking. When the coal plant retires, there won't be any additional coal generation from that facility. So our project would tie in to that existing transmission infrastructure that will remain after the power generators are taken offline.

MEMBER GENTLES: Okay, that's good. Thank you.

MS. INNIS: Okay.

BY MR. ACKEN:

Q. And to follow up on that, this project will allow the continued use of that existing infrastructure after Cholla is no longer producing power generation, is that correct?

A. Correct.

MEMBER RIGGINS: Mr. Chairman.

CHMN. CHENAL: Yes.

MEMBER RIGGINS: Ms. Innis, the public comment and feedback that you received, was that more focused on the entire solar project -- proposed solar project facility and the transmission line area, or was it more one or the other or was it -- was there any concern about the proposed routes for the transmission lines into Cholla from the area, or was it more the project in itself, the entire solar facility?

MS. INNIS: Thanks for the question. At the open house, we did talk about both solar and transmission. We did not receive any negative feedback at the open house about transmission specifically.

MEMBER RIGGINS: Thank you.

BY MR. ACKEN:

Q. Ms. Innis, what other witnesses are testifying on behalf of the application?

A. We have several members of our project team here in the room -- or, in the building today. They assisted with preparation of this application and various environmental and cultural studies. We'll have Derek Holscher from Burns & McDonnell addressing land use and cultural issues. Randy Simpson from Burns &

McDonnell will address visual impacts and the photo simulations in the application. And from SWCA we'll have Tom Koronkiewicz address biological resources.

In addition to the formal written testimony from these gentlemen and their testimony today, we also have available an electrical engineer and environmental specialist who are listening in via Zoom and will be able to answer any questions.

Q. Was the CEC application prepared under your direction and supervision?

A. Yes, it was.

Q. And do you have any corrections or changes at this time?

A. No, I do not.

Q. And so is it true and accurate, to the best of your knowledge?

A. Yes.

Q. Any final comments for the Committee?

A. Just to quickly summarize my testimony for you today, the Hashknife Gen-Tie project, it's an approximately 3-mile-long 500 kV transmission line to connect the 400-megawatt proposed solar and battery energy storage facility to the existing transmission infrastructure at Cholla substation owned by APS.

This project area was selected because of

environmental compatibility for both solar and transmission development, access to available transmission capacity, cooperative landowners, and a supportive community.

The project will help Arizona meet its goals for clean, reliable electricity, while providing revenue to the local area in the form of jobs, taxes, and landowner payments.

I very much appreciate the Committee's consideration of this application. Thank you for being here during these challenging virus times in person and online. We look forward to answering any questions you may have about the project. Thank you.

CHMN. CHENAL: Thank you, Ms. Innis.

Does the Committee have any further questions of Ms. Innis at this time?

Member Noland.

MEMBER NOLAND: Just a real quick question. The slide that you have up right now shows wind generation in the background. I'm assuming that's just another project? You're not planning wind generation, as well as solar?

MS. INNIS: Thank you for the question. We find eastern Arizona is well suited for solar, but not wind at this particular location. The resource isn't

strong enough for a wind facility.

MEMBER NOLAND: Thank you.

CHMN. CHENAL: Thank you very much.

Okay. Thank you, Ms. Innis.

I do note that there were some questions that were asked, you know, so you'll have to come back and, either through you or another witness or other witnesses, you know, provide the additional information that was requested.

MR. ACKEN: Mr. Chairman, our thought would be to get through our direct, I understand you had a couple questions for APS as well, and then we can bring back Ms. Innis to clean up any remaining questions at the conclusion.

CHMN. CHENAL: Sure, that sounds fine. However you'd like to handle it.

MR. ACKEN: All right. Are you ready for our next --

CHMN. CHENAL: Yes, I think we're ready for your next witness.

MR. ACKEN: The applicant calls Tom Koronkiewicz. And he will be -- he's remote.

MR. KORONKIEWICZ: Can everybody hear me okay?

CHMN. CHENAL: Is there a way, until we get

into the exhibit, that we could have this witness appear on the screen? It's done.

You're going to have to tell me how to pronounce your name, sir, before I swear you in. I don't want to butcher it.

MR. KORONKIEWICZ: That's okay, Mr. Chairman. Thomas J. Koronkiewicz.

CHMN. CHENAL: Koronkiewicz.

MR. KORONKIEWICZ: Perfect.

CHMN. CHENAL: Do you prefer an oath or an affirmation, sir?

MR. KORONKIEWICZ: Oath, please.

CHMN. CHENAL: Okay. Would you raise your right hand.

(Thomas J. Koronkiewicz was duly sworn by the Chairman.)

CHMN. CHENAL: Mr. Acken.

MR. ACKEN: Thank you.

THOMAS J. KORONKIEWICZ (VIDEOCONFERENCE), called as a witness on behalf of the Applicant, having been previously sworn by the Chairman to speak the truth and nothing but the truth, was examined and testified as follows:

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DIRECT EXAMINATION

BY MR. ACKEN:

Q. Please state your name and business address for the record.

A. Thomas J. Koronkiewicz, 114 North San Francisco Street, Flagstaff, Arizona 86001.

And I believe we should advance the slide, please.

Q. Thank you. And if there's a way we could show him as well. Thank you.

By whom are you employed and in what capacity?

A. SWCA Environmental Consultants, and I am an ecologist and environmental specialist.

Q. And what was your role in the preparation of this CEC application?

A. Senior ecologist and SWCA Environmental Consultants' project manager overseeing both the biological and aquatic resource surveys.

Q. Describe your experience with line siting hearings.

A. In 2010, I provided Line Siting Committee expert testimony regarding the biological surveys for the Perrin Ranch wind energy facility in Coconino County, Arizona. And I also completed an internal SWCA

Environmental Consultants' technical review of the biological survey work for the proposed Chevelon Butte wind energy facility in Coconino and Navajo Counties.

Q. Please provide an overview of your professional background and educational experience.

A. I have a BS in biology from Southern Connecticut State University and an MS in biology from Northern Arizona University. I'm an ecologist with 23 years of experience, and my most recent projects involve environmental compliance management of renewable energy development projects across the western United States. I also serve as a graduate student advisor at Northern Arizona University.

Q. And what topics are you going to cover today?

A. I'm sorry. I think we should advance the slide, please. Sorry about that.

Yeah, my testimony covers biological and aquatic resources as the SWCA Environmental Consultants' project manager for the biological and aquatic resource surveys for the project. I will provide testimony regarding application exhibits and project environmental compatibility associated with biological and aquatic resources.

Next slide, please.

Q. Well, let's leave that slide up there that's

on the screen for us. It's Slide 21.

A. Oh, I see. Okay.

Q. If you would, describe -- excuse me, Slide 22 -- describe the evaluation methods that you used.

A. Right. Right. Following the Arizona Game and Fish Department recommending guidelines for solar development in Arizona, and in order to assess environmental risk for the project, SWCA Environmental Consultants and Invenergy consulted with the Arizona Game and Fish Department in 2019 and reviewed multiple environmental and biological online data sources, including the U.S. Fish and Wildlife Service information for planning and consultation tool and the Arizona Game and Fish Department environmental review tool.

A desktop review was also completed to identify aquatic resources, including wetlands and other special aquatic sites as defined under the Clean Water Act. Based on the desktop reviews, we then conducted field surveys both in 2019 and in 2020 to identify and document vegetative communities, potential wildlife foraging resources, topography of the area, habitat features to evaluate potential wildlife usage, and aquatic resources within the project area. The surveys also characterized and verified the habitat

types within the project area to assess whether there is suitable habitat for federally listed and other special status species and to identify potential waters of the U.S. using U.S. Army Corps of Engineers wetland delineation guidance protocols.

The following figures in my presentation, the photographs included, are all included in the CEC application exhibit, Appendices B-1 and B-2. This photograph is the alternate Gen-Tie line route with the Cholla substation in the background.

Next slide, please.

Q. So what type of biological and aquatic resources do you expect to find on this project?

A. Wildlife is typical of northern Arizona desert scrub habitat. Importantly, there is no difference, in terms of habitat or common wildlife use, between the proposed and alternative Gen-Tie routes. Typical wildlife species observed included coyote, deer, desert cottontail and jackrabbits, mice, small reptiles, common bird species.

According to the U.S. Fish and Wildlife Service information for planning and consultation database query, a total of eight threatened or endangered species have the potential to occur within the project area. Those species are: California

condor, yellow-billed cuckoo, gray wolf, black-footed ferret, Little Colorado spinedace, northern Mexican gartersnake, Chiricahua leopard frog, and Peebles Navajo cactus. However, and importantly, the results of the online research and field surveys indicate that the documented suitable breeding and/or roosting habitat is not present within the project area and/or the project area is outside of the known geographic range for these eight species. In addition, no threatened or endangered species were observed during the field surveys.

This photograph is the alternate Gen-Tie line route where it crosses the Little Colorado River.

And next slide, please.

Q. So what are your conclusions with respect to biological resources?

A. For both the proposed and alternative Gen-Tie routes, our results have indicated the project is environmentally compatible, as project construction and operational activities are unlikely to adversely impact threatened or endangered species or their habitats.

Additionally, based on wildlife agency consultation from May in 2020, the Arizona Game and Fish Department has no concerns for wildlife, including wildlife corridors, which may occur within the project

area. The project will not disturb any areas of biological wealth and will have minimal to no impact to wildlife species. Again, in my opinion, the project will be environmentally compatible with respect to terrestrial species and their habitats.

These photographs here depict the dominant habitat within the project areas.

Next slide, please.

Q. And the next slide, for the record, is Slide 25 of hearing exhibit INV-2. If you would, describe this for the Committee.

A. Thank you. Thank you. So for both the proposed and alternative routes, aquatic resources are limited to ephemeral surface water features and the Little Colorado River, which is also an intermittent surface water feature. There are no wetlands or perennial surface water features in the project area.

Surface waters -- surface features will be avoided by spanning, and structures will be placed outside of the limits of aquatic resource features. In my opinion, because of this avoidance, again, the project will be environmentally compatible also with respect to the aquatic resources.

This figure here depicts the aquatic delineation that we completed near the Cholla

substation. And you can see, at least hopefully fairly well, the black outlines are the proposed and alternate routes, the areas we surveyed.

CHMN. CHENAL: Remind me, sir, what you mean when you say "ephemeral."

MR. KORONKIEWICZ: Ephemeral, meaning not permanent, things such as ephemeral washes. Occasionally, if we're so lucky to see some rain, you would get water in those features, such as ephemeral water sources. And again, the Little Colorado River is an intermittent water -- a water source as well. It's only in times of big precipitation events would we see moisture in those drainages.

CHMN. CHENAL: So is there a difference between ephemeral and intermittent? Is intermittent a term of art, like ephemeral is, when describing water sources?

MR. KORONKIEWICZ: Yeah. They're pretty synonymous with each other, both terms.

CHMN. CHENAL: So I'm just curious. How often does the Little Colorado River -- in the area where the project is located, how often is there actually water of some measurable amount during the course of a year?

MR. KORONKIEWICZ: Yeah. We usually see

it -- how often? I think every year you will see some smaller areas, puddled areas, for example. But in years that you would actually see some form of flow, those are correlated with major precipitation events largely in winter, when we see our winter storms up here, up north.

CHMN. CHENAL: Okay, thanks.

MR. KORONKIEWICZ: You bet.

BY MR. ACKEN:

Q. Let's turn to Slide 26, mitigation measures. And describe mitigation measures that will be used to minimize effects to biological and aquatic resources.

A. All right. Because the project area is largely located in areas subject to previous disturbance and outside of areas that may provide essential habitat for listed species, potential impacts to special-status species present in the region are unlikely to occur or would not rise to a level that would warrant mitigation.

Transmission structures will be Avian Power Line Interaction Committee recommendations.

Preconstruction surveys for burrowing owls, if present, would be conducted by qualified biologists according to a current Arizona Game and Fish Department protocol, and areas occupied by burrowing owls would be

avoided should they occur.

And next slide, I believe.

CHMN. CHENAL: Before we leave, I have a couple questions on that, the avian standards.

MR. KORONKIEWICZ: Yes, sir.

CHMN. CHENAL: We have some pretty standard language in our CECs that require the applicant to comply with two specific documents issued by the Avian Power Line Interaction Committee, and I see one of the proposed changes to the CEC that the applicant made in this case was to strike the reference to those two specific publications and just refer to the most recent publications. So that prompted me to, for the first time, to get onto the Committee's website and actually see what publications are published in relation to mitigation measures for power lines with respect to avian measures.

The only two I could find were the two that were language in our previous cases, the 2006 standards. And I'm going to ask you to distinguish between the word "standards," because there are 2006 standards for the Avian Power Line Committee, and then there are the recommended measures to minimize the risk of collision in the 2012 guidelines of the Avian Power Line Interaction Committee. So there's 2006 standards,

and then there are 2012 recommended measures. And I'd like you to speak to what are those two different documents and what's your understanding of each?

MR. KORONKIEWICZ: Understood. The 2006 document, the use of standard, versus the 2012 recommendations, I don't know why they changed those titles. To the best of my knowledge, a lot had been learned since 2006 to 2012 during that interim. I know there was a lot more data exchanged with the Fish and Wildlife Service and others from other developers. I could only think of that -- again, my best guess would be that it just is a matter of nomenclature which reflects just a lot more knowledge learned since 2006.

CHMN. CHENAL: Okay. Because, I mean, I don't want to speak for all lawyers, but to this lawyer the word "standards" is a very specific term of art. It means, this is what thou shalt comply with. It's a commandment. It's a level that has to be met. Whereas, a recommended measure is simply a recommendation that is not -- one isn't obligated to follow.

So I haven't really delved into the two documents, but I guess, just from the title of the two documents, they aren't mutually exclusive. In other words, one is standards and one is recommended

measures, and I think that's why in the past we've always had the applicant comply with both. So can you speak to that?

MR. KORONKIEWICZ: I guess in the same context of what I was trying to frame up before. Although called standards, I recall that essentially they were also recommendations as well. I don't think developers in either case are obligated to comply with either; hence, maybe the term recommendations. Again, a lot of information from power line projects across the United States went into those documents, so the degree to which -- maybe the appreciative nature from the Fish and Wildlife Service, who's the lead agency on those documents, might have reflected that in the name change.

CHMN. CHENAL: And I'm not trying to trip you up. I promise you, I'm not.

MR. KORONKIEWICZ: Oh, understood, sir.

CHMN. CHENAL: But are you able, sitting here now, to testify the differences between what's in the 2006 document versus the 2012 document, or you just don't know at this point?

MR. KORONKIEWICZ: I would have to look into that further and could definitely get back to you.

CHMN. CHENAL: And that's okay. This wasn't

a trick question. I just --

MR. KORONKIEWICZ: Understood.

CHMN. CHENAL: I wasn't fond of the change, and I'm going to -- when we get to that point, I'm going to say, I think we should keep it the way it was and refer to the two documents as we have in the many, because those are the only two that are listed that I could see on the Committee's website in terms of documents. But, okay, you've answered my question. Thank you.

MR. KORONKIEWICZ: Thank you, sir.

BY MR. ACKEN:

Q. Okay, thank you. I think we're ready for your conclusions on Slide 27. What is your overall assessment of the project's effect on biological and aquatic resources?

A. Again, overall, our analyses have shown that the preferred and alternative routes are environmentally compatible, having effectively minimized impacts to common wildlife, threatened or endangered species or their habitats, as well as aquatic resources.

Q. And do you have any further comments for the Committee at this time?

A. I do not.

CHMN. CHENAL: Does the Committee have any questions of the witness? I'm terrified to try to pronounce your name. Koronkiewicz.

MR. KORONKIEWICZ: Koronkiewicz, but thank you for asking.

CHMN. CHENAL: Koronkiewicz. I'm going to stay with that, and that's the last time I'm going to say it.

But any other questions from the Committee at this time?

(No response.)

CHMN. CHENAL: Okay. Mr. Koronkiewicz, thank you for your testimony. Appreciate you appearing.

MR. KORONKIEWICZ: Thank you, sir.

MR. ACKEN: Thank you, Mr. Chairman.

The applicant calls Randy Simpson.

CHMN. CHENAL: Mr. Simpson, let me know when you're ready and we'll swear you in.

MR. SIMPSON: Ready.

CHMN. CHENAL: Do you refer prefer an oath or an affirmation?

MR. SIMPSON: Oath, please.

CHMN. CHENAL: Would you raise your right hand.

(Randall Simpson was duly sworn by the

Chairman.)

CHMN. CHENAL: Mr. Acken.

RANDALL SIMPSON,

called as a witness on behalf of the Applicant, having been previously sworn by the Chairman to speak the truth and nothing but the truth, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. ACKEN:

Q. Please state your name and business address for the record.

A. My name is Randall Simpson. My business address is 1850 North Central Avenue, Suite 800, Phoenix, Arizona 85004.

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

A. I'm employed by Burns McDonnell. We are an engineering and planning firm. My role there is a senior project manager and environmental planner.

Q. And what was your role in the CEC application for this project?

A. I assisted with preparation of the CEC application, including some of the technical studies,

several of the map exhibits, specifically application -- or, Exhibit E of the application, the scenic areas assessment. I also did some coordination and meetings with Navajo County, conducted some field review of the project site, and also participated in the public outreach, in particular the public meetings.

Q. Please provide an overview of your educational and professional background.

A. My academic background is I received a bachelor of landscape architecture in 1993 and a bachelor of environmental science in 1992 both from North Dakota State University.

I have approximately 28 years of professional experience primarily providing environmental planning and consulting services for energy infrastructure projects. Those projects have been throughout Arizona, as well as several other western states. I have previously conducted studies for several projects here in Arizona that have been presented before the Siting Committee, and I've testified before them, the Siting Committee, in Cases 116, 122, 127, and 131.

Q. Next, I'm going to ask you to describe how you evaluated scenic areas and visual resources, but I understand we have a new exhibit. So did you want to introduce that?

A. Yeah. Earlier today, we had inadvertently missed a slide in the package that you received, so we submitted INV-7, which is Slide 28.1, so it comes right after 28, and it was basically a slide titled methodology. So we've added that to the tables in front of the Committee Members that are here present, and we also have some additional copies if needed.

CHMN. CHENAL: Mr. Simpson, I think the rules require us to wear the mask at all times, even when we're testifying.

MR. SIMPSON: I was running out of air.

CHMN. CHENAL: Pardon me?

MR. SIMPSON: I was running out of air a little bit there. Maybe talking too fast.

CHMN. CHENAL: Okay. Well, we're happy to have you slow it down a little then.

MR. ACKEN: It's all kinds of fun new challenges for all of us. I was worried about that today as well.

BY MR. ACKEN:

Q. All right. So on the screen is INV-7, Slide 28.1. Why don't you summarize how you evaluated scenic areas and visual resources.

A. Thank you. Yeah. This information is presented in detail in Exhibit E as well, but I do want

to touch on a few key items relative to the methodology that we use to evaluate scenic and visual resources.

Essentially, the purpose of the studies was to characterize the level of visual modification that would occur in the landscape after construction and operation of the project. Specifically, our evaluation included studies related to landscape scenery and sensitive views. Landscape scenery can be defined as the scenic quality of the different landscape units in the area. And sensitive viewers are oftentimes travelers on roadways or residences or recreation areas, things of that nature.

Our methodology followed guidelines that were established by the Bureau of Land Management and Forest Service for management of scenic resources on federal lands. More specifically, we adapted those guidelines for the analysis of the proposed 500 kV transmission line within this study area.

We conducted two specific field reviews to collect and analyze visual data; that included photography, mapping, things of that nature. And we also have prepared two visual simulations which are in the application, and we're going to talk a little bit about them later, but they were essentially prepared along Obed Road to illustrate both the preferred and

alternate conditions if the line were to be built on those alignments.

Q. So we have seen photographs of the project area in the biological resources testimony and also in Ms. Innis' testimony, as well as the virtual tour. Could you provide kind of the -- I guess the expert view of the scenic resources that are in the vicinity of the project?

A. Yes.

Next slide, please.

Yeah. So we're going to talk specifically about the two topics I mentioned earlier, scenic quality and viewers. Hopefully, you'll be able to recall some of the imagery that was presented in the virtual route tours that Ms. Innis presented, because I think it's important to reflect back on that, as well as the photos that we included in Exhibit E.

But as you guys have probably surmised at this point, the area is very rural in nature. It's characterized largely by grazing activities and industrial development associated with the Cholla power plant and the Burlington Northern Santa Fe railroad corridor. The terrain in this area is relatively flat. There is some topographic relief with some rock outcroppings in the area, but generally it's pretty

flat.

There are numerous high-voltage transmission lines that connect into the Cholla plant, and that's not only coming from the south, but they also come from the north as they make their way up to the Four Corners area. So the setting itself is very much influenced by this history, this long history of energy development in this area.

Associated with the -- it's not showing up too well. But associated with the project area, we've inventoried four different classifications of landscape. Shown in blue is an area that we called Class A, and that is the Little Colorado River corridor. And that's probably the most diverse and unique resource in the study area. There are sections outside the study area that probably are a little more pristine. Again, this area of the Colorado River, it's influenced because it's right up against the railroad, there's flood control features there, there's erosion control features against the railroad, there's quite a few crossings of the Colorado River there from existing transmission lines. So we did inventory it and called it a Class A landscape, but it is heavily influenced by industrial development in the area that we're really focused on near the power plant.

The Class B landscapes are these dissected plateaus that are shown in the green. Let's go back there, please. So those areas are characterized -- a little bit more diversity in soil color. The terrain there is a little more diverse. That's the area where you do see some rock outcroppings out by the solar plant and to the areas on the western side of the transmission line routes. The areas that are influenced by some drainages, that's hence the dissections of the plateaued landscape there. So there's little bit more of a diversity, unique colors with the soil and whatnot, and so they were inventoried as Class B.

Class C landscapes are the area in between the plateaus and the river corridor, and we considered them to be grasslands and lowland areas. And again, they're relatively flat. There's a higher density of vegetation in those areas, predominantly kind of high desert scrub vegetation. There's not a lot of significant trees or anything. It's mostly shrubs and grasses for the most part. There are some trees along the edges of the Colorado River, but those were inventoried as Class C.

And then the D areas are developed areas. So that's the areas around the Cholla power plant and the

areas associated with Joseph City. So you have quite a bit of development north of I40 and then some development just to the south of I40.

So that's kind of the scenic quality setting. And generally speaking, impacts to the scenic quality are pretty modest. Again, the area does not have a wealth of unique or special visual features associated with it. Again, I would say areas outside of here, outside of the study area along the Little Colorado River, might be an exception, but in this case it's fairly industrialized in this setting. So there are no protected landscapes, per se, in this area.

Q. What kind of viewpoints do you have in the area?

A. Next slide, please.

So this map shows the inventory viewpoints. And what you're seeing with the different colors on this map are the distance zones that are shown from the actual viewing location. So we have major road corridors, Obed Road, McLaws, and Territorial Road here, and I40 here. And then you have three residences, which are all located in the same ranch farmstead, just east of Obed Road. And other than that, there were no specific fixed viewing locations in the area; there are some dispersed recreation that may

occur in the area.

But generally speaking, my experience in the area was that most people viewing this environment are traveling around on Obed Road north/south. And so people, I think, from Joseph City use that to travel south to some destinations south of here, and then occasionally from Holbrook and Winslow along McLaws and Territorial Road, but I think for the most part, we felt like Obed Road was really the primary access point that the public would use to access this area.

Almost all of the lands are fenced off and gated. Most of the gates are locked. So it's difficult for the public to go out here and really access any of the private lands outside those road corridors.

As I mentioned, we did prepare a couple of visual simulations, and we'll show them next. One of the viewpoints is located at the preferred route just to the north side viewing southbound, and the other one is located a little bit further south of the alternate route and it is also viewing southbound. And we'll show them a little bit more specifically.

But, you know, one thing I would say is, again, impacts generally to viewers in this area were pretty modest. And, you know, the residences

themselves, they're located on the opposite side of three existing transmission lines. So we did feel like the impacts to the residences, even though they're close to the alternative corridor, they are viewing across three existing lines to see even the preferred route. So again, we do have some residences there, but we just felt like the impacts were not significant because of the presence of existing lines.

I think -- next slide, please.

Q. And this is Slide 31, Simulation 1. If you would, please describe this for the Committee.

A. Yeah. So we just talked a little bit about the location of these, and I think now it's easier to see what I was saying. This is a simulation that was completed along the preferred route, and this is located on Obed Road. You're viewing southbound and you're about a quarter mile or maybe a little less, thousand feet, south of where the transmission line route would potentially follow the section line.

What you can see here in the background is some existing distribution lines. Some of these connect back towards the Cholla facility. Some of them extend out into the project area and serve wells and the residences that are out there and then also some communication facilities that are out in the area. But

you do have quite a few of these distribution lines scattered throughout the study area, including up by the power plant.

What you see in the proposed conditions is the steel lattice structures that we're anticipating would be used in the areas outside the Cholla substation. The typical span links that you see if you were to measure the existing lines in these areas are anywhere from a thousand to 1,500 feet. I estimated an approximate average of about 1,200 feet between spans. So in this case, you can see one structure would be located on one side of the road and you'd be able to clean span the road, and the next structure would be several hundred feet to the east. And again, this is an area that residents traveling southbound from Joseph City would see as they traveled southward.

Q. Next, describe Simulation 2 on Slide 32.

A. All right. So this is about -- maybe about a mile further south. Again, this is a southbound view. Also, you can see, in this particular setting, some more distribution lines. Like I say, they continue on all through the study area to get to a number of different facilities that are out in the area.

In this case, as Susan, Ms. Innis, presented in her testimony, this route would parallel two 345 kV

lines that come out of Cholla and they travel all the way down to the Phoenix metro area. So they're pretty long-haul lines, and you can see them here in this location. And again, these spans are approximately 1,200 feet for these existing lines.

So if you look at the proposed conditions, we've simulated that, also showing that we would match the approximate span distances. And you can see the new facility a little -- in this case a little bit closer to the viewer than the existing lines, but you can see how the lines would match up with that corridor and match the structure type and, generally speaking, would have minimal impact, I think, to the viewing conditions in this area.

Q. Are there any mitigation measures that can be used to further minimize impacts?

A. Next slide, please.

Yes. In fact, it's fairly common for projects of this nature to have a range of different mitigation measures. Oftentimes, these are design measures that are considered when the appellant is actually designing the facility when they're ordering materials.

Oftentimes, in these rural areas one of the things you're concerned about is seeing reflections or

glare from the structures, so oftentimes they'll use a galvanized or surface-treated metal finish that dulls it that helps minimize the glare. The conductors, or the wires themselves, can also be surface treated so that they are essentially nonspecular, is the term that's used, and that can help reduce glare from the wires as well.

And then as I mentioned in the second simulation, matching of spans, where we have existing transmission line structures and matching the structure types themselves, typically helps reduce visual impact.

And then on the ground, utilizing existing access roads to minimize surface disturbance. And because this is relatively flat, you don't see as much benefit in this area as you might in areas with steep terrain where if you blade new roads, you can oftentimes see those roads as much as the transmission line corridor, especially at distance. But both of these routes do have existing ranching roads and transmission line access roads nearby, and so we felt like both of these routes would be able to take advantage of the presence of those existing routes and result in building fewer new roads to construct the line and operate and maintain it. So we feel like that's a benefit to this project, and fairly typical

industry standard things that can be done to reduce impacts.

CHMN. CHENAL: Mr. Simpson, your last point about roads, using existing roads -- obviously, the applicant would do that -- but were there more access roads, existing access roads, for the preferred route or the alternative route?

MR. SIMPSON: They're very similar. What I would say is you have roads that are almost the entire length of both routes; and depending upon where you physically site the roads, you could be either fairly close to the road or just a few hundred feet away.

About the only exception where we don't have roads is the crossing of the Little Colorado River, for obvious reasons. But, you know, again, I believe with spanning that, you'll also be able to reduce impact to the actual river corridor itself.

So I feel like they're fairly similar. The roads for the preferred route are ranching access roads and they follow along the section lines and they go out to some of the ranching infrastructure that's out there. The road on the existing -- or, the preferred route is largely a result of the access road for the existing transmission line to perform maintenance and it was used during construction.

CHMN. CHENAL: Member Noland.

MEMBER NOLAND: Thank you.

Mr. Simpson, you haven't mentioned the little pond, lake, body of water to the east of the Cholla plant. Is that used in the plant itself, or what is that water, body of water?

MR. SIMPSON: Typically ponds like that are either makeup water, so it's used for cooling, or it's used to discharge water that has already been used for cooling purposes. I don't know if I can tell you for sure which is which in this area, but I also know that there is a well field out in our study area where I believe water is pumped. And I don't know if that's only secondary use, but I would say, you know, it's one of the -- one of the two. And perhaps APS could give you a better answer. But it's usually makeup water or discharge water.

MEMBER NOLAND: So a manmade water structure?

MR. SIMPSON: Yes.

MEMBER NOLAND: Thank you.

MEMBER DRAGO: Mr. Chairman.

CHMN. CHENAL: Member Drago.

MEMBER DRAGO: Mr. Simpson, thank you. I've got a question on Slide 29 with the Classifications A through D. Just for my own understanding, is that a

reference document that you use that defined those classes, and then you took the features of your proposed project area and then found those features to be classified under A, B, C, or D? Is that -- can you tell me a little bit how that works?

MR. SIMPSON: Some of those details are presented in the application, but that classification system is a derivative of the guidelines that the Forest Service and Bureau of Land Management use. So in order to delineate those units, this was something that we -- typically, we'll use either aerial photography and topo maps and we'll map them out ourselves to kind of delineate distinctive units, and then when we go out in the field we'll confirm those units.

So in this case, these units were based on my interpretation of a map, aerial imageries, and field work that was conducted to kind of delineate these zones. And so you look at things like vegetation type, soil pattern, soil colors, land patterns, rock outcroppings. And so it's not a perfect science, but you're kind of trying to characterize the area into zones so you can determine if there's different levels of modification in each of those zones; therefore, what's the level of impact.

MEMBER DRAGO: Gotcha. Thank you.

CHMN. CHENAL: Member Riggins.

MEMBER RIGGINS: Mr. Simpson, and maybe this is more of a land use question for the next testimony, but with respect to, as you stated in your testimony, the distribution lines that are supplying power to wells, and I know there are several exempt and nonexempt wells within the proposed solar facility area, is there any plan to incorporate those into the solar facility or is there any sort of plan as far as -- if they're going to be abandoned, what is -- is there any sort of plan as far as mitigating the impact to those wells, or are they going to be incorporated into the solar facility?

MR. SIMPSON: Yeah. I think Ms. Innis might be better suited to answer that. I do know, spending some time in the area, most of the lines could be avoided, I think, from the project standpoint. Perhaps the solar facility itself may have to try to accommodate a couple of the lines that serve some wells out there. But I don't believe, you know, from my perspective, having spent quite a bit of time in the field, that we would directly impact any of those lines with this -- with the proposed structures themselves.

MEMBER RIGGINS: And the well field that you

mentioned with respect to the retention ponds at Cholla, is that in the study area -- or, in the proposed solar area or just the study area in general?

MR. SIMPSON: Yeah, on -- I forget the exhibit offhand, but one of the land use exhibits, I believe it might be A-2 or 3, actually shows that network of wells. And so again, I got that information partly from looking at the aerial imagery and then doing a little bit of research on my own and then confirming some of those locations out in the field. But yeah, they're -- and I also believe there are some wells, like you say, that aren't used out there, but there's probably a well shaft or a well head that might be even buried out there, but the shaft itself might still exist. I know, driving around with a rancher, he pointed out a lot of them; some of them I couldn't tell there was a well there.

MEMBER RIGGINS: Okay, thank you.

BY MR. ACKEN:

Q. Mr. Simpson, to finish up your testimony, why don't you provide your conclusions regarding the project's potential effects on visual resources and scenic resources that's shown on Slide 34.

A. Yeah, a couple of key points. Again, with our evaluation, and one thing that I think is really

important, is this is a relatively short, direct transmission line connection from the solar facility into the Cholla substation. If you look at the size of this generation facility, I think you get a lot of megawatts for a relatively short line, and so I think the strategic siting of the solar plant here helps reduce the overall footprint of this transmission project.

As I mentioned, there are a number of high-voltage lines, just the nature of this area, the history of the area, both along the railroad tracks, as well as coming in and out of the Cholla substation. And then some of the ranching features, you know, it's not uncommon to find energy infrastructure almost all throughout the project study area of different sizes.

The conformance with the Navajo County comprehensive plan, and specifically the Aztec area plan, is also in line. Again, there were no real specific protections that they had in place for this project area. Most of their guidelines were, you know, more for developed resources that just simply don't exist out here. They also do talk about this area as being compatible and desirable for renewable energy development. So again, I feel like in general it conforms to the plan and is the right place for a

facility like this.

Overall impacts to scenic resources would not be considered significant. Both the preferred and alternate routes are compatible with scenic and visual resources. And again, I feel like this is very compatible compared to other projects that I've worked on where the Siting Committee has reviewed and approved those projects as well. I think it's very commensurate with the prior work and recommendations we've made.

CHMN. CHENAL: Are there any -- I probably should have asked this of the previous witness, but to your knowledge, Mr. Simpson, are there any restrictions on placement of the poles or the structures across the little Colorado?

MR. SIMPSON: I don't believe there would be, but the goal would be to be far enough, I think, from the edges of the river bank so that you have appropriate stability and easy access for long-term maintenance and whatnot, and I think that helps. And again, that's one of the benefits, I think, to the preferred route, is it's little easier, in my opinion, to get across the river there. Where that crosses, it's a shorter crossing, so it makes spanning it and getting across it a little easier.

But from a visual standpoint, you come into

an area where you already have existing lines. That's the point at which you have a lot of lines. So we would try to, you know, cross the river, I think, in a similar fashion that's already out there; therefore, hopefully minimizing the visual impact.

CHMN. CHENAL: Right. I was more thinking if it was a floodplain or if it was a flood zone area or whether there were some, I don't know, restrictions on where structures could be placed.

MR. SIMPSON: The river channel would present the biggest challenge. You wouldn't want to be in there. I mean, that river can move a lot of water. And the prior witness -- during high periods of runoff, it can move a lot of water. So you just want to be far enough back.

More than likely you're going to probably be somewhere in that floodplain, because you can kind of see the patterns out there, and I think the floodplain is fairly broad historically. So I do think you're going to probably be on the edges of the floodplain itself, but not in the channel, which I think is the real issue.

CHMN. CHENAL: Any -- well, I'm not sure if you're finished. We had a series of questions for Mr. Simpson. I'm not sure you're finished with him,

Mr. Acken.

MR. ACKEN: Thank you, Mr. Chairman.

BY MR. ACKEN:

Q. I do believe that completes your testimony, unless you have any other final comment?

A. That's it. Thank you.

MR. ACKEN: Thank you.

CHMN. CHENAL: Do any of the other -- any members have any questions, the ones appearing via Zoom?

MEMBER HAENICHEN: Mr. Chairman.

CHMN. CHENAL: Yes, Member Haenichen.

MEMBER HAENICHEN: Are we going to get an opportunity to question the APS witness?

CHMN. CHENAL: I'm sorry. Which witness, Member Haenichen?

MEMBER HAENICHEN: APS, Linda.

CHMN. CHENAL: Yes, I think we're going to need to hear from APS. I know I have some questions, and I think you still do, and I think it would be very helpful.

MEMBER HAENICHEN: But that's not now, is that what you're saying?

CHMN. CHENAL: Well, it will be tomorrow.

MEMBER HAENICHEN: Okay.

CHMN. CHENAL: Because the applicant has one more witness this evening. So there will be -- there will be an opportunity tomorrow.

MEMBER HAENICHEN: Yeah, that's fine.

And also, then, I would like the opportunity to just put in the record questions for Ms. Innis so that she can know what she has to dig up tonight. So I guess I'm interested in -- on your existing 200-megawatt farm, solar PV farm, what percentage of the output energy is pure 60-hertz and what percentages are in the harmonics? And then do you envision any changes in those numbers with the new facility, for example, improvements in inverters and that kind of stuff?

MR. ACKEN: Chairman Chenal, Member Haenichen, our thought was -- would be to get through our direct, give APS the opportunity to respond to some of the questions, and then Ms. Innis can come back, have time to do some homework, and be in a position to answer your questions.

MEMBER HAENICHEN: Yeah. I just wanted to be sure that she has enough information on my questions to get the right answers.

MR. ACKEN: And we thank you for that.

And, Mr. Chairman, if I could, if I could

just ask my witness if that's clear to her or if she needs any further clarity at this time as to the questions.

Okay. We may bring in a subject matter expert to answer those questions.

CHMN. CHENAL: And, you know, that would be fine.

MR. ACKEN: Okay.

CHMN. CHENAL: That would be fine, because I think we'd like to hear the testimony. And I know it's a little out of order, but there won't be an objection; and if there was, I'd overrule it and we could hear the expert.

And I want to just foreshadow to APS. I think there's some questions that Member Haenichen has and I'd like to get a little more background on, I guess. What's going to happen to the power when it comes into the substation? And why are there 365 kV and 500 kV lines? Was that power all generated at Cholla? And as it's decommissioned, where is this power -- because this is going to basically supplant the Cholla power, where is this power going to go and what lines are going to be used? And if you're not going to use the 345 kV and the 500, well, will some of the lines be decommissioned? So I think this general

background will be very helpful to me.

And I also feel -- and it's just me. I know Ms. Innis covered CEC-2, but it just seems, as I'm sitting here now, I have a much better feel for CEC-1 than I do for CEC-2. And that's just probably me, but I just -- maybe I need to hear a little more or see a little more; I don't know. CEC-2 is still not fixed in my head. And maybe there's not much that needs to be discussed, if anything, really, but I'm just a little -- I guess I'm a little unclear as to what happens when we get to the change in ownership and then maybe hear a little testimony about what -- like I said, what happens to the power at that point and maybe a little more explanation from APS would be helpful for me.

MS. BENALLY: Chairman Chenal, we do have Brad Larsen, as I mentioned this morning, available to testify tomorrow as the Committee wishes, and he will be speaking more specifically to CEC-2, the facilities associated with that.

We had also filed a supplemental witness summary, because there are some areas that require specialized knowledge since this is an interconnection. So we had added Jason Spitzkoff as a potential witness, so he may also be joining tomorrow.

The team will have to meet this evening, but

we will have Brad Larsen testify tomorrow to be responsive to the Chair and the Committee's questions.

CHMN. CHENAL: Very good. Thank you.

MEMBER HAENICHEN: Mr. Chairman.

CHMN. CHENAL: Yes, Member Haenichen.

MEMBER HAENICHEN: Following that testimony you just made, just to give you a heads up about what I need to know tomorrow. One is, does APS have any route preference between the two? That's one thing I'd like to know.

And the other thing is, in the long haul, like 2025, you're going to be replacing a 24/7 pure 60-hertz sine wave power source with an intermittent power source that has harmonics associated with it, and I want to know how APS feels about that in terms of servicing their customers, existing customers, for the energy from Cholla.

MS. BENALLY: That's noted, Committee Member Haenichen.

CHMN. CHENAL: Thanks. Thank you very much. And Ms. Benally, I know the other -- Mr. Acken here is very familiar with it, but this is really typical of our cases where we try to telegraph, during the course of the hearing, that there's certain things we'd like to hear so there's no surprises at the end and we can

give you an adequate opportunity to line your witnesses up. So we kind of do it out of respect for you so you're not surprised.

Mr. Acken, is there anything further from Mr. Simpson?

MR. ACKEN: Not at this time. Thank you.

CHMN. CHENAL: Thank you, Mr. Simpson.

MR. SIMPSON: Thank you.

CHMN. CHENAL: I note that it's 5:00, but we don't have the public hearing until 6:00. I know we want some sort of a break.

MEMBER NOLAND: Yeah, a break before the public --

CHMN. CHENAL: Oh, absolutely. But I guess the question is: There's another witness that we would like to present. Do we want to hear that this evening or defer until tomorrow morning?

MEMBER HAENICHEN: Were they going to provide dinner tonight or not?

CHMN. CHENAL: I don't think so tonight.

MEMBER HAENICHEN: Oh, I thought I heard that earlier.

CHMN. CHENAL: I don't think so.

MEMBER HAENICHEN: Okay.

MEMBER NOLAND: There's the thing at the

hotel. I don't know what they're doing for sure.

CHMN. CHENAL: The applicant is not providing dinner. I think that was --

MR. ACKEN: We are for tonight because of the public comment session. And there is dinner out here for the Committee Members.

CHMN. CHENAL: Oh, I'm story.

MR. ACKEN: That was my mistake.

CHMN. CHENAL: Thank you for that clarification.

Well, do we want to break now? I think we'll have plenty of time tomorrow. But if you would like to go further with this witness -- because we're going to start at 6:00, and I'm not sure there's going to be much public comment tonight at 6:00.

How long do you think this witness will take, Mr. Acken?

MR. ACKEN: Mr. Chairman, there's only a handful of slides. He is covering two resources, but the cultural resource in particular is very straightforward, and land use there's a couple questions. I think that his testimony shouldn't last longer than Mr. Simpson's did, so a half hour with questions if you want to grind through it.

CHMN. CHENAL: Well, I'm going to ask the

Committee. I could go either way.

My sense tomorrow is I don't want to run out of witnesses at noon or 1:00 and feel pressure to start going into deliberations. I'd rather do the deliberations Wednesday morning. And so, you know, I don't want to have a lot of dead time tomorrow. So that's suggesting to me we defer your next witness to tomorrow.

MEMBER HAENICHEN: Yes.

MEMBER RIGGINS: I agree.

CHMN. CHENAL: So let's call it an evening. I think that's good. Let's call it an evening and give the Committee an opportunity to have dinner, if they want it now, and we'll start up at 9:00 tomorrow. And I think we'll have plenty of time to go through the witnesses, and I'm thinking we're going to then do the deliberations -- start fresh Wednesday morning.

Member Haenichen.

MEMBER HAENICHEN: But we're still going to have the evening session at 6:00 for the public?

CHMN. CHENAL: Yes, sir.

MEMBER HAENICHEN: Is it going to be in this room?

CHMN. CHENAL: Yes, sir.

MEMBER HAENICHEN: And they're going to know

where to come and so on?

CHMN. CHENAL: Yes. And also, the applicant has set it up so that public comment could be taken by Zoom. So people could appear by Zoom as well to make it easier on them. So we could have some of each.

MEMBER HAENICHEN: Good.

CHMN. CHENAL: Anything further we need to talk about before we adjourn for the evening?

(No response.)

CHMN. CHENAL: Any of the Members that are appearing by Zoom have anything further to add?

(No response.)

CHMN. CHENAL: If not, we'll adjourn. See everyone tomorrow at 9:00, and this evening at 6:00.

(Off the record from 5:03 p.m. to 6:09 p.m.)

CHMN. CHENAL: This is the time set for -- a few minutes late. Sorry for the delay. It's technical matters with the COVID, but we're doing the best we can to accommodate public comment for the Hashknife Energy transmission project. And we always take public comment.

My name is Tom Chenal. I'm the Chair of the Line Siting Committee. We have the full complement of Committee Members here. We heard testimony starting at a little after 1:00 this afternoon, and we value the

public comment on all our projects.

Some of our Committee Members are in person and some are attending via Zoom. And so we made sure, with the applicant, that the public would have the ability to do the same, either appear in person or appear via Zoom or even phone.

So with that, what we want to hear from you is your position on the project. We try to keep public comment to no more than 5 minutes per person. And if someone has stated ahead of you basically your position, you can basically just summarize your position. It's not evidence, but we rely on it. It helps inform us, it helps us to ask questions and direct the hearing, so we value the public comment.

So with that, I know we're doing this with people who are appearing by Zoom, at least I believe there's three or four people, maybe a few more could attend. But we're trying to get your contact information so if in the future if a CEC, Certificate of Environmental Compatibility, is granted by our Committee and it's approved by the Corporation Commission, if the applicant later comes in and tries to amend it or extend it in some fashion, you'll be notified so you have an opportunity to appear at that hearing. So that's why we capture your contact

information.

So with having said that, maybe we -- in no particular order, Ms. Innis, if you would direct which of the parties can begin their public comment.

MS. INNIS: Yeah, I just want to make sure. We had a number of people on the line when we started this at 6:00, so I just want to double-check. I think we logged in Steve Brophy from Aztec Land & Cattle.

Steve, are you there?

(No response.)

MS. INNIS: Can we unmute Steve?

MR. BROPHY: I'm sorry. I was struggling to unmute myself, but I am here, Susan.

MS. INNIS: Thank you, Steve. Hang tight.

Do we have any other members of the public who wish to comment?

(No response.)

CHMN. CHENAL: Are there any members of the public who wish to make comment in addition to Mr. Brophy who are on mute and they can't tell us that they want to communicate, I guess that's the issue.

So if I could ask the technical crew, who are excellent, to make sure that the members of the public are unmuted. I'm getting the thumbs up. So if there's any member of the public besides Mr. Brophy who would

like to speak, we'll hear Mr. Brophy and then just announce yourself after Mr. Brophy's comments and we'll hear your comment.

So Mr. Brophy, I know you and I have worked with each other in the past on the power plant -- on the APA. It's nice to hear from you again. So if you'd like to give us your comments, we'd all appreciate hearing from you.

MR. BROPHY: Thank you, Mr. Chairman, and Members of the Commission. Can I be heard?

CHMN. CHENAL: Yes.

MR. BROPHY: Thank you. I run Aztec Land & Cattle company on whose property a majority of this solar project, which is seeking your approval for transmission access to Cholla, is located. So I'm sure you will, but weigh my comments, which I intend to be truthful and sincere, in light of our interests, and our interests are Aztec's, that we fundamentally support this transmission line access application for a couple of reasons.

Obvious, one, it provides a much higher use to our land than is presently being employed, which is grazing. But also, it makes use of a number of natural resources in changing times. One of them, obviously, the sun, coupled with whatever Invenergy's technology

is.

But a far greater one, from I think a local and a state standpoint, is the fact that -- and my numbers are woefully imprecise, but there has to be billions and billions and billions of dollars of transmission assets that cross our property because of the Cholla power plant from where this -- whose switchyard this transmission access is intended to connect to, which, given just the price of coal-generated power alone, not to mention all the other environmental restrictions that have either been brought on by or imposed on coal, those assets from both Cholla -- or, Cholla, but other coal generators, are going to not be able to be used absent other generation. And the only generation foreseeable, to me anyway, is renewable generation.

Our property was enormously affected by the Cholla power plant. APS put a well field on our property with our consent, and there are two 345 kV power lines and two 500 kV power lines that cross our property and service the Cholla power plant and interconnection needs of the system. So we've already either been paid or paid the price, depending upon how you look at it, for this crisscross of power lines coming in -- coming into the Cholla switch and going

out of it, and that grand central station sort of set of tracks has enormous value for their generation.

As I understand it, Invenergy has applied for two paths into the Cholla switch. I have no idea what your mechanism for evaluating that is or if it's choose one or the other or both, but I can tell you that there will be this and future applications for transmission access to the Cholla switch to take advantage of the billions and billions of dollars' worth of transmission assets that come out of there and serve, among other places, the Phoenix load center.

So we support it. We don't think that there's any adverse -- specific adverse environmental damage by adding two or more sets of tracks to the grand central station group of tracks that comes in there and goes out. I can't speak for the county or the other people in Navajo County, but I can tell you that there are distinct and decided and noticed property tax advantages to something like this.

One of -- this particular project, not the transmission lines, but the project, will affect one of our grazing lessees, who's a legacy rancher, a wonderful family of a hundred-plus years' tenure as lessees on our land, and I'm certain they're not in favor of it. And they've registered that opposition in

zoning actions that the County has taken with approval.

But beyond that, I think it is highly beneficial -- again, I can't speak for the County -- but for Navajo County and its people.

In addition to that, all of this activity, except for a section, that is proposed which would service that generation -- or, the transmission, is on our land, and we are by and large our own buffer. And I say by and large. There's State land there and there's also land that belongs to Arizona Public Service, which will be affected one way or another by this.

It's a long way of saying we support the project.

MEMBER NOLAND: Mr. Chairman.

CHMN. CHENAL: Yes, Member Noland.

MEMBER NOLAND: Mr. Brophy, this is Committee Member Noland. I'm a Navajo County resident. And I want to know, do you have any preference between the preferred route and the alternate route?

MR. BROPHY: Ms. Noland, given this project, and depending upon demand for renewables, I don't, but I do express the preference that both routes, either now or in the future, will be in front of you for consideration, because this isn't the only project that

I believe will be built in service to the generation needs in the future that renewables are going to have to provide. And both those routes go across our land, and we've made room for them in our planning, and we hope that the Commission recognizes that, to use that crude example, you're going to need more than one train track going into grand central station in the coming years.

MEMBER NOLAND: Mr. Brophy, one other thing. We that live in Navajo County have been aware of the closure plans for the Cholla plant. And I wonder if you see this as a first step in helping with the downside of those closures and having an upside to using the lines and generating clean energy?

MR. BROPHY: Well, it's sort of patronizing of me to say yes, but I say not only yes, but hell yes, with a couple of -- pardon my language -- a couple of qualifiers.

This won't replace the loss in jobs that Navajo County is going to experience. It will replace, if built, some significant -- not significant, but certainly important portion of lost property taxes.

But I also say, looking at it more broadly than Navajo County, the state of Arizona has this enormously valuable transmission asset that's sitting

there that has 3,000 megawatts' worth of future capacity, much of which won't be used. It's incumbent on the stewards of that transmission resource to do all that is reasonable and proper and safe and correct to occupy that transmission resource with a future generation so that it is not, to mix metaphors, an electrical freeway to nowhere.

MEMBER NOLAND: Thank you.

CHMN. CHENAL: Any other questions from the Committee?

(No response.)

CHMN. CHENAL: Thank you, Mr. Brophy. Appreciate your comments very much.

MR. BROPHY: Thank you, sir.

CHMN. CHENAL: Do any other members of the public wish to provide public comment tonight? If so, just please announce your name.

(No response.)

CHMN. CHENAL: I'm not hearing any, so -- going once, going twice. Okay. I think -- there's no one here present live, so I think we'll close the public comment portion of the hearing this evening. We will resume the hearing tomorrow morning at 9:00 a.m.

And does the Committee have -- any further questions or comments from the Committee before we

adjourn to tomorrow?

(No response.)

CHMN. CHENAL: Does the applicant or the intervenor have any comments, matters we should discuss?

MR. ACKEN: No, Mr. Chairman. Thank you.

CHMN. CHENAL: Okay. Well, let's adjourn for the evening. Again, thank you for your comments, Mr. Brophy, and we'll see everyone tomorrow at 9:00 a.m. Thank you.

(The hearing recessed at 6:24 p.m.)

STATE OF ARIZONA)

COUNTY OF MARICOPA)

BE IT KNOWN that the foregoing proceedings were taken before me; that the foregoing pages are a full, true, and accurate record of the proceedings all done to the best of my skill and ability; that the proceedings were taken down by me in shorthand and thereafter reduced to print under my direction.

I CERTIFY that I am in no way related to any of the parties hereto nor am I in any way interested in the outcome hereof.

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 20th day of November, 2020.

KATHRYN A. BLACKWELDER
Certified Reporter
Certificate No. 50666

I CERTIFY that Coash & Coash, Inc., has complied with the ethical obligations set forth in ACJA 7-206(J)(1)(g)(1) through (6).

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