

1 BEFORE THE ARIZONA POWER PLANT LS-390

2 AND TRANSMISSION LINE SITING COMMITTEE

3

4 IN THE MATTER OF THE APPLICATION OF ) DOCKET NO.  
 5 ARIZONA PUBLIC SERVICE COMPANY, IN ) L-00000D-24-0218-  
 6 CONFORMANCE WITH THE REQUIREMENTS ) 00238  
 7 OF ARIZONA REVISED STATUTES SECTION )  
 8 40-360, ET SEQ., FOR A CERTIFICATE )  
 9 OF ENVIRONMENTAL COMPATIBILITY )  
 10 AUTHORIZING THE BAGDAD 230kV )  
 11 TRANSMISSION LINE THAT WILL CONNECT )  
 12 FROM WESTERN AREA POWER )  
 ADMINISTRATION'S MEAD-TO-PERKINS )  
 TRANSMISSION LINE VIA A NEW )  
 SUBSTATION TO A NEW SUBSTATION NEAR )  
 THE TOWN OF BAGDAD AND ADJACENT TO )  
 THE WILLOW LAKE-TO-BAGDAD 115kV )  
 LINE, ALL WITHIN YAVAPAI COUNTY, ) EVIDENTIARY  
 ARIZONA. ) HEARING  
 )

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13 At: Phoenix, Arizona

14 Date: October 28, 2024

15 Filed: November 4, 2024

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17 REPORTER'S TRANSCRIPT OF PROCEEDINGS

18 (Pages 1 through 153)

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 Arizona CR No. 50695

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1 BE IT REMEMBERED that the above-entitled  
2 and numbered matter came on regularly to be heard before  
3 the Arizona Power Plant and Transmission Line Siting  
4 Committee at Rancho de los Caballeros, 1551 South Vulture  
5 Mine Road, Wickenburg, Arizona, commencing at 1:00 p.m.  
6 on October 28, 2024.

7

8

9 BEFORE: ADAM STAFFORD, Chairman

10 LEONARD C. DRAGO, Department of Environmental  
11 Quality  
(Videoconference appearance.)  
12 ROMAN FONTES, Counties  
(Videoconference appearance.)  
13 DAVID FRENCH, Arizona Department of Water Resources  
(Videoconference appearance.)  
14 JON H. GOLD, General Public  
NICOLE HILL, Governor's Office of Energy Policy  
(Videoconference appearance.)  
15 R. DAVID KRYDER, Agriculture Interests  
16 MARGARET "TOBY" LITTLE, General Public  
(Videoconference appearance.)  
GABRIELA SAUCEDO MERCER, Arizona Corporation  
17 Commission  
18 DAVE RICHINS, General Public

19 APPEARANCES:

20 For the Applicant:

21 Linda Benally  
(Videoconference appearance.)  
22 Farris Gillman  
PINNACLE WEST CORPORATION  
23 400 North 5th Street, MS 8695  
Phoenix, Arizona 85004  
24

25

1 APPEARANCES (Continued):

2 J. Matthew Derstine  
3 SNELL & WILMER, LLP  
4 One East Washington Street, Suite 2700  
5 Phoenix, Arizona 85004

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

2 Now's the time set for the hearing on the  
3 application of Arizona Public Service Company for its  
4 Bagdad 230-kV transmission line project, Docket Number  
5 L-00000D-24-0218-00238, also known as Line Siting Case  
6 238.

7 Let's take role call for the members.

8 Member Kryder?

9 MEMBER KRYDER: Present.

10 CHMN STAFFORD: Member Mercer?

11 MEMBER MERCER: Present.

12 CHMN STAFFORD: Member Gold?

13 MEMBER GOLD: Present.

14 CHMN STAFFORD: Online we have Member  
15 Little?

16 MEMBER LITTLE: Present.

17 CHMN STAFFORD: Member Drago?

18 MEMBER DRAGO: Present.

19 CHMN STAFFORD: Member French?

20 MEMBER FRENCH: Present.

21 CHMN STAFFORD: Member Fontes?

22 MEMBER FONTES: Present.

23 CHMN STAFFORD: Member Hill?

24 MEMBER HILL: Present.

25 CHMN STAFFORD: And Member Richins will be



1 joining us shortly.

2 Let's enter the appearance of the  
3 applicant.

4 MR. DERSTINE: Good afternoon, Chairman --  
5 I've got a good mic -- Members of the Committee, Matt  
6 Derstine appearing on behalf of Arizona Public Service  
7 Company. I think appearing virtually is Ms. Linda  
8 Benally from Pinnacle West law department and also  
9 appearing with me here at the table Farris Gillman from  
10 the Pinnacle West law department as well.

11 CHMN STAFFORD: Thank you.

12 There have been no requests for  
13 intervention, but we did receive a limited appearance  
14 from Freeport Minerals Corporation. That will be marked  
15 as FMI-1 and admitted into the record. I will get a copy  
16 to the court reporter.

17 (Exhibit FMI-1 was admitted into evidence.)

18 CHMN STAFFORD: Mr. Derstine, would you  
19 like to make an opening statement?

20 MR. DERSTINE: Yes, please.

21 Yeah, we drove up yesterday to get  
22 the -- ourselves situated and the room situated. And  
23 this is really the first time that I've spent any time  
24 in -- in Wickenburg. And so I was curious a little bit  
25 about Wickenburg as I was, yeah, in getting checked into

1 my room and talking to the folks here at the hotel and  
2 did a little bit of research just because I was curious  
3 about the history of Wickenburg.

4 And discovered that certainly along the  
5 Hassayampa River, this area was originally settled and  
6 enjoyed by the Yavapai, or I guess as they called  
7 themselves, the Tolkapaya, who used the river to irrigate  
8 crops and corn and beans and squash. And the town gets  
9 its name from Henry Wickenburg, who was an Austrian who  
10 traveled to the United States to make his fortune in gold  
11 mining. And after spending some time in California,  
12 without a lot of success, came here to Arizona and  
13 discovered gold and developed the Vulture Mine in 1863  
14 that produced significant amounts of gold and silver.  
15 Over \$30 million of gold ore was extracted from the  
16 Vulture Mine while it was in operation.

17 I think the town itself had its ups and  
18 downs, based on the economy and things that were  
19 happening, but when the railroad came in 1895 that was a  
20 big plus for the town. And the original railroad depot  
21 is now the Chamber of Commerce in downtown Wickenburg.  
22 The town was incorporated in 1909, although the  
23 settlement of the town, the start of the town really  
24 coincided with the Vulture Mine. And Wickenburg as -- as  
25 I've read, is the fifth oldest town in Arizona, and the

1 oldest town north of Tucson.

2 One of Wickenburg's claims to fame is the  
3 number of guest ranches that are here and have increased  
4 over time. Guest ranches attracted visitors to  
5 Wickenburg starting in the early 1900s, and where we are  
6 today, the Rancho de los Caballeros, was founded in 1948.

7 The western heritage of Wickenburg  
8 continues as it's known as the team roping capital of the  
9 world. And in the winter months the population of  
10 Wickenburg increases significantly as team ropers come  
11 here and travel here to compete and to train together.  
12 And, yeah, the gentleman who showed me to my room was  
13 quick to note that team roping is a big thing here and  
14 you should enjoy it. So I don't know a lot about team  
15 roping, but maybe I'll learn more in the future. So  
16 that's a bit of the history.

17 Let me check and see if I can -- aside from  
18 being dive-bombed by the flies that are apparently making  
19 their way over from the -- the arena, let's see if I can  
20 get this to advance. Okay. There it is. So that was  
21 the -- with the background on Wickenburg, and where we  
22 are today, let's talk about the project, the transmission  
23 line project that brings the committee here.

24 It's not advancing. If you want to have  
25 someone else advance it, I can just give the nod. I

1 don't know if it's my clicker or whether it's a different  
2 issue.

3           Okay. I'll start giving you a high-level  
4 overview of what the testimony will be concerning the  
5 purpose of this project. The purpose is to serve the  
6 expanding energy needs of the Bagdad Mine. Freeport  
7 McMoRan is expanding its concentrated capacity and other  
8 operations at the mine, and this expanding energy need  
9 exceeds the capacity of the 115-kV line that currently  
10 supports the mine.

11           The project involves the construction of a  
12 new 14-mile 230-kV radial transmission line. At the  
13 southern end, the bottom of the map on the right, you'll  
14 see the -- where the line will connect to the existing  
15 WAPA Mead-to-Perkins 500-kV line. There will be a  
16 switchyard and a substation that's constructed there.  
17 You're going to -- oh, thank you. Right here. So this  
18 is the -- you'll see the 500-kV line traveling here, and  
19 the new switchyard and -- and substation will be  
20 constructed there at the southern terminus.

21           At the northern end of the line, the new  
22 230 line will connect to a new substation that will be  
23 constructed just off of the existing 115-kV line that you  
24 see traveling here. That substation will then connect to  
25 the mine and mine operations and supply the energy needed

1 for mining operations at different voltage levels.

2           The route for the -- for the line, it  
3 follows the path of a new water pipeline that's also  
4 being constructed to serve the mine. So the route that  
5 you see -- and I'm going to avoid hitting Madam Court  
6 Reporter in the eye with this laser pointer -- so that  
7 route -- one route is proposed in the application and has  
8 been studied. But the reason for following that route is  
9 that it generally follows the path of this new Aguila  
10 Water pipeline. And so the co-location of the  
11 transmission line with the water pipeline, using the  
12 access road that will be constructed or apparently is  
13 under construction for the new water pipeline, allows the  
14 transmission line project to minimize impacts on not  
15 having to blade a new path for the transmission line and  
16 utilizing the road that will be there or is there today.

17           We're requesting a 300-foot corridor in the  
18 CEC for the placement and final engineering of the  
19 transmission line. The line will ultimately require  
20 100-foot right-of-way. And the line will be constructed  
21 using steel monopoles. The terrain, Sonoran Desert  
22 scrubland, predominates with rolling hills and some  
23 rugged mountains. In certain areas you can -- I think  
24 it's hard to see it from this map, but there are some  
25 fairly significant hills that move into mountains along

1 the path of the line and the water pipeline.

2 The land that's being crossed is  
3 unincorporated Yavapai County. It's largely Arizona  
4 State Trust Land with a small portion, you'll see here in  
5 the upper section of the line, is private land that's  
6 owned by Freeport, the owner of the Bagdad Mine. There  
7 is limited residential development along the path. Here  
8 at the southern end there is a land holding, it's known  
9 as the Santa Maria Ranch, and I think we have the owners  
10 of the ranch are here today here in the hearing room, and  
11 I think are intending to provide public comment.

12 So the ranch sits south of the existing  
13 500-kV transmission line. Importantly there's two  
14 transmission lines that generally follow the same path  
15 here, there's an older 345-kV transmission line owned  
16 exclusively and operated by WAPA. And then the 500-kV  
17 line is owned by WAPA, APS, and various other owner  
18 participants in the 500-kV line. And then -- so as I  
19 mentioned, this project will interconnect with the 500-kV  
20 line, but again, two -- two transmission lines that  
21 follow generally the same corridor and path that are  
22 running along and intersect here at the southern end of  
23 the proposed new 230-kV transmission line.

24 MEMBER LITTLE: Mr. Chairman?

25 MR. DERSTINE: Yes.

1 CHMN STAFFORD: Yes, Member Little.

2 MEMBER LITTLE: Mr. Derstine, I'm a little  
3 confused. There are no transmission lines that actually  
4 follow the path of the project, correct?

5 MR. DERSTINE: Correct.

6 MEMBER LITTLE: It's the two transmission  
7 lines in the area are the -- there's an APS 115-kV line,  
8 the WAPA -- isn't there a WAPA 500-kV line up on the  
9 north end --

10 MR. DERSTINE: No, so --

11 MEMBER LITTLE: Oh, the WAPA line is -- is  
12 the 500-kV line down on the south end, correct?

13 MR. DERSTINE: At the south end -- Member  
14 Little, thank you for your question -- at the south end  
15 there is the 500-kV transmission line, you see that  
16 follows the path --

17 MEMBER LITTLE: Right. Okay.

18 MR. DERSTINE: -- and I think the AV team,  
19 if you can see that on your screen since you're appearing  
20 virtually.

21 MEMBER LITTLE: I can. I can. Thank you.

22 MR. DERSTINE: And following the path of  
23 that 500-kV line is another 345-kV line. So that's the  
24 southern end. The interconnection for this new proposed  
25 230-kV line will be at the 500-kV line where you can see

1 the triangle on the southern end.

2 MEMBER LITTLE: Okay.

3 MR. DERSTINE: And then on the north there  
4 is the existing 115-kV line that's shown in red on the --  
5 on our right screen, the map screen. So 115-kV line  
6 crosses near the terminus of the new 230-kV transmission  
7 line, although our -- our project does not interconnect  
8 with the 115-kV line at this point in time. And then the  
9 interconnection point again on the south is with the  
10 500-kV line jointly owned by WAPA and others, including  
11 APS. And in that same corridor, or generally following  
12 the 500 line is an older 345-kV transmission line.

13 Did that answer your question?

14 MEMBER LITTLE: Yes, thank you. I do have  
15 one other. And that is, so this is a radial line?

16 MR. DERSTINE: Yes, it is.

17 MEMBER LITTLE: Thank you.

18 CHMN STAFFORD: Thank you, Member Little.

19 Let's let Mr. Derstine finish with his opening and then  
20 we can ask questions of the witnesses once they're sworn  
21 in.

22 MR. DERSTINE: I was mentioning we have the  
23 Santa Maria Ranch here at the southern end, you can see  
24 this private land holding in white on our right map  
25 screen. I think that's the land holding, the Santa Maria



1 Ranch here. And then there's this, you see this white  
2 box here kind of in the middle, that is approximately 25  
3 residents [sic] who are roughly a mile from the proposed  
4 route of the new 230-kV line, and those are dispersed  
5 residents who -- who are not -- yeah, essentially living  
6 off grid one way or another supply their own power, but  
7 are off, I think it's Highway 97 here. So that covers  
8 the rest of the area. The path of the line is there's no  
9 residences or developments or planned developments that  
10 impact or that are impacted by the project.

11 In terms of the environmental studies, the  
12 project avoids disturbance of drainages and riparian  
13 habitats. There are, you'll hear from the testimony from  
14 Ms. Esquer, three endangered species that were listed or  
15 candidate species that were evaluated for the potential  
16 to occur in the area, but it was determined that the area  
17 really lacks suitable habitat for these species, and  
18 therefore, the project is not anticipated to affect ESA  
19 species and will not be impacted, taking into account the  
20 implementation of various protection measures that will  
21 be in the CEC and more importantly are contained in the  
22 Environmental Assessment and I'll touch on the federal  
23 permitting side of this project here in a minute.

24 Finishing up with the environmental  
25 studies, cultural resources or resource studies

1 identified two sites in the project area. There's no  
2 direct impact to any registered eligible sites. There's  
3 no impact to recreation. And conclusion is that the CEC  
4 conditions and the environmental quality protection  
5 provisions of the EA address and minimize the impacts of  
6 this project and are pretty comprehensive in terms of how  
7 they deal with and are intended to protect vegetation, as  
8 well as animal life through the construction process.

9 As I mentioned, there is a federal  
10 permitting component to this. The interconnection with  
11 the WAPA line triggered NEPA compliance. WAPA is the  
12 lead agency that led the -- that process. An  
13 Environmental Assessment was performed that studied the  
14 same route that we're presenting to the committee here in  
15 the CEC application. The draft EA was just released and  
16 it's included as an exhibit for the committee.

17 So in terms of our case presentation, we'll  
18 have a panel of the four friendly faces you see on the --  
19 across from me here in the hearing room. They will  
20 testify in support of the application and answer your  
21 questions. Each of the witnesses has prepared slides to  
22 assist them and illustrate and support their testimony.  
23 You also have a placemat which carries the same map that  
24 we're seeing on the right screen here in the hearing  
25 room. And the other side contains one of the KOPs or the

1 visual simulations of how the line will appear. And  
2 Ms. Esquer will testify in terms of the simulations that  
3 were prepared for the project.

4 We'll also have a virtual flyover that  
5 we'll get to here this afternoon, and we'll -- we can  
6 also pull up Google Earth to inform the committee of the  
7 terrain and, you know, we can start at the southern end  
8 and see the existing 500-kV and 345-kV corridor where the  
9 line starts on the south and then show where the Santa  
10 Maria Ranch is located. And if there's other points  
11 along the path of the -- of the transmission line that  
12 the committee would like to see in depth beyond the  
13 flyover simulation, we're happy to do that as well. And  
14 then I know that you'll have a discussion about whether  
15 or not to take the route tour and we have prepared, and  
16 it's an exhibit, a proposed route tour with identified  
17 stops, and an estimate of the amount of time it will take  
18 to do the route tour.

19 So that's the project. The project's  
20 needed to serve a customer, the Bagdad Mine. It's a  
21 single radial line. There's no alternative routes. I  
22 know you'll have -- have had before the committee  
23 projects in which you had to evaluate numerous  
24 alternatives. You'll have another one of those in a  
25 couple weeks. This application presents one route, a

1 single radial line, for consideration by the committee.  
2 And the reason that it's a single route is that it,  
3 again, follows an already planned and in some ways under  
4 construction water pipeline, and so the idea is to  
5 co-locate the transmission line with the water pipeline  
6 in order to minimize impacts along the route. Largely a  
7 remote, undeveloped area. And we're looking forward to  
8 presenting our case and -- to you and to answer your  
9 questions. So thank you for your time.

10 CHMN STAFFORD: Thank you, Mr. Derstine.  
11 Would you like to call on your witness panel and then  
12 we'll swear them in.

13 MR. DERSTINE: Sure. So our witness panel  
14 will consist of and start off with Mr. Jason Spitzkoff  
15 and then move to Mr. Kevin Duncan, our environmental  
16 analysis and expert is Catherine Esquer, and then Anna  
17 Chaulk will discuss our public outreach and engagement  
18 efforts, as well as talk about the satisfaction of the  
19 various statutory notice requirements.

20 CHMN STAFFORD: All right. Ms. Chaulk, an  
21 oath or affirmation?

22 MS. CHAULK: Affirmation, please.

23 (Anna Chaulk was duly affirmed by the  
24 Chairman.)

25 CHMN STAFFORD: Mr. Duncan, oath or

1 affirmation?

2 MR. DUNCAN: Oath, please.

3 (Kevin Duncan was duly sworn by the  
4 Chairman.)

5 CHMN STAFFORD: Ms. Esquer -- am I  
6 pronouncing that correctly?

7 MS. ESQUER: Yes.

8 CHMN STAFFORD: All right. Oath or  
9 affirmation?

10 MS. ESQUER: Affirmation, please.

11 (Catherine Esquer was duly affirmed by  
12 the Chairman.)

13 CHMN STAFFORD: And, Mr. Spitzkoff, oath or  
14 affirmation?

15 MR. SPITZKOFF: Affirmation, please.

16 (Jason Spitzkoff was duly affirmed by  
17 the Chairman.)

18 CHMN STAFFORD: Thank you.

19 Mr. Derstine, please proceed.

20 //

21 //

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25 //

1 ANNA CHAULK, KEVIN DUNCAN, CATHERINE ESQUER and  
2 JASON SPITZKOFF,  
3 called as witnesses as a panel on behalf of Applicant,  
4 having been previously affirmed or sworn by the Chairman  
5 to speak the truth and nothing but the truth, were  
6 examined and testified as follows:

7

8 DIRECT EXAMINATION

9 BY MR. DERSTINE:

10 Q. All right. Mr. Spitzkoff, you're going to start  
11 us off. Do you want to remind the committee, you've  
12 testified before this committee on a number of occasions,  
13 most recently in the Redhawk CEC application case, but  
14 remind the committee of your education and your  
15 background and your position with APS, please.

16 A. (MR. SPITZKOFF) Sure.

17 My name is Jason Spitzkoff. I have a bachelor  
18 of science in electrical engineering, a bachelor of arts  
19 in economics from Rutgers University. I have been  
20 employed at APS for the last 23 years. I started as a  
21 transmission planning engineer, worked up through  
22 supervisor of transmission planning and engineering. And  
23 in my current role of -- as manager of transmission  
24 planning, siting, and interconnections for the last six  
25 years.

1 Q. And I -- I failed to give you the opportunity to  
2 state your name for the record and give us your business  
3 address, so why don't you do that now.

4 A. (MR. SPITZKOFF) Certainly.

5 Jason Spitzkoff. Business address is 2121 West  
6 Cheryl Drive, Phoenix, Arizona 85021.

7 Q. Okay. Mr. Duncan, would you like to do the  
8 same, state your name for the record and give us your  
9 business address, please?

10 And I pulled you ahead of Ms. Chaulk just  
11 because that's the order of our testimony, so I thought  
12 I'd have you go next.

13 A. (MR. DUNCAN) Understood.

14 My name is Kevin Duncan. Business address, 2121  
15 West Cheryl Drive, Phoenix, Arizona 85021.

16 Q. Can you similarly take us through your education  
17 background and your work experience and your -- maybe  
18 your position and involvement with this project?

19 A. (MR. DUNCAN) Sure.

20 At APS I work as the senior siting consultant in  
21 the siting department. For this project I served as an  
22 advisor on the siting process for APS assisting the  
23 project manager, Anna Chaulk. My educational background  
24 includes a master of business administration from  
25 Benedictine University and a bachelor of science in urban

1 planning from the University of Utah.

2 I have 23 years of combined experience, with  
3 14 years as an environmental planner or consultant, along  
4 with 9 years' experience in my current role in the siting  
5 department at APS. And I've testified in numerous  
6 previous cases listed here on the left slide.

7 Q. And, Ms. Esquer, I'm going to -- we're saving  
8 the best for last, Ms. Chaulk, so we're jumping over her  
9 slides and get to yours. There we go.

10 Yeah, start us with your education and your  
11 experience and --

12 A. (MS. ESQUER) Would you like my name and business  
13 address for the record?

14 Q. Well, we said it several times, but let's do it  
15 for the record and then also give us what address you  
16 want to use.

17 A. (MS. ESQUER) My name is Catherine Esquer. My  
18 business address is 4001 East Paradise Falls Drive,  
19 Tucson, Arizona 85712.

20 Q. Perfect.

21 A. (MS. ESQUER) So I have a bachelor's of science  
22 in biological and ecological science from Northern  
23 Arizona University. I also have a master's of business  
24 administration from Western Governors University. I'm an  
25 environmental project manager at WestLand. I've been



1 working in environmental planning and permitting for  
2 about eight years in both the public and the private  
3 sector, and I've supported a number of line siting cases,  
4 215 and 220, specifically.

5 Q. All right. And, Ms. Chaulk, let's get you on  
6 the record and have you cover your background as well.  
7 State your name and business address for the record.

8 A. (MS. CHAULK) You said best for last, but --

9 Q. Exactly.

10 A. (MS. CHAULK) My name is Anna Chaulk. My  
11 business address is 2121 West Cheryl Drive, Phoenix,  
12 Arizona 85021. My education includes a bachelor of arts  
13 in English from the University of Nevada, Las Vegas, and  
14 an associate of applied science in paralegal studies from  
15 the College of Southern Nevada. I have 10 years of  
16 utility experience, all at APS. One year as a line  
17 siting consultant, two years as a regulatory analyst  
18 supporting the line siting group. I have a year as a  
19 realtime trader, and six years as the community affairs  
20 manager serving the Southwest Division of APS in Yuma and  
21 La Paz counties. I have 20 years' combined media and  
22 communications experience, serving in various capacities,  
23 including news director, anchor, reporter, editor,  
24 writer, and social media manager.

25 Q. I notice you left off from your extensive and

1 varied experience the stint doing roller derby, but maybe  
2 that's something we can discuss at a break --

3 A. (MS. CHAULK) Please.

4 Q. -- and isn't appropriate for testimony.

5 All right. Mr. Spitzkoff, let's -- let's make  
6 our way back to you. You're going to start us off with  
7 testimony on the purpose and need of the project,  
8 correct?

9 A. (MR. SPITZKOFF) That is correct.

10 CHMN STAFFORD: Oh, one minute,  
11 Mr. Derstine. Can you resend the exhibits to Tod to send  
12 out to the remote members? They can't seem to locate  
13 them.

14 MR. DERSTINE: I'm looking at the  
15 transmittal bar here on Ms. Odisho's computer here and  
16 they are on their way.

17 CHMN STAFFORD: Thank you.

18 MR. DERSTINE: Do you want to pause for a  
19 while --

20 CHMN STAFFORD: No, please proceed.

21 BY MR. DERSTINE:

22 Q. Okay. Mr. Spitzkoff, I'm looking at your slide  
23 27, I think those are the topics you're going to cover,  
24 but take us through that.

25 A. (MR. SPITZKOFF) Yes. I'm going to briefly cover

1 APS's background, the existing system that's serving out  
2 there today, the purpose and need for this project,  
3 System Impact Studies that have been completed for this  
4 project, and then wrap up with our Ten-Year Plan filings  
5 that include this project.

6 Q. Okay. Start us off with history of the service  
7 territory, please.

8 A. (MR. SPITZKOFF) Certainly.

9 So APS has been serving the state and territory  
10 of Arizona since 1866. We're the largest and  
11 longest-serving electric utility in the state. Our  
12 service territory is over 34,000 square miles. And on  
13 the picture on the right the areas shown in blue depict  
14 our service territory throughout the state. You can see  
15 the outline of the state of Arizona. We are roughly in  
16 this area where I'm pointing to right now for Wickenburg,  
17 just to the west of Prescott.

18 So our territory encompasses service in 11 out  
19 of the 15 counties in the state, with nearly 1.4 million  
20 customer accounts. And our peak demand, which was set  
21 again this year just -- just over 8,200 megawatts.

22 APS is a public service corporation, so we have  
23 a defined service territory that I just showed on the  
24 previous slide. We have a broad service obligation,  
25 which for this case means when we have a customer

1 requesting service in our service territory, we have an  
2 obligation to provide service. We then -- along with  
3 that is planning responsibility to make sure that we are  
4 planning not only the wires, but the resources in a  
5 responsible, reliable, economic manner. And the last  
6 bullet, as I already mentioned, we have an obligation to  
7 provide service.

8 Q. Okay. You're going to talk about the -- I  
9 touched on the existing 115-kV line that serves the  
10 Bagdad Mine, I think you want to give the committee some  
11 context and background for the transmission system that's  
12 currently serving the mine and the surrounding area.

13 A. (MR. SPITZKOFF) Yes, I do. I'll start on the  
14 right side screen. It's a -- picture's a little bit  
15 dark, but it provides a background. This is a Google  
16 Earth snapshot showing the terrain and the line in purple  
17 that I am following left to right on the screen or west  
18 to east, that's the existing 115-kV line that's providing  
19 service. It's a radial line, approximately 50 miles  
20 long, and it's sourced from the east out of the Pres- --  
21 the Prescott area.

22 You can see this -- the lighter shades on the  
23 picture here is if we had zoomed in you would see this is  
24 the development in the outskirts of Prescott area. So  
25 this 230 substation transforms down to 115, provides

1 service to the township of Bagdad, located where this pin  
2 is on the map, and then ultimately the existing mine  
3 services at the end of the 115 line.

4           The existing load for the mine is variable, but  
5 generally we'll see it peak out around 72 megawatts. And  
6 the township -- the load in the township will peak at  
7 approximately 11 megawatts. As a radial line that's  
8 relatively long in distance, for a 115-kV voltage line,  
9 with large load at the end. One of the challenges with  
10 that situation -- I'm not getting the laser pointer --  
11 here, I'll use this -- with the load at the end of the  
12 line with the source back here, is it requires a lot of  
13 voltage correction on that line.

14           And between the thermal rating of the line and  
15 the transformers at the source and the voltage profile  
16 across the line, the existing system can only serve so  
17 much load, and that's why we are requesting the project  
18 in front of the committee.

19           Q.    When you -- you mentioned it requires a lot of  
20 voltage correction, what does that mean?

21           A.    (MR. SPITZKOFF) Certainly.

22           So when you get load flowing along a radial  
23 line, a long radial line like this, you'll have a voltage  
24 drop over that distance. And we have -- oh, there we  
25 go -- for the existing system, there's another pin here.

1 We have a station that just has capacitor banks.  
2 Capacitor banks add voltage into the system to help. By  
3 the time you get to the end of the line, the voltage at  
4 the beginning of the line could be within the reliability  
5 limits by the time you get to the end of the line, it  
6 will be under reliable levels.

7 Q. Okay.

8 MEMBER GOLD: Mr. Chairman?

9 CHMN STAFFORD: Yes, Member Gold.

10 MEMBER GOLD: This is a question --

11 CHMN STAFFORD: Use the microphone, please.

12 MEMBER GOLD: A question for Mr. Spitzkoff,  
13 a couple of questions.

14 For clarification, what does radial line  
15 mean?

16 MR. SPITZKOFF: Thank you.

17 It means it's only tied into the grid at  
18 one end. And the other end is just serving either --  
19 it's either radial serving a load and it doesn't tie into  
20 other lines, or it's radial as a generator tie as another  
21 form. So you only have the generator at one end, it's  
22 not tied into the grid. And then it's tied into other  
23 lines at the other end.

24 MEMBER GOLD: So by "radial" in this case  
25 the existing line is just going to the mine?

1 MR. SPITZKOFF: And the town before it gets  
2 to the mine.

3 MEMBER GOLD: Okay. Is there an existing  
4 substation there presently?

5 MR. SPITZKOFF: There is a substation at  
6 the town site that transforms down from the 115 voltage  
7 down to 69-kV, and ultimately to distribution voltage. I  
8 believe it's 12-kV. It could be 15-kV in this area.  
9 There's a substation at the mine, the end of the line at  
10 the mine, location also.

11 MEMBER GOLD: And is there not a solar  
12 substation just above it?

13 MR. SPITZKOFF: Yeah, there is a small  
14 solar plant that connects into the line and uses the  
15 line.

16 MEMBER GOLD: Okay. How big is that solar  
17 plant?

18 MR. SPITZKOFF: It's either 10 or  
19 15 megawatts.

20 MEMBER GOLD: Okay. Now, you said the mine  
21 needs 72 megawatts, the town needs 11. Why did they  
22 bother doing a solar station up there with only 10  
23 megawatts?

24 MEMBER KRYDER: Move a little closer, Jon,  
25 to your microphone.

1 MEMBER GOLD: Oh, I'm sorry, David. What I  
2 asked, David, was why they built a solar station at only  
3 10 megawatts when it seems to be insignificant compared  
4 to the needs of the mine and the town?

5 MR. SPITZKOFF: The solar plant that's  
6 located up there is a third-party developer that, for  
7 whatever reason they chose, developed in that location  
8 and connected into the existing line that's up there.

9 MEMBER GOLD: So just because it's named  
10 "Bagdad," doesn't mean it's part of your project.

11 MR. SPITZKOFF: Correct. It was just named  
12 after the -- because it's the Bagdad area, they called it  
13 Bagdad Solar.

14 MEMBER GOLD: Okay. Next question.  
15 Instead of doing that 11-mile line between your TS-01  
16 substation proposed and TS-02 substation proposed, what  
17 if you just put a heavier duty line where the APS 115-kV  
18 line is?

19 MR. SPITZKOFF: Great question. That takes  
20 me into my next slides.

21 MEMBER GOLD: Okay.

22 MEMBER KRYDER: Mr. Chairman?

23 CHMN STAFFORD: Yes, Member Kryder.

24 MEMBER KRYDER: Another question for  
25 Mr. Spitzkoff. I didn't quite understand that. I



1 understand on a 50-mile line like this, there will be  
2 line loss, and then you've got boosters and I didn't get  
3 the name of what those are properly called.

4 MR. SPITZKOFF: So those are capacitor  
5 banks. There's five individual capacitor banks all  
6 located -- it's hard to see the pin here -- but all  
7 located right in this location that are connected to that  
8 115-kV line.

9 MEMBER KRYDER: And so that kicks it back  
10 up to an appropriate level for you just through the  
11 capacitor banks, is that it?

12 MR. SPITZKOFF: Yes.

13 MEMBER KRYDER: Okay. Okay. Thank you. I  
14 wasn't aware of that's how that process was done. I  
15 understood line loss a little bit, but not how you  
16 boosted it back. Thank you very much.

17 MR. SPITZKOFF: Okay. Moving to the  
18 purpose and need, and ultimately answering Mr. -- Member  
19 Gold's question.

20 So -- so this project is proposed because  
21 we need a new source. The existing 115-kV line is not  
22 adequate as-is. Yes, we could rebuild that line, the  
23 50 miles of the existing line, with a larger conductor,  
24 bigger line. There's a couple of limitations to that.  
25 One, it is a radial line, so we would have to build or

1 rebuild -- more like build a new line next to the  
2 existing line. Because if that line is out of service  
3 while we're upgrading it, there's no service to the town  
4 and no service to the mine while that's happening. And  
5 for 50 miles of construction and through the terrain that  
6 it goes through, that would take quite a while.

7 MEMBER GOLD: Mr. Chairman?

8 CHMN STAFFORD: Yes, Member Gold.

9 MEMBER GOLD: But after construction, you  
10 can take down that line because you wouldn't need it  
11 anymore or you could keep it as a backup line.

12 MR. SPITZKOFF: That is correct.

13 MEMBER GOLD: So, again, why are you  
14 running a new line through areas that have never had  
15 lines instead of just reinforcing or just increasing the  
16 capacity of the already existing line, which was already  
17 approved?

18 MR. SPITZKOFF: Yes. And so that takes us  
19 to the second point. The source here, so this is a  
20 graphical version of the map, the purple is the 115 line,  
21 you can see the town, the cap banks, the -- the existing  
22 line substation. The Willow Lake Substation here that's  
23 the source that's in the greater Prescott area. Part of  
24 the limitation is also the source at Willow Lake. So if  
25 we add to the existing line or to an upgraded existing

1 line, just add the additional load that's being  
2 requested, which is upwards of another 120 megawatts,  
3 this source cannot handle that.

4 So there are three 230 lines that are  
5 connecting into Willow Lake. You've got WAPA line going  
6 to the north, WAPA line going to the south, and you have  
7 an APS 230 line that goes back to the Yavapai Switchyard  
8 here. And the Yavapai Switchyard ultimately is the real  
9 source for this area. That's connected to an existing  
10 500-kV line. So your power is coming from Yavapai  
11 through the 230 line to Willow Lake and then ultimately  
12 across the 115 line.

13 MEMBER GOLD: So what you're telling me, if  
14 I understand you correctly, is Yavapai is at its limit  
15 and you cannot add more power to Willow Lake to send to  
16 the mines; is that correct?

17 MR. SPITZKOFF: Basically that's correct.  
18 Yavapai is at the limit and the 230 line between Yavapai  
19 and Willow Lake would also have to be upgraded. So --  
20 and I don't have my notes available, which I have the  
21 length of this line, which is probably in the  
22 neighborhood of 50 miles itself, through some -- some  
23 sensitive areas itself. That would have to be upgraded,  
24 and then also back to the existing 50 miles of 115 that  
25 would have to be upgraded.

1 MEMBER GOLD: Wait, wait, wait. Back to my  
2 original question. Yavapai is maxed out?

3 MR. SPITZKOFF: Yes.

4 MEMBER GOLD: Where does Yavapai get its  
5 power from?

6 MR. SPITZKOFF: From the 500-kV lines that  
7 it's connected to. And there are two 500- to 230-kV  
8 transformers at Yavapai.

9 MEMBER GOLD: So Yavapai 500 is maxed out.  
10 You cannot increase the power to Willow Lake from  
11 Yavapai. And while you could put in a heftier line from  
12 Willow Lake to Bagdad, the line would carry the power,  
13 but you can't get the power; am I understanding you  
14 correctly?

15 MR. SPITZKOFF: Yes.

16 MEMBER GOLD: Thank you.

17 MR. SPITZKOFF: So, Member Gold, Committee,  
18 that's why in our analysis to maintain proper  
19 reliability, bringing power for the additional load from  
20 a new source, which is the connection to this 500-kV  
21 line, the Perkins-to-Mead 500-kV line, that source will  
22 reliably provide power for the new load at the end of the  
23 new line.

24 MEMBER GOLD: Then again back to the same  
25 kind of questions for Perkins-Mead. Perkins-Mead has an

1 excess of power at this point in time?

2 MR. SPITZKOFF: Perkins-Mead has enough  
3 capability to support that load.

4 MEMBER GOLD: For how far into the future?

5 MR. SPITZKOFF: For as -- as long as it  
6 needs to. Once -- once a -- once a -- a use is approved  
7 on a line, then that use is baked into all future  
8 studies. So with this project being approved for  
9 interconnection, the use of the 120-ish megawatts of what  
10 it would be using for the load at the end of the line  
11 will furthermore be accounted for in any future studies  
12 that are performed and any future interconnection  
13 requests on that 500-kV line. So it has its place in  
14 line. It has its allocation.

15 MEMBER GOLD: Is anybody else vying for  
16 power from that Perkins-Mead line that you know of?

17 MR. SPITZKOFF: There are many different  
18 joint owners. And all of those joint owners use some or  
19 all of their capacity on that line.

20 MEMBER GOLD: So this project will  
21 successfully pull the power it needs from Perkins-Mead,  
22 provide it to the township and the mine and you will have  
23 a backup coming from Willow Lake?

24 MR. SPITZKOFF: No. So this line, as it's  
25 proposed today, is not connecting into the existing

1 115-kV line. So they're going to operate as two  
2 different radial lines. If we connect this new project  
3 into the 115-kV, that will create other reliability  
4 issues. It's a possibility for something that we may do  
5 in the future, but it's not needed for this request and  
6 it -- this proposal is to have the new line operate as a  
7 radial line serving the incremental load that Freeport is  
8 asking for which allows -- allows the existing line not  
9 to have to serve the incremental load and load it up to  
10 its maximum, which allows the township to grow. And you  
11 saw the disparity in the amount of load between the town  
12 and the mine, the growth of the town would be just a  
13 handful of megawatts, it wouldn't be 100 megawatts or 120  
14 megawatts, it would be somewhere in the, you know, maybe  
15 less than 10 megawatts.

16 So the addition of 10 megawatts or  
17 approximately 10 megawatts to the existing 115-kV line,  
18 that can be accommodated on the existing system.

19 MEMBER GOLD: By taking away the power  
20 that's going to the mine, because the mine is getting  
21 this brand-new line?

22 MR. SPITZKOFF: Yes.

23 MEMBER GOLD: However, it seems like a  
24 waste if you're building a substation right there not to  
25 put everything together. Is there a reason why you're

1 not putting everything together?

2 MR. SPITZKOFF: Yes.

3 MEMBER GOLD: Is it prohibitively expensive  
4 or is there another reason?

5 MR. SPITZKOFF: At this time it could be  
6 prohibitively expensive because what you ultimately would  
7 be doing is providing a path between this 500-kV line  
8 through the new line, through the 115, and then back to  
9 this 500-kV system. And that will create issues on the  
10 underlying 230 system and maybe even the underlying 69  
11 that's supporting the Prescott area.

12 So while ultimately it might be something  
13 that we do, if -- if there's other growth either, you  
14 know, possibly in this area or -- or throughout this  
15 area, at this time it's not something that's needed.

16 MEMBER GOLD: So it's not needed now, but  
17 if it's needed in the future, it can be done?

18 MR. SPITZKOFF: Yes.

19 MEMBER GOLD: But you're saying right now  
20 it could cause you to have to modify switchyards at  
21 Willow Lake or at Yavapai, and you would have to have a  
22 greater expense of the switchyard you're building that  
23 you're call TS- -- TS-02 location?

24 MR. SPITZKOFF: Yes. It could cause the  
25 need to modify the other switchyards and also the other

1 existing 230 and 115-kV lines too.

2 MEMBER GOLD: Okay. Thank you.

3 CHMN STAFFORD: Please proceed,  
4 Mr. Derstine.

5 BY MR. DERSTINE:

6 Q. I want to make sure I'm following your  
7 testimony. So the existing Willow Lake 115-kV  
8 transmission line will continue to serve the mine and the  
9 town, the load that it serves today, but the incremental,  
10 the additional load that needs to be served at the mine  
11 will be separately served by this project, the new radial  
12 230-kV line.

13 Do I -- do I have that right?

14 A. (MR. SPITZKOFF) That is correct.

15 Q. Okay. All right. Is there more that you wanted  
16 the committee to understand about the need for this  
17 project or did you want to move on to the System Impact  
18 Study?

19 CHMN STAFFORD: Let's see, we have questions  
20 from Member Little and Member Fontes.

21 MR. DERSTINE: Okay.

22 CHMN STAFFORD: Member Little?

23 MEMBER LITTLE: I believe Mr. Fontes was  
24 first.

25 CHMN STAFFORD: Member Fontes?



1 MEMBER FONTES: Thank you, Member Little.

2 You're very kind.

3 Mr. Derstine, Mr. Spitzkoff, good  
4 afternoon. Thanks for covering the details in the  
5 application for some of the members who didn't pick up on  
6 those things. I have to disclose that I have studied  
7 this project extensively as a part of my employment that  
8 ended last year with WAPA. I've also met with Freeport  
9 McMoRan on this project in past years and am very  
10 familiar with it.

11 Mr. Spitzkoff, I believe you've done your  
12 homework and analysis here based on the cost-to-benefit  
13 ratios, rate impacts, and then also on the conductor, the  
14 insulators, and the towers on the northern segment of the  
15 115-kV, and came to the same conclusions that I did years  
16 ago on this.

17 My question, though, is on the WAPA line,  
18 with respect to your testimony that you've got coming up,  
19 can you make sure that you educate and inform the  
20 committee of what your Transmission Service Rights  
21 Agreement is with WAPA, in terms of the tenor on that,  
22 with respect to the life of the project as it's going to  
23 serve load to the power on the -- to the mine.

24 I just want to make sure that if you only  
25 have a 20-year TSR, Transmission Service Rights Agreement

1 and then the life of the mine of this project is going to  
2 be 30, 40, sort of what's the back plan on that  
3 contractually? So you can go on that.

4 Also, if you could characterize what your  
5 Transmission Service Rights capacity on that WAPA line is  
6 for APS's segment, because I know that it's had some  
7 bilateral issues. It runs north to south, so if you have  
8 south to north that you're going to be bringing in load,  
9 can you -- can you just put on the record for us what  
10 your megawatt capacity right is on that?

11 So that's all I had, Mr. Chairman,  
12 Mr. Spitzkoff. If you don't know that now, you can  
13 answer it, you know, tomorrow.

14 MR. SPITZKOFF: I can answer.

15 MEMBER FONTES: Yup.

16 MR. SPITZKOFF: So the first part, the APS  
17 transmission rights, we are a joint owner, so we don't  
18 have a transmission service agreement with WAPA. We  
19 administer our share of our rights in the line. So  
20 there's no agreement to expire. As far as the capacity,  
21 we having the rights in both the north to south and south  
22 to north direction. I don't know if this number is  
23 100 percent accurate. I think, if my memory is good  
24 enough, it's 236 megawatts. If it's not that number,  
25 it's in that neighborhood.

1 MEMBER FONTES: But it's enough to service  
2 the load --

3 MR. SPITZKOFF: It's enough for the load.

4 MEMBER FONTES: -- as planned by Freeport  
5 McMoRan?

6 MR. SPITZKOFF: Yes.

7 MEMBER FONTES: Okay. Great. Those are  
8 the questions I have for right now. And, again, I  
9 appreciate you recapping for things that were stated in  
10 the application.

11 CHMN STAFFORD: Thank you, Member Fontes.

12 Member Little, do you still have a question  
13 or were they answered by Member Fontes's questions?

14 MEMBER LITTLE: I do have a question, if I  
15 might, Jason -- or Mr. Spitzkoff.

16 Is there -- or does APS have plans to  
17 provide a backup for the town? I recognize that you  
18 can't interconnect any of that, but if you have a line go  
19 down, say the one from Prescott, and can you disconnect  
20 that line and connect into this new line so that the town  
21 has a little more reliable service as a result of adding  
22 the second line?

23 MR. SPITZKOFF: Thank you, Member Little.  
24 Very good question.

25 We actually have a backup available today.

1 That backup capability is about 6 megawatts, with the  
2 option to have more, depending on specific system  
3 conditions at the time. And that backup is through  
4 AEPCO, A-E-P-C-O, Arizona Electric Power Cooperative.  
5 They have -- one of their member utilities has a 69-kV  
6 line that is about a mile or was about a mile from the  
7 115 line. A number of years ago we installed a normally  
8 open tie. And that allows AEPCO to back up our township  
9 load, but also allows us to back up the load that they're  
10 cooperative has. And that -- their cooperative,  
11 ultimately the source of that 69 is out of the Parker  
12 area.

13 So we -- it's a mutual backup that when one  
14 company needs -- they have a line out for maintenance or  
15 some contingency that occurred, you can call upon the  
16 other entity. The agreement's minimum 6 megawatts, and  
17 if -- if either company needs more, we can ask. It's not  
18 guaranteed. So it's dependent upon the system conditions  
19 that are going on.

20 This project would allow an additional  
21 backup, so the -- at the TS-02 site we are going to  
22 transform down to 69-kV. That allows -- we can put in an  
23 additional normally open, if needed, at that point. It  
24 would be a normally closed because, again, you'd have  
25 flow-through issues if it's normally closed. But

1 that -- that backup tie is a whole lot easier and much  
2 more limited operation than just normally terminating the  
3 230 into the 115.

4 MEMBER LITTLE: Thank you.

5 MEMBER GOLD: Mr. Chairman?

6 CHMN STAFFORD: Yes, Member Gold.

7 MEMBER GOLD: Following Member Little's  
8 question and my previous question, are any of their power  
9 supplied by coal-fired plants that are going to be closed  
10 along the Yavapai line?

11 MR. SPITZKOFF: Our customers' loads are  
12 not supplied by a specific generator, it's supplied by  
13 our overall portfolio. So we -- in that portfolio we  
14 currently still have some coal plants, but we have a  
15 resource plan that covers all of our load needs out, you  
16 know, for the next 15 -- 10, 15, 20 years.

17 MEMBER GOLD: Okay. So there will always  
18 be enough power in Yavapai -- in your plan that you've  
19 already done, and you do have an option to make a  
20 normally closed line between TS-02 and Bagdad township,  
21 just like the apparently that privately owned company  
22 does have. And you have the option to put in a switching  
23 station. Is there any other route that you could have  
24 taken besides this one to get from -- to TS-02, that was  
25 further north along the line?

1 MR. SPITZKOFF: I -- I would say  
2 theoretically you can. Whether it's more economical, has  
3 a less environmental impact, all of the characteristics  
4 that we look at, I think our -- my co-witnesses will talk  
5 about this route and the advantages with this route.

6 MEMBER GOLD: So you've looked at other  
7 routes that would be shorter, but this one seems to be  
8 the most efficient?

9 MR. SPITZKOFF: I can't answer that  
10 question.

11 MEMBER GOLD: Oh, I'm just looking at your  
12 map.

13 MR. SPITZKOFF: Well, I can't answer how  
14 many or what other routes -- shorter routes were looked  
15 at.

16 MEMBER GOLD: But somebody on your  
17 committee can?

18 MR. SPITZKOFF: Yes.

19 MEMBER GOLD: Thank you.

20 CHMN STAFFORD: Were they going to answer  
21 that now or are we going to come back to that? I think  
22 you meant panel, not committee, I believe.

23 MR. SPITZKOFF: Yeah. Before  
24 Mr. Derstine -- Mr. Duncan jumps in, just for Member  
25 Gold, from a reliability and performance perspective of

1 the system, connecting at this location or a different  
2 location along the 500-kV line is equivalent. So  
3 it -- it comes to all of the accompanying effects of  
4 looking for a route for a line.

5 MEMBER GOLD: The reason I ask is I'm  
6 looking at your, you know, your satellite, your map, and  
7 I see you're following the water line that goes through a  
8 valley, but apparently it passes some residential areas.  
9 There are other, what appears to be -- I'm not a  
10 geologist -- what appears to be other valleys that would  
11 have been a shorter route that you didn't choose for  
12 different reasons, which I'm not aware of. I'm just  
13 saying this route was the best route because you don't  
14 have to make another right-of-way, because the ground has  
15 already been cleared by the water line and you will get  
16 into less red tape, but you may be affecting some  
17 homeowners or residential areas or ranches or something?  
18 Doesn't appear to be, but it could be. As opposed to  
19 blazing a trail through one of the northern valleys to  
20 make a shorter route, but you would have to be the  
21 original trailblazer?

22 MR. SPITZKOFF: Yes, that's the trade-off.

23 Mr. Duncan --

24 CHMN STAFFORD: I believe -- is this part  
25 of your testimony that's coming up, Mr. Duncan?

1 MR. DUNCAN: Yes, but probably not in this  
2 level of detail.

3 CHMN STAFFORD: All right.

4 Member Gold, I would suggest we let them  
5 continue with their presentation. I think they're going  
6 to get to all these points and they've laid them out in a  
7 certain way, and we're kind of, like, jumping around  
8 within the presentation, I think. Perhaps if we let them  
9 proceed, a lot of this stuff will be answered as they --  
10 as they progress through the order in which they've  
11 planned. And so instead of having to jump around because  
12 right now they have Mr. Spitzkoff doing his share of the  
13 spiel or presentation and then you'll have the other  
14 witnesses come on.

15 So I think if you can wait until Mr. Duncan  
16 gets to his portion of the testimony, a lot of these  
17 questions will be answered and now you know that he's the  
18 one with the answers to many of these questions that  
19 you're having.

20 MEMBER GOLD: Mr. Chairman, I will yield to  
21 your advice.

22 CHMN STAFFORD: Thank you.

23 I guess, Mr. Spitzkoff, please proceed.

24 MR. SPITZKOFF: Certainly. And just  
25 excited when I read the transcript I'm finally going to



1 learn how to spell "spiel."

2 MEMBER KRYDER: (Inaudible.)

3 MR. SPITZKOFF: Yeah.

4 So I'm up to the System Impact Study  
5 portion that I wanted to talk about. So APS did request  
6 an interconnection to the 500-kV line, even though we are  
7 a joint owner, WAPA is the operating agent. WAPA is  
8 Western Area Power Administration.

9 As the operating agent, they administer all  
10 interconnection requests into the line. And, as we've  
11 discussed, at some of the generator interconnections.  
12 Even though if you -- if you own a line, if you have --  
13 if you have joint owners, you have to have an  
14 interconnection request. And that interconnection  
15 request performs all of the required reliability studies.  
16 So that occurred in this case, it was overseen -- oversaw  
17 by WAPA.

18 It was shared with all of the joint owners,  
19 all of the joint owners in this project saw the study  
20 plan, approved the study plan, saw the study results,  
21 approved the study results. And those results showed no  
22 negative impacts to reliability. The interconnection can  
23 serve the load on this new radial 230 line with no  
24 negative impacts to the reliability of this 500-kV line  
25 that we're connecting into or the greater transmission

1 system.

2 BY MR. DERSTINE:

3 Q. Mr. Spitzkoff, the System Impact Study that  
4 you're providing the committee with an overview of,  
5 that's marked as APS Exhibit 16; is that correct?

6 A. (MR. SPITZKOFF) Yes.

7 Q. Okay.

8 CHMN STAFFORD: Member Little, you had a  
9 question?

10 MEMBER LITTLE: I did, Mr. Chairman. Thank  
11 you.

12 Mr. Spitzkoff, my question is, I'm  
13 wondering if any of the regional or web studies that have  
14 been performed since that 2021 WAPA study have included  
15 the -- the -- this Bagdad line or the BTA?

16 MR. SPITZKOFF: Member Little, that's a  
17 good question.

18 I actually would have to look into that.  
19 I -- so without knowing whether it did or did not, I  
20 would say being a radial line-serving load, there would  
21 not be any impact to any of those, regardless of whether  
22 it was in there or not. And right now this line is  
23 planned to be a tap into the 500-kV line. So if there  
24 was an outage of the 500-kV line, this new 230 line would  
25 also go out.

1 MEMBER LITTLE: Good point. Thank you.

2 I tried to look at the most recent BTA, but  
3 I don't know what the docket number is, so it's difficult  
4 to find anything in the docket if you don't know the  
5 number. Thanks.

6 MR. SPITZKOFF: It's -- Member Little, I  
7 will say it was included in APS's Ten-Year Plan that we  
8 filed just -- just this last January, but that the BTA  
9 for this set of plans has not come about yet, so it will  
10 be in the next BTA.

11 MEMBER LITTLE: Can I ask why it wasn't  
12 included before, you know, this line's been sort of  
13 contemplated for a long time, and APS usually puts pretty  
14 much everything that they're planning at all or  
15 contemplating in their Ten-Year Plan.

16 MR. SPITZKOFF: So it was in the Ten-Year  
17 Plans. It was in there as a to-be-determined project.  
18 As the project was evolving and if you read the System  
19 Impact Study, that System Impact Study actually had this  
20 as a 115-kV line. The project evolved as it was being  
21 studied to now the 230 that you see and the matter of  
22 interconnection.

23 Once those solidified, we put it in as a  
24 specific project with the details, and even then during  
25 one of the breaks and when my fellow panelists are

1 testifying I'll go back and look at our earlier cases,  
2 because it still may have been in there, but just with a  
3 cut-in and a load, right, at that cut-in, so not  
4 necessarily representing exactly the way the project is,  
5 but from an electrical standpoint the equivalent of it.

6 MEMBER LITTLE: Yeah, that would be  
7 sufficient from a study. Thank you.

8 BY MR. DERSTINE:

9 Q. You touched on the Ten-Year Plan, do you want to  
10 cover that here?

11 A. (MR. SPITZKOFF) Yes, sir.

12 So we had been including this project, again, as  
13 a TBD, a to-be-determined project in our Ten-Year Plan  
14 filing. And in this filing we may -- or, sorry, since  
15 January of 2021. And in this last filing in January of  
16 2024, it was included as a specific project with a  
17 project sheet. And on the right screen, I'll highlight  
18 in the map, you can see the project on the map here.  
19 Prior years it was still shown on the map, but it didn't  
20 have the 2027 label, it just said "TBD" under it.

21 And then on the left side of the right screen,  
22 you can see the project specifics that are representative  
23 of all of the projects that we have in our Ten-Year Plan.

24 Q. Mr. Spitzkoff, does that conclude your testimony  
25 on the purpose and need of the project?

1 A. (MR. SPITZKOFF) It does.

2 Q. Okay. Mr. Duncan, are you ready for us?

3 A. (MR. DUNCAN) Yes, I am.

4 Q. Okay. Looking at slide 47, why don't you tick  
5 off the topics that you're going to address, and then  
6 when you get to the second bullet on slide 47, the  
7 proposed route, maybe spend a little more time talking  
8 about how this route was evaluated and whether APS  
9 considered alternative routes to the one that's proposed  
10 that follows the water pipeline and how that was taken  
11 into consideration.

12 A. (MR. DUNCAN) Absolutely.

13 So in my testimony today, I'm going to talk  
14 through the description of the project. As Mr. Derstine  
15 just said, I will provide an overview of the proposed  
16 route and why it was selected. And we'll talk through  
17 the corridor that we are requesting today, as well as our  
18 planned right-of-way, and the project costs and the types  
19 of facilities we are planning.

20 So the project consists of the construction,  
21 operation, and maintenance of a new 230-kV transmission  
22 line, approximately 14 miles in length, as shown here on  
23 the right screen, this is the map we've been showing.  
24 The route is located primarily on State Trust Land, which  
25 on this map is shown in blue. It's most of the map is

1 Arizona State Trust Land, and it also includes a smaller  
2 portion of private land that crosses at the northern end,  
3 which on this map is shown with no color, and that is  
4 owned by Freeport McMoRan.

5 The transmission line will connect to the  
6 existing WAPA Mead-Perkins 500-kV transmission line at  
7 the southern end and will include construction of new  
8 substations labeled TS-01 and TS-02, at both the  
9 northern -- or southern and northern ends.

10 So the proposed route, as I stated a moment ago,  
11 was 14 miles long and is primarily located on State Trust  
12 Land. The route primarily was selected because of its  
13 adjacency to the under-construction Aguila pipeline.  
14 However, the consideration alternatives goes all the way  
15 back to the NEPA process which preceded development of  
16 our CEC application. But the important points of that  
17 process, and Ms. Esquer can speak to it if additional  
18 information is required after I speak to it, but in  
19 addition to the transmission line, one of the important  
20 considerations is the location of the substations.

21 Substations are not as easily sited as  
22 transmission lines. And in this case, the  
23 transmission -- or, excuse me, the substations at both  
24 the northern and southern ends needed to identify  
25 locations that were suitable for placement of substation.

1 This can include not only terrain and space, elevation,  
2 slope, flood potential, and many other civil  
3 engineering-type factors. I'm not a civil engineer, so I  
4 can't speak to exactly what those factors are; however, I  
5 can say that numerous substation sites were considered,  
6 especially at the southern end where the terrain is more  
7 unpredictable and more challenging to find substation  
8 locations.

9 So one of the primary drivers, again, for the  
10 selection of the route was the ability to co-locate with  
11 the water pipeline, which was known at the time that the  
12 alternatives were being considered. But, secondarily,  
13 the -- the choice of where the substations are located  
14 was done through a process involving site visits and  
15 engineering studies done by APS civil and electrical  
16 engineers to determine suitable location for those  
17 substations. So this is the primary explanation for why  
18 the route is in its location.

19 Again, the -- by the time we got to the point of  
20 starting the CEC application, the NEPA process was well  
21 underway, and at that point in the NEPA process, WAPA had  
22 already stated that two alternatives were being  
23 considered. This action alternative with this alignment  
24 and the no-action alternative, which is basically not  
25 building the project.

1           So at that point it would not have made sense  
2 for us to introduce an additional alternative into the  
3 CEC process when the NEPA alternative was already  
4 considering only a singular route alternative. Again,  
5 which minimizes impacts by paralleling the planned and  
6 under-construction Aguila pipeline and using substation  
7 locations that were identified through a thorough civil  
8 and electrical engineering evaluation process.

9           Q.    So to -- to Member Gold's question, I guess, is  
10 in line with the conversation that you and I had when I  
11 asked you about the interconnection point at the southern  
12 end and why were the proposed route traverses and follows  
13 the existing 500-kV line some distance rather than simply  
14 interconnecting at the earliest point possible. And the  
15 reason for that is based on what you told me then and how  
16 you've testified today is that that interconnection point  
17 is determined by the appropriate location for the  
18 substation and that requires a number of factors and  
19 considerations and, ultimately, WAPA selected the  
20 location for the substation that's shown on the map. And  
21 that largely drove the route for this project?

22           A.    (MR. DUNCAN) That is correct.

23                   CHMN STAFFORD: And that's the substation  
24 one -- the southern point that you're talking about?

25                   MR. Derstine: Correct.



1 Q. And does the same analysis follow the selection  
2 of the location for the substation at the northern end?

3 A. (MR. DUNCAN) Yes, it does. At the northern end  
4 the -- in the particular location where the substation is  
5 located, terrain and drainage challenges were not as  
6 evident, so it was easier to select a site that was, you  
7 know, closer to the points that were the, as Jason  
8 elaborated on, that would make sense for potential -- not  
9 only the current purpose and need, but the future purpose  
10 and need as well. So -- but at the southern end, there  
11 were definitely challenges in identifying an appropriate  
12 substation location.

13 MEMBER RICHINS: Chairman?

14 CHMN STAFFORD: Member Richins.

15 MEMBER RICHINS: So you're saying the WAPA  
16 substation locations drove this route, is -- is that what  
17 you just said?

18 MR. DERSTINE: Well, I think, though, it's  
19 fair to say -- and Member Richins thank you for the  
20 question -- I think the WAPA substation locations drove  
21 the interconnection points on the south for the 500-kV  
22 line. The route, as I understand from Mr. Duncan, was  
23 largely driven by the ability to co-locate the  
24 transmission line with the path of the Aguila Water line.

25 MEMBER RICHINS: Okay. Does WAPA -- what's

1 their obligation to public outreach and notification for  
2 that? Do you know? I'm very -- I'm just curious. I  
3 know you're not responsible for it, but if -- if these  
4 things are kind of symbiotic with each other, I'm just  
5 curious as to how the chronology of the public gets  
6 informed about this kind of thing.

7 BY MR. DERSTINE:

8 Q. Yeah. Either Mr. Duncan or Ms. Esquer, can you  
9 talk about the public outreach and engagement process  
10 that was used for the -- by WAPA, as the lead agency, for  
11 the federal permitting process and then, as I understand  
12 it, then, we did our own additional outreach and  
13 engagement specifically for the CEC application? Can you  
14 cover that?

15 MEMBER RICHINS: Yeah, bear in mind, if you  
16 have testimony later that's going to cover this, just say  
17 that and we can move on --

18 MR. DERSTINE: I think it's --

19 MEMBER RICHINS: -- it just seemed like it  
20 fit here for a minute.

21 MR. DERSTINE: Let's cover it here. It's a  
22 good question.

23 MR. DUNCAN: I do believe that Ms. Esquer  
24 will be the better person to speak to that, as she was  
25 the -- worked with the environmental consulting firm not

1 only that is leading our CEC effort here today, but the  
2 NEPA effort. And so I will let her speak to that. And I  
3 think she did have some testimony on this later, but I  
4 think not at the deep level of detail that you're looking  
5 for.

6 So, Ms. Esquer, it might be appropriate to  
7 answer that.

8 MS. ESQUER: Yes.

9 So through the NEPA process WAPA is  
10 required to go through multiple public outreach  
11 engagements. So the first of that was the public scoping  
12 period, which is where WAPA announces the project, you  
13 know, describes it, and asks for any comment on, you  
14 know, potential issues from landowners, agencies. So  
15 WAPA did do that.

16 There's a 30-day public scoping period and  
17 this was in early 2023. WAPA also held a virtual open  
18 house where WestLand and WAPA and APS described the  
19 project, and that was an open venue for anyone interested  
20 to ask questions and make public comment.

21 MEMBER RICHINS: Ms. Esquer, did -- so,  
22 like, the virtual open house was done in concert with  
23 each other? It wasn't individual open houses? I'm just  
24 kind of --

25 MS. ESQUER: Yeah, so -- yeah, so there is

1 a -- there was a separate scoping period, and this was  
2 prior to the open houses that you'll hear about for the  
3 CEC process, this was specific to the NEPA process. And  
4 it's kind of a preliminary step in the NEPA process where  
5 you garner any comments or concerns, questions that the  
6 public may have, so that when you are preparing the NEPA  
7 document, you can, you know, attempt to adequately  
8 address all of those.

9 So that was done, like I said, in early  
10 2023 for the NEPA process, specifically. And then now,  
11 as of yesterday, actually, we are in the public comment  
12 period for the draft EA itself. So the draft EA has been  
13 prepared, and it is out for public review and comment for  
14 30 days. And that's required under NEPA regulations.

15 MEMBER RICHINS: Okay. So there is a good  
16 amount of coordination between what NEPA -- what WAPA is  
17 saying, what APS is saying, so the public wasn't  
18 confused. It sounds like there's several open houses  
19 happening?

20 MS. ESQUER: Right. Yeah. Yes, there's  
21 been multiple opportunities for the public to be  
22 involved, and, you know, voice concerns and ask questions  
23 about the project through both permitting processes.

24 MEMBER RICHINS: Yeah, it sounds like  
25 having the substations located by WAPA in their process

1 helped inform for APS later where that route -- this  
2 route was probably headed, right? I'm just looking at  
3 the public got a strong signal that this was what was  
4 going to happen?

5 MR. DUNCAN: Yes, Member Richins. We  
6 worked very hard as we started the CEC process to make  
7 sure that we were consistent in our messaging,  
8 particularly to the public, with what had been already  
9 and was continuing to be shared in the NEPA process.  
10 And, yes, you are correct that the NEPA process did  
11 definitely help inform what we plan to do in the CEC  
12 process, because we wouldn't want to do something that  
13 would be inconsistent with what WAPA is going to decide,  
14 because then we end up with a nonviable project.

15 MEMBER RICHINS: Yeah, I think that's  
16 important to get on the record early on, because I'll  
17 have additional questions about public outreach in that  
18 part of the testimony. But I just wanted to make sure  
19 that those two things got tied together. So thank you.

20 MR. DUNCAN: Yes. And Member Chaulk will  
21 speak to the public outreach, and she'll make sure to  
22 elaborate on -- on, you know, not only what the efforts  
23 were, but how they were coordinated.

24 BY MR. DERSTINE:

25 Q. And if I'm -- just to make sure I'm tracking, it

1 sounds like, Ms. Esquer, the public scoping that was done  
2 in connection with the NEPA process preceded, certainly,  
3 the filing -- or the outreach efforts we did to support  
4 the CEC application, so there were separate outreach and  
5 engagement through the virtual open house through NEPA,  
6 that was followed by the outreach and engagement that was  
7 done to support the CEC application before the committee  
8 today?

9 A. (MS. ESQUER) That is correct, yup.

10 MEMBER RICHINS: Thank you.

11 BY MR. DERSTINE:

12 Q. So, Mr. Duncan, you spoke to the route and how  
13 it was selected. I think you're going to cover next kind  
14 of the -- well, you're going to cover next the corridor  
15 that we're requesting from the committee, as well as the  
16 right-of-way that I think you'll largely have to obtain  
17 from the State Land Department.

18 A. (MR. DUNCAN) Yes, that is correct. The map on  
19 the right screen shows the proposed corridor, but it's  
20 pretty difficult to see at this scale; however, the  
21 placemats that are in front of you provide the same maps  
22 showing the corridor.

23 The corridor that is proposed is a 300-foot  
24 corridor, with 150 feet on each side of the center line.  
25 The reason we're requesting a 300-foot corridor is just,

1 again, although we are, you know, intending to parallel  
2 the planned and under-construction water line, we still  
3 need flexibility, you know, in the event that there are  
4 unforeseen hazards or obstacles or for some reason the  
5 engineering needs to vary a little bit. So that 300-foot  
6 corridor gives us that variability.

7 We plan to request a 100-foot right-of-way from  
8 the Arizona State Land Department, ultimately, for the  
9 construction of the project.

10 Q. And the -- APS has presented a proposed CEC for  
11 consideration by the committee. That's marked as APS  
12 Exhibit 7 and that proposed CEC also includes a  
13 description of the route and the corridor; is that  
14 correct?

15 A. (MR. DUNCAN) Yes, that is correct.

16 Q. Okay. And you were the primary author of that  
17 route description? I know you had a conversation with me  
18 maybe more than once about how it's somewhat difficult to  
19 describe the corridor in a narrative fashion, given the  
20 few landmarks and reference points, but APS has done its  
21 best, you've done your best to try to describe the  
22 300-foot corridor that would mark the path of the CEC.  
23 And that's, again, an exhibit to our proposed CEC, which  
24 is APS Exhibit 7.

25 A. (MR. DUNCAN) Yes, that tortured page is mine.

1 Q. Okay. All right.

2 MEMBER KRYDER: Mr. Chairman?

3 CHMN STAFFORD: Yes, Member Kryder.

4 MEMBER KRYDER: Question for Mr. Duncan. I  
5 know, and from the material I've read, the proposed line  
6 is trying to follow the water line that's in progress of  
7 being built; is that correct?

8 MR. DUNCAN: That is correct.

9 MEMBER KRYDER: Could you with a laser  
10 pointer or something -- well, I guess the -- how close is  
11 the water line to the proposed route? Are they, like, 50  
12 feet apart or 200 feet apart or half a mile or how does  
13 that run?

14 MR. DUNCAN: It does vary. And I don't  
15 have exact measurements. In some places it's very close.  
16 In other places it is a bit further away. If I can make  
17 a suggestion, Member Kryder, when Ms. Esquer does her  
18 virtual route tour, because the -- well, the preliminary  
19 access roads have been constructed for the water line and  
20 those actually show up on the imagery that she will be  
21 sharing, I think that may give you a sense, better than I  
22 can describe it. But what I can tell you is that it just  
23 varies in different places.

24 MEMBER KRYDER: Thank you very much. I  
25 remember Attorney Derstine telling us how difficult with



1 landmarks describing this, so I'll await with eagerness  
2 to see the proposal that you have for us. Thanks.

3 CHMN STAFFORD: That's why we usually  
4 include a map along with the description to make it more  
5 understandable.

6 All right. We're coming up on 90 minutes.  
7 I think it's about time for a break. Members online, I  
8 just want to confirm that you received the exhibits from  
9 Tod. I got -- I believe they were sent out again. They  
10 may have been labeled under case 240, but it's actually  
11 for this case, which is 238.

12 (No response.)

13 CHMN STAFFORD: I'm seeing Member Little  
14 nodding her head. Do you have the exhibits, Member  
15 Fontes?

16 (No response.)

17 CHMN STAFFORD: No news is good news, if  
18 you're not --

19 MEMBER FONTES: Sorry, I was on mute. I do  
20 have them, Mr. Chairman.

21 CHMN STAFFORD: Okay. Thank you. Member  
22 French, do you have yours?

23 MEMBER FRENCH: Mr. Chairman, no.

24 CHMN STAFFORD: Okay. They should be --  
25 Tod sent them out. I think they're labeled case 240, but

1 they're actually for this case 238.

2 MEMBER FRENCH: That may be why I missed  
3 them. I'll double-check.

4 CHMN STAFFORD: And I believe Member Drago  
5 is on his way here. And I don't think he was able to  
6 check while he's driving. So I think -- all right.

7 MEMBER DRAGO: I'm not sure -- Chairman, I  
8 am not sure, but I will check when I get down to the  
9 governor's office.

10 CHMN STAFFORD: Okay. All right. Then,  
11 yeah, check and let me know if you still need them. You  
12 are on your way here, though, after that appointment,  
13 correct?

14 MEMBER DRAGO: That's correct.

15 CHMN STAFFORD: Okay. Well, we'll have  
16 something here for you at any rate whether or not you  
17 received the email.

18 MEMBER DRAGO: Thank you, Chairman. Thank  
19 you.

20 CHMN STAFFORD: All right. With that,  
21 let's take a 10- to 15-minute recess and we'll come back  
22 and then start on the project costs and facilities.

23 MR. DERSTINE: Thank you.

24 CHMN STAFFORD: Excellent. Thanks.

25 We stand in recess.

1 (Recessed from 2:34 p.m. until 2:52 p.m.)

2 CHMN STAFFORD: All right. Let's go back  
3 on the record.

4 Mr. Derstine, I believe you were going to  
5 continue your questions of Mr. Duncan, and he's going to  
6 address the project cost and facilities.

7 MR. DERSTINE: That's right. Thank you,  
8 Mr. Chairman.

9 Q. Mr. Duncan, the Chairman has teed up for you  
10 your next topic, so do you want to cover costs?

11 A. (MR. DUNCAN) Thank you, Mr. Derstine.

12 It is expected that the costs of the project  
13 will be approximately \$60 million for the construction of  
14 the transmission line, and upgrades to the access routes  
15 and any land acquisition will cost another \$2.96 million.

16 Q. Okay. You heard Mr. Spitzkoff's testimony about  
17 the obligation that APS has to serve customers. In this  
18 case it's the service obligation to the -- to the Bagdad  
19 Mine. Who is paying that cost, please?

20 A. (MR. DUNCAN) My understanding that FMI is paying  
21 this cost.

22 Q. Okay.

23 CHMN STAFFORD: For the entire line?

24 MR. DUNCAN: That is my understanding.

25 CHMN STAFFORD: Okay. Thank you.

1 Member Richins, you had a question?

2 MEMBER RICHINS: Yeah, I was curious as to  
3 the 2.6 million of land acquisition costs, is that  
4 acquiring private land, state -- State Land or is that  
5 leasing a portion of State Land for your line? What did  
6 that buy?

7 MR. DUNCAN: I don't believe that there's  
8 any purchase there from Arizona State Land, I believe  
9 it's all lease.

10 MEMBER RICHINS: So the 2.6 million is  
11 paying for a lease to the State Land Department?

12 MR. DUNCAN: That is my understanding.

13 MEMBER RICHINS: Okay. Thank you.

14 One more question, Chairman. And also the  
15 full 60 million for the line, including that 2.6 million  
16 for land acquisition is being paid by Freeport McMoRan?

17 MR. DUNCAN: That is correct.

18 MEMBER RICHINS: Okay. Thank you.

19 BY MR. DERSTINE:

20 Q. And what about the transmissions -- the  
21 structures that will be used to construct the line?

22 A. (MR. DUNCAN) So the project is planned to be  
23 constructed using single-circuit 230-kV monopoles,  
24 similar to the structures that you see on the right  
25 screen. The structures are anticipated to average in

1 height of about 130 feet. However, they can range all  
2 the way up to 199 feet tall for site-specific  
3 accommodations, if necessary. Span lengths are  
4 anticipated to be approximately 750 to 1,200 feet.

5 MEMBER KRYDER: Mr. Chairman?

6 CHMN STAFFORD: Yes, Member Kryder.

7 MEMBER KRYDER: Mr. Duncan, I see, but I  
8 can't read, what's the circumference of the base there to  
9 that pole in the diagram?

10 MR. DUNCAN: What you're seeing here is  
11 actually just engineering. It's cardinal orientation.  
12 This is 0, 90, 180, so it's just -- it's just a --  
13 literally depicting 360 degrees.

14 MEMBER KRYDER: It's a cardinal  
15 orientation.

16 MR. DUNCAN: That's correct.

17 MEMBER KRYDER: Okay. I got it.

18 What is the approximate diameter of a hole  
19 for a monopole structure like that?

20 MR. DUNCAN: I don't have that information  
21 specifically. It looks like Mr. Spitzkoff may be able to  
22 address that, but what I can say is that they will --  
23 they will vary. A taller structure or a structure that  
24 is a turning structure will have a greater diameter base.

25 But, Mr. Spitzkoff?

1 MR. SPITZKOFF: Yeah, Mr. Duncan is  
2 correct. It's almost designed pole by pole, structure by  
3 structure. And it depends on the height. It depends on  
4 the stresses that are going to be on there. If you've  
5 got a drop into a canyon or a sharp turn, you know, that  
6 could necessitate a stronger or a wider pole. And then  
7 also on the soil conditions at that spot, so it's -- it's  
8 going to vary on pole by pole.

9 MEMBER KRYDER: Back of the envelope, what  
10 would be the max that you would think of? I'm not going  
11 to hold you to that in any way, but I'd just like, are we  
12 looking at a 6-foot or 10-foot hole or back of the  
13 envelope?

14 MR. SPITZKOFF: So the pole diameter  
15 probably about 6-foot or so. However, when you dig the  
16 hole, the hole is bigger than the pole and then is  
17 backfilled.

18 MEMBER KRYDER: Sure. Okay. Thank you.

19 CHMN STAFFORD: Member Fontes, you had a  
20 question?

21 MEMBER FONTES: Thank you, Mr. Chairman.

22 I just wanted to drill down on the costs if  
23 we could return to that since that was the presentation  
24 here. So Freeport McMoRan advance -- provides an advance  
25 payment for the construction of the line to APS and then

1 does -- how does that work? Is that part of an advanced  
2 payment for the eventual energy that they're going to go  
3 or is that separate? And then a related question is who  
4 has the ultimate liability on that line once it's  
5 constructed for end of life? Does that transfer to the  
6 rate-based structure of APS, so it's used and useful, as  
7 well as for decommissioning costs, insurance, and  
8 liability on the APS books? That's important for us,  
9 just because we're looking at the lifecycle of this.

10 MR. SPITZKOFF: So I don't think I can  
11 answer all of your questions. Especially the last ones,  
12 but it's -- the payment by Freeport is not a -- it's not  
13 an advance, it's a payment for what the cost of the  
14 construction's going to be. It's -- it's a line being  
15 built and it's really like a large equivalent of a line  
16 extension per the APS policies, so, you know, it's not a  
17 backbone facility of the network, so the customer in this  
18 situation will pay the cost of the line.

19 MEMBER FONTES: But then APS owns it and  
20 assumes all liability and pays insurance and operates it?

21 MR. SPITZKOFF: That's -- APS does own it.  
22 I can't answer whether we -- if there's an incident or  
23 how insurance is paid for or anything like that.

24 MEMBER FONTES: Mr. Derstine, if you could  
25 just, you know, as we go through the hearing here, that's

1 an important thing for us just so we know if there's  
2 issues down the road.

3 Appreciate you, as always. Thank you.

4 MR. DERSTINE: We'll -- if Mr. Spitzkoff or  
5 Mr. Duncan can make a note that we'll circle back and do  
6 some research at the break or answer those questions by  
7 tomorrow morning, we will do that.

8 Q. Okay. You've covered the cost, Mr. Duncan, is  
9 there anything else -- and the type of structures that  
10 are being used to construct this line, is there more you  
11 wanted to add to a project description or does that cover  
12 it?

13 A. (MR. DUNCAN) That covers my testimony.

14 Q. Okay. So Ms. Esquer, that brings us to you to  
15 take the committee through the environmental studies, but  
16 ahead of that we thought it would be helpful for the  
17 committee to see the virtual flyover that was prepared at  
18 WestLand's direction; is that right?

19 A. (MS. ESQUER) Yes, that's correct.

20 Q. Okay. Are we set up to handle the flyover  
21 simulation through your laptop?

22 A. (MS. ESQUER) I've got a HDMI cord and we will  
23 see what happens.

24 Is it possible to get the flyover on the left  
25 side only, so we can keep the map on the right.



1 Q. The right screen for Google Earth; is that  
2 right?

3 A. (MS. ESQUER) For the KOP map.

4 Q. Okay. Whenever you're ready.

5 A. (MS. ESQUER) So we will begin the virtual tour  
6 with a little orientation. We today are down at the  
7 south end of the screen. Down here at the bottom of the  
8 screen is Wickenburg, that's where we are today. About  
9 50 miles northwest of us if we go up US 93 here, we will  
10 reach the southern terminus of the proposed line. So  
11 we'll fly there now.

12 So we begin our virtual tour at the southern  
13 terminus of the line, and I'll pause here. We're going  
14 to start with a key observation point view, this is  
15 KOP-2, which is down here at US 93, just south of the  
16 Santa Maria Ranch. So this is a representative view of  
17 what travelers on US 93 and the residents at Santa Maria  
18 Ranch will see from their residence. So we're looking  
19 north towards the southern terminus of the line and the  
20 project substation here.

21 Q. And I guess, just for clarification, you're  
22 starting with KOP-2 because KOP-1 was a simulation that  
23 was created for the EA, but it focused on -- do I have  
24 that right, communication facilities that really have  
25 nothing to do with the project?

1 A. (MS. ESQUER) Correct. Yes. KOP-1 was a visual  
2 simulation of a communication facility for WAPA's  
3 switchyard, so that's covered in the EA, but not relevant  
4 to this project.

5 Q. Okay. So -- and you said the Santa Maria Ranch  
6 where would it be within that --

7 A. (MS. ESQUER) Yes, so Santa Maria Ranch is here  
8 so I believe the residential structures are right about  
9 here, but this is that private land associated with the  
10 ranch that we're viewing here.

11 Q. And then that dark line that I'm seeing moving  
12 up the terrain, what is that?

13 A. (MS. ESQUER) This dark line that you're seeing  
14 here is the proposed route. And this is the project  
15 substation. After we view the KOP we'll have a view of  
16 the existing transmission infrastructure there as well.

17 Q. Okay. And that brown area in the center, what  
18 is that?

19 A. (MS. ESQUER) Part of the ranch.

20 Q. Okay.

21 A. (MS. ESQUER) So beginning with KOP-2, this is  
22 the visual simulation, so on the right here, you can see  
23 the project substation in the distance, and then there  
24 are some --

25 MEMBER GOLD: Mr. Chairman?

1 CHMN STAFFORD: Yes, Member Gold.

2 MEMBER GOLD: I can't see any of that.

3 MR. DERSTINE: Can we keep the lighting up.

4 CHMN STAFFORD: If you look at your tablet.

5 MR. DERSTINE: Okay. That looks better.

6 CHMN STAFFORD: No, it's the -- yeah, look  
7 at this screen here, you don't have the Kindle with the  
8 view.

9 BY MR. DERSTINE:

10 Q. Maybe now. What's making the backlighting go  
11 away and come when we're stopping?

12 A. (MS. ESQUER) I think it's a technical issue with  
13 the video, I'll use the laser pointer instead.

14 Q. Okay.

15 A. (MS. ESQUER) So here in the right you can see  
16 the project substation, and then there are some  
17 transmission structures that are visible associated with  
18 the proposed route here heading west.

19 MEMBER KRYDER: And, Mr. Chairman?

20 CHMN STAFFORD: Yes, Member Kryder.

21 MEMBER KRYDER: Where is the ranch house  
22 and such located? Can we see it from here?

23 MS. ESQUER: It is not visible in this  
24 simulation, but it would be about north of us here  
25 between the highway and the substation there or just to

1 the east.

2 MEMBER KRYDER: So what's the approximate  
3 distance from your corridor to the ranch house?

4 MS. ESQUER: About half a mile.

5 MEMBER KRYDER: About a half a mile, okay.

6 MS. ESQUER: Right.

7 MEMBER KRYDER: And is that the nearest  
8 dwelling, then, to the corridor?

9 MS. ESQUER: It is.

10 MEMBER KRYDER: And is that the only  
11 habitation near the corridor, then, is just this ranch?

12 MS. ESQUER: The Santa Maria Ranch is the  
13 closest. There are a number of scattered rural residents  
14 [sic] to the west of the transmission line and we  
15 will -- we actually have a KOP that shows the line from  
16 that location.

17 MEMBER KRYDER: Okay. So we'll see those  
18 coming up; is that correct?

19 MS. ESQUER: Correct.

20 MEMBER KRYDER: Thank you.

21 MEMBER GOLD: Mr. Chairman?

22 CHMN STAFFORD: Yes, Member Gold.

23 MEMBER GOLD: Why don't you have a KOP at  
24 the ranch? That seems to be the most logical place where  
25 somebody would -- is actually existing and working and

1 living and looking at what you're proposing to build.

2 MS. ESQUER: Right. So we tried to pick  
3 representative locations for sensitive receivers  
4 throughout the proposed route. So KOP-2 was chosen as  
5 both a representative view for the ranch, as well as  
6 travelers on US 93.

7 MEMBER GOLD: But it doesn't show the  
8 ranch. It's a half a mile from the ranch, you just said.

9 MS. ESQUER: The ranch is essentially in  
10 between the KOP and the southern terminus of the line.

11 MEMBER GOLD: Okay. I see it on the  
12 screen, but I don't see it on the map. I don't see it on  
13 the exhibit. How far away from this "Do not enter" sign  
14 is the ranch?

15 MS. ESQUER: So I will point you here. So  
16 KOP-2 is here. The ranch is just about there. And then  
17 the southern terminus of the line is there. So it's just  
18 between -- and I think a function of topography here  
19 where the ranch just isn't visible.

20 MEMBER GOLD: So you're saying that the  
21 view from the ranch will be pretty much identical to the  
22 view from the "Do not enter" sign, correct?

23 MS. ESQUER: It will be similar, but  
24 close -- closer.

25 MEMBER GOLD: The ranch is closer?

1 MS. ESQUER: The ranch is closer, correct.

2 MEMBER GOLD: So right now the ranch has no  
3 transmission lines that it can see, because I'm looking  
4 at your screen and they're barely visible in the distance  
5 and you're proposing to put a substation literally right  
6 in front of it?

7 MS. ESQUER: So in just a second, we will  
8 see the -- where the existing transmission infrastructure  
9 lies between the project and the Santa Maria Ranch.

10 MEMBER GOLD: And I'm guessing you have  
11 already spoken to the owners of the Santa Maria Ranch?

12 MS. ESQUER: Yes.

13 MEMBER GOLD: And they're okay with this?

14 MS. ESQUER: I won't speak for them.

15 MEMBER GOLD: So I'm gathering they're not  
16 okay with this. Okay.

17 BY MR. DERSTINE:

18 Q. Well, and maybe speak to this point, you say  
19 there's -- and in my opening I mentioned there's the  
20 500-kV line and the 345-kV line, why don't we see those  
21 in this viewpoint if they are essentially in this same  
22 area?

23 A. (MS. ESQUER) Again, I think it's a function of  
24 topography, they are just beyond -- probably over this  
25 hill and then follows US 93 there. And we'll see that in

1 the flyover.

2 Q. Okay.

3 A. (MS. ESQUER) So at this point we are flying  
4 north right over the Santa Maria Ranch, which is right  
5 about there. And we see the existing transmission  
6 infrastructure, so WAPA's 345-kV transmission line is  
7 here on the southern -- the southern line that you see  
8 there, the northern line is a 500-kilovolt WAPA line that  
9 is existing.

10 MEMBER GOLD: So --

11 MEMBER KRYDER: Oh, go ahead, Jon.

12 MEMBER GOLD: I was going to say the  
13 substation or the switchyard that I'm looking at right  
14 now is already existing?

15 CHMN STAFFORD: No.

16 MS. ESQUER: No, this is the project  
17 substation, and then the proposed route begins here at  
18 that substation and heads west. These two lines that you  
19 see in the foreground before that are the existing  
20 transmission infrastructure in the area.

21 MEMBER GOLD: Regrettably I can't see them.  
22 Okay. Please continue. I'm sorry. I'm trying to look  
23 at the bottom one that's a little clearer and --

24 MEMBER KRYDER: Where is the ranch house?

25 MS. ESQUER: I will back up just a little

1 bit. So the ranch is right about there, Santa Maria  
2 River is here, US 93 is here, and then we see two  
3 existing transmission lines here, and then in the very  
4 back is the proposed route.

5 MEMBER GOLD: Okay. So you've drawn in  
6 those transmission lines, the existing ones? Because  
7 they look pretty dark.

8 MS. ESQUER: We have -- yes, we have shown  
9 them here just for visibility for the flyover.

10 MEMBER GOLD: So this is not a real  
11 depiction of what it looks like now?

12 MS. ESQUER: The -- the --

13 MEMBER GOLD: You just -- I'm sorry.

14 CHMN STAFFORD: One at a time.

15 MEMBER GOLD: You just said you drew in the  
16 lines to make them more visible, so this is not a true  
17 depiction of what the area looks like now?

18 MS. ESQUER: So the flyover here that you  
19 see, it is darkened to help show where things are, really  
20 to orient the committee to where these things are in  
21 space. The visual simulations are more realistic and  
22 lighter and that's how they, you know, appear in reality.

23 BY MR. DERSTINE:

24 Q. Can you -- maybe it makes sense to start us off  
25 with a Google Earth so we can actually see what this area



1 looks like.

2 A. (MS. ESQUER) Sure. I will unplug for just a  
3 second.

4 Q. And I guess while you're doing that, going to  
5 Member Gold's question about not seeing the ranch, the  
6 purpose of your simulation was to show and to simulate  
7 the view from the ranch not necessarily to simulate the  
8 ranch or to show what the ranch looks like, correct?

9 A. (MS. ESQUER) Correct.

10 MEMBER KRYDER: The difficulty I had,  
11 though, was knowing where the ranch was vis-à-vis -- I  
12 mean, when you point at it with a marker, it was  
13 difficult to know was there a ranch house there, are  
14 there some corrals and whatnot and whatnot. Anyway, I  
15 just found it difficult to get oriented to what you were  
16 trying to show, so --

17 MR. DERSTINE: Absolutely. We're hoping  
18 maybe the Google Earth --

19 MEMBER KRYDER: Maybe the Google Earth will  
20 help us as well.

21 CHMN STAFFORD: One at a time, please. One  
22 at a time. If you ask the question, let them give the  
23 answer and then ask another one, please.

24 MEMBER KRYDER: Thank you.

25 MS. ESQUER: Okay. So in Google Earth now,

1 I will just reorient you, so US 93 is here to the  
2 left-hand side of the screen, Santa Maria Ranch is here,  
3 in the center of the screen. This white block that you  
4 see is the project substation area and then the proposed  
5 route begins there at the very top of the screen. And I  
6 will attempt to zoom in now so you can see where the  
7 existing infrastructure is.

8 So here is the existing infrastructure, so  
9 the southern line here that you see, you can see the  
10 shadows of these large structures here, this is the  
11 345-kV WAPA line here in the south and then the 500-kV  
12 WAPA line is shown there on the north and these are  
13 existing.

14 MEMBER GOLD: Could you show this from a  
15 position standing at the ranch house, just a view from  
16 the ground looking in the direction of any of those lines  
17 so where you're going to put your substation, but from a  
18 perspective of the ranch house?

19 MS. ESQUER: Yeah, I don't think that  
20 Google has imagery from that specific location. There is  
21 Google imagery from US 93, but not from the Santa Maria  
22 Ranch.

23 MEMBER GOLD: Can you put your cursor on US  
24 93, then, looking at the ranch and we can perhaps see  
25 what it looks like from there?

1 MS. ESQUER: Yes. So there in the  
2 background you can see some of the structures associated  
3 with those existing high-voltage transmission lines.  
4 This is looking north directly towards the ranch and the  
5 transmission lines. It's hard to see from this  
6 viewpoint, but it is just beyond the ranch.

7 MEMBER GOLD: So the transmission lines are  
8 barely visible from the roadway, which would make them  
9 barely visible from the ranch, but pretty much you're  
10 going to be putting a switchyard or a substation -- just  
11 put your arrow on where you'd be putting the switchyard.

12 MS. ESQUER: It would be right about this  
13 area.

14 MEMBER GOLD: And if you don't mind, how  
15 tall would the poles be at your switchyard, just put your  
16 cursor on, you know, the ground -- that's ground level,  
17 how much higher would the poles be?

18 MR. SPITZKOFF: They should be about the  
19 same height as the existing towers that are there.

20 MEMBER GOLD: Okay. But I don't see a  
21 tower that's there now. Does that mean the poles in the  
22 substation or switchyard will not be visible from the  
23 ranch or from the road or will they just be an eyesore?  
24 That's my question.

25 MS. ESQUER: They will be visible but they

1 will be additive to the existing transmission  
2 infrastructure that's present.

3 MEMBER GOLD: Would you point to some of  
4 the existing -- just one of the existing transmission  
5 lines, a pole?

6 MS. ESQUER: Yes.

7 MEMBER GOLD: If you can see one.

8 MS. ESQUER: Yes, so difficult with the  
9 topography and probably with the screen, but you'll see  
10 two here.

11 MEMBER GOLD: Okay. They're very visible  
12 against the skyline from the crest of the hills.

13 MS. ESQUER: Right.

14 MEMBER GOLD: But if they are not on the  
15 crest of the hills they are not visible up against the  
16 mountains. Now I can't see any from here. What I'm  
17 asking is will your structures be taller than the  
18 existing poles?

19 MR. SPITZKOFF: They should be comparable  
20 heights.

21 MEMBER GOLD: So if they're comparable,  
22 they should also not be an eyesore or, you know, just  
23 sticking up, you know, when a rancher gets up in the  
24 morning and looks out he's pretty much going to see the  
25 same thing he sees now; is that correct or am I incorrect

1 in my assumption?

2 MS. ESQUER: They will see the existing  
3 infrastructure as well as the new substation and the new  
4 line, that is correct.

5 MEMBER GOLD: So they'll be pretty  
6 comparable and this will be the similar view, even after  
7 you build your substation?

8 MS. ESQUER: Correct.

9 MEMBER GOLD: That's what I was asking,  
10 thank you.

11 BY MR. DERSTINE:

12 Q. I guess with the caveat that this viewpoint is  
13 from the road and the ranch is between 93 and the  
14 existing 345- and 500-kV line, so depending on where the  
15 owners are on their land, the new facilities may or may  
16 not be more visible than what we're seeing here, but they  
17 would also be seeing the existing infrastructure, which  
18 is a lattice tower 500-kV line and a lattice tower 345-kV  
19 line?

20 A. (MS. ESQUER) That's correct.

21 CHMN STAFFORD: All right. Just to make  
22 sure I'm spatially oriented here, we have the existing  
23 WAPA lines, the new substation will be located north of  
24 those, and then head northwest and then north again and  
25 then you have -- the ranch is south of the existing WAPA

1 lines, but north and east, I guess, of the 93?

2 MS. ESQUER: Correct. Correct.

3 CHMN STAFFORD: Okay. All right. Thank  
4 you.

5 MR. DERSTINE: Is there more members of the  
6 committee wanted to see from the Google Earth before she  
7 unplugs and moves back to the virtual flyover?

8 MEMBER GOLD: No, I'm good with that.  
9 Thank you, Mr. Derstine.

10 MS. ESQUER: Continuing our tour now, as I  
11 said, seeing the existing infrastructure there in the  
12 foreground, those are those WAPA 345- and 500-kV lines,  
13 coming to the project substation here in the southern  
14 terminus of the proposed route.

15 BY MR. DERSTINE:

16 Q. And I guess as a point it's worth making that  
17 when we saw on the Google Earth we saw the, I think the  
18 shadows were more visible than the structures themselves,  
19 but the existing lines are constructed on lattice  
20 structures; am I correct about that?

21 A. (MS. ESQUER) That's correct.

22 Q. And the new transmission line, once it leaves  
23 the substation site, will be constructed on monopoles?

24 A. (MS. ESQUER) Correct. So we are --

25 MEMBER LITTLE: Mr. Chairman?

1 CHMN STAFFORD: Yes, Member Little.

2 MEMBER LITTLE: What is the distance  
3 between the project line and the existing WAPA lines,  
4 approximately?

5 MS. ESQUER: I would say approximately a  
6 quarter of a mile, Member Little.

7 MEMBER LITTLE: Okay. Thank you.  
8 And -- and this -- this part of the line that leaves the  
9 substation and before it turns north, that is -- is not  
10 in the same area as the pipeline, right?

11 MS. ESQUER: It actually is. So as you can  
12 see here, and I paused here a moment in the virtual  
13 flyover, there is an access road here that you'll see off  
14 to the left, this is the access road for the Aguila --

15 MR. DERSTINE: Can the committee and Peaks  
16 kind of simulate and show that for the -- for our  
17 committee members who are appearing virtually.

18 Oh, so you have to use your mouse to trace  
19 that?

20 MEMBER LITTLE: I think I can see. I think  
21 I can see it. It's pretty clear --

22 MS. ESQUER: Yeah.

23 MEMBER LITTLE: -- it's a bright colored  
24 line. Oh, perfect, thank you.

25 MS. ESQUER: Yeah, so that is the access

1 road for the Aguila pipeline, right here.

2 MEMBER LITTLE: And is the access road  
3 where you're going to dig or a ways away from it or --

4 MS. ESQUER: I'm sorry, Member Little, can  
5 you repeat the question?

6 MEMBER LITTLE: Is the access road right  
7 where the pipeline will go in the ground or is it next to  
8 it or where -- where -- where is the access road relative  
9 to where the pipeline will have to go in the ground?

10 MS. ESQUER: Generally adjacent to the  
11 access road.

12 MEMBER LITTLE: I'm sorry, it's what?

13 MS. ESQUER: I'm sorry, generally adjacent  
14 to the access road is where the pipeline will be.

15 MEMBER LITTLE: Okay. Okay. Okay. And  
16 the NEPA study, EA study, does that just include the  
17 substation or does it include any portion of the line  
18 coming out of the substation?

19 MS. ESQUER: The EA analyzes the entirety  
20 of the proposed route, in addition to the substation  
21 switchyard and a number of communication facilities that  
22 would be needed.

23 MEMBER LITTLE: Excellent. Thank you very  
24 much.

25 MS. ESQUER: One more thing I'll point out



1 while we're paused here. In addition to the Aguila  
2 pipeline access road that we see here to the left side of  
3 the screen, we also have that existing transmission  
4 infrastructure shown just for -- just for, you know,  
5 orientation for the committee here and then the proposed  
6 route is the line here to the right side of the screen.

7 So at this point the proposed route will  
8 head north towards Bagdad and will begin to climb some  
9 mountainous areas. And you'll see that Aguila pipeline  
10 access road there already constructed, which will be  
11 utilized for construction of the project. Continuing  
12 north still. And you can see the rugged terrain here.

13 BY MR. DERSTINE:

14 Q. And, Ms. Esquer, would any of this be visible  
15 from the Santa Maria Ranch given the -- the undulating  
16 terrain and the rise in elevation?

17 A. (MS. ESQUER) No, you know, because of the  
18 topography it would likely not be visible.

19 So at this point we are going to come to KOP-3.  
20 And I will orient you all to where this is. So we're  
21 about halfway up the proposed route at this point here at  
22 KOP-3. This KOP is a representative view for those  
23 residents there west of the line that we pointed out  
24 earlier, also travelers on SR-97.

25 Q. So in my opening I made the statement that there

1 is this kind of a dispersed residential development of  
2 approximately 25 homes, is that what you're referring to  
3 there?

4 A. (MS. ESQUER) Correct.

5 Q. And the distance of those homes to the proposed  
6 new line?

7 A. (MS. ESQUER) About three quarters of a mile to a  
8 mile away.

9 Q. Okay.

10 A. (MS. ESQUER) And I will pause it here so you can  
11 kind of see exactly where those residents are at. They  
12 are here in the bottom left corner of the screen, and  
13 this is SR-97. So KOP-3, this is a representative view  
14 from that location.

15 Continuing on our tour we'll continue to head  
16 north towards Bagdad at this point. And those access  
17 roads -- existing access roads still clearly visible  
18 here.

19 Q. And when you're referencing the access road this  
20 is a road that was constructed for the Aguila pipeline?

21 A. (MS. ESQUER) Correct.

22 MEMBER RICHINS: Chairman?

23 CHMN STAFFORD: Yes, Member Richins.

24 MEMBER RICHINS: I guess for anybody that's  
25 just simply observing, the line that's simulated is the

1 center point of your 300-foot corridor?

2 MS. ESQUER: That's correct.

3 MEMBER RICHINS: So it could end up closer  
4 to that road or not?

5 MS. ESQUER: That's correct.

6 MEMBER RICHINS: Okay. So that's not  
7 specifically saying that's where it's going to be  
8 located, but it could be anywhere in that -- just because  
9 we have members of the public here I just want to make  
10 sure we clarify that.

11 MS. ESQUER: Yes. Yes. Thank you for that  
12 clarification.

13 CHMN STAFFORD: And then I have a quick  
14 follow-up, so the access road exists and was made to  
15 build the water pipeline, correct?

16 MS. ESQUER: Correct.

17 CHMN STAFFORD: And how far along is  
18 construction of that water pipeline?

19 MS. ESQUER: I -- my -- to my knowledge,  
20 the, you know, obviously the access roads have been  
21 constructed and they are currently doing, like,  
22 geotechnical testing, test beds, those sort of things.

23 CHMN STAFFORD: Okay. So which side of the  
24 road the water pipe will be on and which side of the road  
25 the power line will be on, it could be either/or at this

1 point?

2 MS. ESQUER: Correct.

3 CHMN STAFFORD: Will they both be sited on  
4 the same side or opposite sides of the access road?

5 MS. ESQUER: I don't think that's  
6 necessarily been determined.

7 CHMN STAFFORD: Okay. It could be  
8 either/or as well?

9 MS. ESQUER: Right.

10 CHMN STAFFORD: Okay. And there is not a  
11 reason why there couldn't be -- I guess, you wouldn't put  
12 the right-of-way for the transmission line -- it wouldn't  
13 encompass the water pipeline, would it? They  
14 can't -- they have to be separate or can their  
15 right-of-ways overlap?

16 MS. ESQUER: The right-of-ways may overlap,  
17 but they -- they would not -- trying to think of the  
18 words -- interfere.

19 CHMN STAFFORD: Okay. All right. Thank  
20 you.

21 MEMBER LITTLE: Mr. Chairman?

22 CHMN STAFFORD: Yes, Member Little.

23 MEMBER LITTLE: How -- what is the  
24 distance, approximately, between the transmission line  
25 and the access road in this picture, just so I have the

1 sense of how -- how far on this picture is the 600-foot  
2 right-of-way.

3 MS. ESQUER: It's a good --

4 MEMBER LITTLE: What do you think it is?

5 MS. ESQUER: Yeah, it's a good question. I  
6 don't know exactly, Member Little, but I would say  
7 approximately a couple hundred feet.

8 MEMBER LITTLE: Okay. That's kind of what  
9 I had thought. Thank you.

10 BY MR. DERSTINE:

11 Q. And I guess on the issue of right-of-way, I  
12 think, Mr. Duncan, you testified that the right-of-way  
13 will be 100 feet that will be obtained from State Land  
14 Department and then, but the corridor that you were  
15 asking for that's described in the proposed CEC is  
16 300 feet.

17 Do I have those callouts correct?

18 A. (MR. DUNCAN) Yes, that is correct.

19 A. (MS. ESQUER) Continuing north now we'll see here  
20 the transmission line crosses SR-97 and we'll get a view  
21 of that crossing here at KOP-4 in just a second. So  
22 we're at KOP-4 now, looking south towards the project and  
23 just to orient you on the map, KOP-4 is right about here,  
24 about 70 percent up the line, again, looking southwest  
25 towards the project where the project crosses SR-97.

1 Now the visual simulation from KOP-4.

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

3 CHMN STAFFORD: Yes, Member Hill.

4 MEMBER HILL: In the simulations here, as  
5 well as the photographs for the viewshed analysis, how  
6 tall were the towers in those simulations?

7 MS. ESQUER: The towers were assumed to be  
8 130 feet in those simulations.

9 MEMBER HILL: Okay. Thank you.

10 MS. ESQUER: Continuing north towards  
11 Bagdad again. And that Aguila pipeline access road is  
12 still visible here. Crossing Bridle Creek here, SR-96 is  
13 now coming into view there. Here. And we will come to  
14 our last KOP, KOP-5, to get a look at this crossing where  
15 the project crosses SR-96.

16 So, again, our final KOP, we're about two  
17 miles south of Bagdad at this point. So this is a  
18 representative view for travelers on SR-96. And the  
19 transmission line crossing there in the visual  
20 simulation.

21 BY MR. DERSTINE:

22 Q. The heights that you gave to Member Hill are the  
23 same there or they were assumed to be or simulated to be  
24 130 feet?

25 A. (MS. ESQUER) Correct.

1           At this point we will take our final jog towards  
2 the northern terminus of the proposed route. Heading  
3 north into TS-02 substation there. And I will pause.  
4 The 115-kV line that is existing is also visible here  
5 just to orient the committee there in the background and  
6 it was also enhanced just for visibility.

7           So we have reached the northern terminus of the  
8 line, TS-02 substation is visible here and then Bagdad  
9 and the Freeport Mine are visible there in the  
10 background.

11          Q.    And so what you're simulating there, I just want  
12 to make sure I understand spatially, that the TS-02  
13 substation site is south of the existing 115-kV line; is  
14 that right?

15          A.    (MS. ESQUER) Correct.

16                   And that concludes the virtual tour.

17                   MEMBER MERCER:   Mr. Chairman?

18                   CHMN STAFFORD:   Yes, Member Mercer.

19                   MEMBER MERCER:   Question, Ms. Esquer, so  
20 approximately of the 14 miles of the proposed route how  
21 many -- how many miles can we see of the lines that are  
22 going to be placed? I saw, you know, from where the crow  
23 flies it's not the same as driving through the highway.  
24 And, to be honest with you, I never paid any attention to  
25 the lines until I started with this committee and I see

1 the lattice towers in the -- smack in the middle of  
2 Scottsdale where my son lives and I go, oh, I'll be darn.  
3 And so I just want to have an idea of the 14 miles,  
4 what's visible from SR-96?

5 MS. ESQUER: Yeah, it's a good question.  
6 And I don't have exactly -- I'd have to get back to you  
7 on that, so let me make a note for myself and I will --  
8 I'll get back to you on that question.

9 MEMBER MERCER: Thank you.

10 BY MR. DERSTINE:

11 Q. I guess to Member Mercer's question, the vast  
12 majority of the 14-mile line is -- would not be visible  
13 except at the southern terminus, you've showed us the  
14 origination point at the substation there, and then where  
15 the line crosses the state route -- is it State Route 97,  
16 and there's a second state route, correct?

17 A. (MS. ESQUER) Yes, SR-96, right. So -- yeah, so  
18 most of the visibility of the line will be there at those  
19 crossings and then there at the southern terminus with  
20 the substation.

21 Q. But in between, there are no -- you pointed out  
22 the one dispersed 25 residences that are, I guess,  
23 approximately a mile away from the line. Short of that,  
24 most of this is in open country and is generally not  
25 visible, unless someone wants to hike back there?



1 A. (MS. ESQUER) That's correct, yeah. You see on  
2 this line here, some really rugged topography here that  
3 would preclude a lot of the view of the transmission line  
4 for the majority of the line there.

5 MEMBER MERCER: Mr. Chairman?

6 CHMN STAFFORD: Yes, Member Mercer.

7 MEMBER MERCER: So one more question. So  
8 at the end of the line, how far is it from the -- from  
9 the mine or the town of Bagdad? And can the people that  
10 live in Bagdad can they see -- is it an eyesore for the  
11 end of the line?

12 MS. ESQUER: So the town of Bagdad is just  
13 about a mile, maybe a mile and a half outside of the  
14 project, the northern terminus there. So likely any  
15 views that they have would be very minimal, just due to  
16 distance of topography.

17 MEMBER MERCER: Thank you.

18 MR. DERSTINE: Do we want to retrace  
19 anything or would you like Ms. Esquer to run the flyover  
20 again just to let it run? Whatever, if there's any  
21 desire to see any more of this.

22 CHMN STAFFORD: I think I'm good. But,  
23 Members, do you need to see the flyover again?

24 MEMBER GOLD: Nope. We're good.

25 CHMN STAFFORD: Any members online want to

1 see it again?

2 (No response.)

3 CHMN STAFFORD: I'm not hearing a response  
4 so I'll take that as a no.

5 MR. DERSTINE: No, all right. Very good.

6 Q. Well, Ms. Esquer, let's then dig into the  
7 environmental studies and analysis that were performed in  
8 support of the CEC application. And I guess a mention of  
9 this was made, but following up on Member Richins'  
10 questions about the EA, were separate environmental  
11 studies performed or are there additional environmental  
12 studies that were performed in support of the EA that  
13 are, I would say, separate from the exhibits that we see  
14 attached to the CEC application?

15 A. (MS. ESQUER) No. So the environmental studies  
16 that WestLand performed for the project were used for  
17 both the NEPA and the CEC permitting, so they are  
18 consistent across processes.

19 Q. Okay. So the conclusions that were reached or  
20 that you're going to testify to here today are consistent  
21 with what was presented in the Environmental Assessment  
22 that the draft has just been released?

23 A. (MS. ESQUER) Correct.

24 Q. Okay.

25 MEMBER HILL: Mr. Chair?

1 CHMN STAFFORD: Yes, Member Hill.

2 MEMBER HILL: Thank you.

3 So when I was going through the study that  
4 is part of the application, I wasn't entirely clear if we  
5 were -- if that covered all of the area for the  
6 transmission line. And we've heard testimony earlier  
7 that the transmission line and the -- the water line,  
8 they diverge in different places and cross a little bit.  
9 And so I was -- I was going to ask for some clarity on  
10 how much do they diverge, you know, do you have a map  
11 that shows the study area that was part of the EA in the  
12 application and the proposed corridor and how much might  
13 be missing in that EA?

14 Now I hear Mr. Derstine characterize it as  
15 the study that's in the application is the same study and  
16 same study area that we'll see in Exhibit, I think it's  
17 Number 20 that you added today, that draft EA that just  
18 came out. Can you clarify that for me a little bit? I  
19 know that the conclusions might be the same, but in terms  
20 of survey work that was done, in terms of species that  
21 were looked at, in terms of the area that was evaluated,  
22 can you clarify that a little bit for me?

23 And when there is a long pause, I feel like  
24 I asked an unclear question. So if you want me to try  
25 and clarify --

1 CHMN STAFFORD: Member Hill, they are  
2 speaking amongst themselves to prepare an answer to your  
3 question.

4 MEMBER HILL: Okay.

5 MS. ESQUER: Yes, Member Hill, so I think  
6 you're referring to Exhibit B-1 of the application, that  
7 was the baseline biological report that was included.  
8 And that baseline biological report was originally  
9 prepared in support of the Aguila pipeline. It also  
10 covers the project area for the transmission line. So it  
11 is representative of the habitat, you know, in the -- in  
12 the project area for the transmission line.

13 MEMBER HILL: But it's not the same -- the  
14 scope of that study isn't the same geographic footprint  
15 as the proposed transmission line, right?

16 MS. ESQUER: It is -- it is very, very  
17 close, it is very proximal, yeah, to the transmission  
18 line.

19 MEMBER HILL: But it is not the same?

20 MS. ESQUER: I would say it is  
21 very -- almost identical and absolutely representative of  
22 the habitat that is present in the project area for the  
23 transmission line.

24 MEMBER HILL: Okay. Representative habitat  
25 I totally get, I mean, there's not huge variations here,

1 although there is some topographic change, which might  
2 create some various issues on habitat type or  
3 microhabitats, but what I was trying to get at is when  
4 we're relying on this report for all of the survey work  
5 that was done, did we actually cover the ground where the  
6 transmission line might be sited? And that --

7 MS. ESQUER: Yeah --

8 MEMBER HILL: -- there might be some  
9 variation there.

10 MS. ESQUER: I wouldn't say so. I would  
11 say that it is the same ground. It was the same area  
12 that was surveyed.

13 MEMBER HILL: Okay. Exhibit 20 is an EA  
14 for the transmission corridor, right?

15 MS. ESQUER: Correct.

16 MEMBER HILL: Is -- is the EA study area or  
17 scope of the study area any different than what was in  
18 the application in B-1?

19 MS. ESQUER: It is -- it includes other  
20 facilities that are not, you know, they're communications  
21 facilities specifically for WAPA's purposes, so in those  
22 cases, additional surveys were completed to cover those  
23 areas.

24 MEMBER HILL: Okay. And then in -- what  
25 I'm trying to figure out is how much studying I need to

1 do tonight to review the EA and what I might see is  
2 different, right, because I think we might want to -- I  
3 might have more questions after I have time to review  
4 that.

5                   And then there's a letter from Game & Fish  
6 here about a set of recommendations. Are those covered  
7 in Exhibit 20 as well, the types of things that they  
8 talked about, desert tortoise habitat stuff, those kinds  
9 of things? Do you feel like you covered all of those in  
10 Exhibit 20?

11                   MS. ESQUER: Yes. So almost all of those  
12 were covered in Exhibit 20. We did receive a similar  
13 letter from Game & Fish for the NEPA side of the -- of  
14 the project. And so all of those recommendations were  
15 very similar, with the exception bighorn sheep. That was  
16 a new one, and I'll cover that here in my testimony.

17                   MEMBER HILL: Okay. Great. I'm just  
18 trying -- I just feel like Exhibit 20 might be the more  
19 comprehensive transmission corridor assessment that's  
20 kind of narrower in scope, but similar geographic scope,  
21 and I wanted to know what I needed to read or cover  
22 tonight, so --

23                   MS. ESQUER: Right.

24                   MEMBER HILL: Thank you.

25 BY MR. DERSTINE:

1 Q. I guess I'm -- Member Hill, I guess, raised a  
2 question in my mind, if I'm looking at the study area  
3 that is presented in the CEC application, does that  
4 coincide with what was studied for the EA?

5 A. (MS. ESQUER) Yes. The EA looked at the study  
6 area and then some for, you know, facilities for WAPA's  
7 communications purposes.

8 Q. Are there areas in the study that was performed  
9 by the -- for the EA that diverges or leaves gaps in the  
10 proposed route for the transmission line?

11 A. (MS. ESQUER) No.

12 Q. Okay. Why don't you take us through the studies  
13 that were submitted in support of the CEC application?

14 A. (MS. ESQUER) So WestLand supported a number of  
15 exhibits for the CEC application, those being land use  
16 and recreation in Exhibits A and F. We looked at  
17 biological resources in Exhibits B, C, and D. Visual and  
18 cultural resources were included in Exhibit E. And then  
19 existing plans were analyzed in Exhibit H. And I'll go  
20 through each of these in my testimony.

21 Q. I assume you're going to start us off with the  
22 land use analysis?

23 A. (MS. ESQUER) Yes.

24 So as you've heard in Mr. Duncan's testimony,  
25 the majority of the land crossed for the project is

1 within unincorporated Yavapai County on ASLD land.  
2 Again, ASLD land being the blue shown here on this  
3 service management map, this is Exhibit A-3. So the  
4 majority of the line crosses --

5 CHMN STAFFORD: And the map, A-3, you're  
6 referring to, is found on slide 76 of APS-6, the  
7 presentation slides?

8 MS. ESQUER: Correct.

9 CHMN STAFFORD: Okay.

10 MS. ESQUER: The line also crosses some  
11 private land here in the northern portion that's owned by  
12 Freeport. There are multiple existing high-voltage  
13 transmission lines adjacent to the northern and southern  
14 termini of the project. So as we've seen, those WAPA  
15 500-kV and 345-kV existing transmission lines here at the  
16 southern terminus and the APS 115-kV line here at the  
17 northern terminus.

18 In addition to those existing transmission  
19 lines, there's also the planned Aguila pipeline for which  
20 construction has begun on those access roads as we've  
21 seen throughout the entirety of the corridor here.  
22 Existing land use within the study area includes those  
23 utilities I just described, vacant desert and ranching,  
24 low-density residential and transportation. There are  
25 grazing allotments throughout the proposed route there on



1 ASLD land.

2 And this -- so this map, this is Exhibit  
3 A-4 from the application, and this shows the zoning. So,  
4 as you can see, the majority is that residential zoning  
5 and then there is some agricultural zoning there shown in  
6 green. And I believe commercial and industrial here at  
7 the north.

8 CHMN STAFFORD: And that's the map you're  
9 referring to is on slide 78 of APS-6, correct?

10 MS. ESQUER: Correct.

11 So the project, as I just described, is in  
12 an area zoned for low-density residential.

13 CHMN STAFFORD: And is the transmission  
14 line a permitted use in that zone?

15 MS. ESQUER: It is.

16 CHMN STAFFORD: Thank you.

17 BY MR. DERSTINE:

18 Q. So getting back to the analysis of the  
19 biological resources that we had the discussion with  
20 Member Hill about, do you want to take us through those  
21 studies --

22 A. (MS. ESQUER) Yes.

23 Q. -- and what's covered?

24 A. (MS. ESQUER) So a number of tools were used to  
25 aid our analysis for biological resources. So a field

1 survey was conducted, that's Exhibit B-1 in the  
2 application, and that's the baseline biology report.  
3 WestLand also accessed some online tools hosted by the  
4 U.S. Fish and Wildlife Service and the Arizona Game &  
5 Fish Department. Those are Exhibits C-1 and C-2.

6 Q. Could you go back a slide?

7 A. (MS. ESQUER) Yes.

8 Q. So I see the HilgartWilson on the cover page for  
9 the -- is that for the field survey?

10 A. (MS. ESQUER) That's correct. Yup.

11 Q. So what role did HilgartWilson play and how was  
12 that used in your analysis?

13 A. (MS. ESQUER) Yeah, so HilgartWilson completed  
14 the baseline biology report for the Aguila pipeline. So  
15 WestLand utilized this report to understand the habitat  
16 present within the project area, the survey area for that  
17 baseline biology report included all of the -- the  
18 project area and then some associated with the Aguila  
19 pipeline as that pipeline does extend north and south  
20 beyond the proposed route.

21 Q. And when you say it covers the project area,  
22 what are you referring to?

23 A. (MS. ESQUER) The proposed route project area.

24 Q. And the proposed route project area, we've seen  
25 it on the opposing screen here, we're using it as a slide

1 throughout much of the presentation. What's the size of  
2 that in relation to the proposed route? Is it a mile on  
3 either side? Is it less than that? What is the project  
4 area? How much of an area was studied along the path of  
5 the proposed transmission line?

6 A. (MS. ESQUER) So the study area is a mile buffer  
7 around the proposed route.

8 Q. Okay. And when you say it was -- it's a mile  
9 around the proposed route, HilgartWilson studied a mile  
10 around the proposed path of the Aguila pipeline; is  
11 that -- is that correct?

12 A. (MS. ESQUER) Not necessarily. They essentially  
13 did a baseline survey of the route itself and the  
14 adjacent habitat to get a feel for the existing  
15 conditions.

16 Q. Okay. So when we're seeing the project map,  
17 like, even if you go back to slide 80, can you pull that  
18 up? So using that slide 80, is that what you're  
19 referring to, that one-mile buffer, that's what was  
20 studied in the HilgartWilson report?

21 A. (MS. ESQUER) Not necessarily. The baseline  
22 survey report, again, it -- it looked at the proposed  
23 route, along with the Aguila pipeline, and then it  
24 extended north past the project and south beyond the  
25 project.

1 Q. Aside from those areas that go beyond where the  
2 transmission line will be constructed, does it coincide  
3 with the proposed route of the transmission line?

4 A. (MS. ESQUER) Yes.

5 MEMBER RICHINS: Chairman?

6 CHMN STAFFORD: Yes, Member Richins.

7 MEMBER RICHINS: In your review of the  
8 HilgartWilson report, what errors did you find?

9 MS. ESQUER: I would have to get back to  
10 you on that. I'd have to confer with the senior  
11 biologist that reviewed it.

12 MEMBER RICHINS: Okay. And then, yeah, I'd  
13 like to confirm how those errors were corrected or  
14 reviewed.

15 MS. ESQUER: Okay.

16 MEMBER RICHINS: I'm not inferring that  
17 there are any. I'm just -- if you're using this as your  
18 reliable baseline report and we're not going back out on  
19 the field -- on the ground on the field to confirm  
20 everything, then how do we know we got it right the first  
21 time? Because if we didn't, we're just perpetuating  
22 errors and we're reusing studies, and we're perpetuating  
23 that. And I just wanted to see if you confirmed  
24 anything. Thank you.

25 MEMBER HILL: Mr. Chair?

1 CHMN STAFFORD: Yes, Member Hill.

2 MEMBER HILL: So I just want to confirm  
3 that everything in the black circle is incorporated in  
4 some portion of the study?

5 MS. ESQUER: So the -- the baseline survey  
6 looked at the alignment, the pipeline alignment and  
7 adjacent habitat. So it went through and analyzed the  
8 baseline conditions there on the ground associated with  
9 the alignment and adjacent habitat. I can't say  
10 specifically that, you know, a biologist went out here to  
11 the outer buffer of this study area, but we deemed this  
12 to be representative of the habitat, based on the surveys  
13 completed, as well as additional surveys that were  
14 completed by WestLand crews for cultural resources and  
15 likewise.

16 MEMBER HILL: Okay. What were the  
17 transects that were walked?

18 MS. ESQUER: I would have to get the  
19 baseline biology report right in front of me to give you  
20 a good answer on that.

21 MEMBER HILL: Okay. I'd like to  
22 characterize the survey methods that were used. I think  
23 that there was some assumption around that type of  
24 habitat in the pipeline corridor would extend into the  
25 transmission corridor, and I think, generally, some of

1 those assumptions can be okay, except for when you're  
2 talking about iconic species, and that's when I feel like  
3 there needs to be more certainty in your survey methods  
4 in the area of impact. And so can you characterize,  
5 maybe not now, but go back and look at the report that  
6 you're relying on, can you characterize the survey  
7 methods in a way that gives us confidence that the  
8 transmission corridor that you've proposed was adequately  
9 surveyed using standard practices and took into  
10 consideration critical habitat or important habitat for  
11 those less common species.

12 MS. ESQUER: Yes, so I can review and  
13 follow up with you on that, Member Hill. I will also add  
14 that specifically for, you know, endangered species,  
15 listed species and just sensitive species, special status  
16 species, WestLand did do a thorough review of the  
17 photography, you know, taken as part of this baseline  
18 survey, and that the analysis done in the baseline survey  
19 report to, you know, assert that the conclusions that  
20 we've made around those special status species.

21 MEMBER HILL: Okay. All right. Thank you.

22 MEMBER LITTLE: Mr. Chairman?

23 CHMN STAFFORD: Yes, Member Hill -- I mean,  
24 Member Little, excuse me.

25 MEMBER LITTLE: I had a question about the

1 date of the report, the environmental study report that  
2 was provided in the CEC. It's basically over five years  
3 old. Is that an issue?

4 MS. ESQUER: I don't believe so, Member  
5 Little. It's unlikely that this habitat has drastically  
6 changed, you know, it's -- and I'll get into this in my  
7 testimony, but it's, you know, desert scrub habitat  
8 there. It's highly unlikely that there's been  
9 significant changes in the -- in the habitat present in  
10 five years.

11 MEMBER LITTLE: And there's no laws or  
12 requirements or how old a survey like this can be and  
13 still be valid? I have, just as a total layperson in  
14 this particular area, it seems to me that what you have  
15 said would be true. But I'm just curious whether there's  
16 any guidelines about how old studies can be when  
17 presented in situations like this.

18 MS. ESQUER: There are no guidelines that  
19 I'm aware of, just speaking for work on other projects,  
20 you know, we use old, you know, I don't want to say old  
21 reports, but reports that are ten-plus years old  
22 for -- to inform, you know, historical occurrences of  
23 special status species, for example, in addition to, you  
24 know, following up. But in my professional opinion, a  
25 five-year old report for a biology report is not

1 unrepresentative.

2 CHMN STAFFORD: Is that all, Member Little?

3 MEMBER LITTLE: Yes, thank you.

4 CHMN STAFFORD: Member Hill, you had  
5 another question?

6 MEMBER HILL: Yeah, I do want to follow up  
7 on the age of reports. I don't think I'm concerned so  
8 much about the age of the report as much as when does  
9 WestLand decide that they actually need to do a new  
10 survey, would a wildfire req- -- you know, lead you to  
11 believe that there might be some species composition  
12 change or some impact that you might want to do, or  
13 drought? What are the circumstances under which you  
14 would want to do another field survey and assessment,  
15 because you feel like your report isn't adequate, and  
16 have any of those things occurred in this corridor that  
17 you should consider, I guess?

18 MS. ESQUER: Yeah, it's a good question.  
19 And I do think, to your point, if there was a significant  
20 event that occurred we would want to, you know,  
21 recharacterize the conditions. None of those events have  
22 happened, and, you know, we have, like I've said, we've  
23 had a number of surveys out since this report,  
24 specifically on more of the cultural side, that continue  
25 to kind of expand the survey area and document



1 conditions. And nothing out of those surveys has, you  
2 know, alerted us to believe that anything may have  
3 changed in the project area.

4 MEMBER HILL: Okay. Thank you.

5 MEMBER RICHINS: Chairman?

6 CHMN STAFFORD: Yes, Member Richins.

7 MEMBER RICHINS: Would the installation of  
8 an access road in a pipeline be considered a major event?  
9 So you did the survey for that, right, so shouldn't we be  
10 confirming how conditions have changed since access into  
11 that area has changed through a pipeline and a road  
12 installation? That's occurred within the last five  
13 years, correct?

14 MS. ESQUER: Right. Yeah. So the access  
15 road is very new and, no, I don't think it would  
16 constitute a change in the, you know, baseline biological  
17 conditions in the project area, the installation of an  
18 access road. Yeah, I don't feel like it would change the  
19 representative habitat that are present.

20 MEMBER RICHINS: So did we confirm that?  
21 Because it's pretty well documented that access roads,  
22 transmission lines, pipeline installations often lead to  
23 the introduction of invasive species into an area. How  
24 did you confirm that in your evaluation of the  
25 HilgartWilson baseline study and your other work?

1 MS. ESQUER: Uh-huh. So the -- sorry. I  
2 would say I can't speak to the introduction of invasive  
3 species from, you know, for instance, the new Aguila  
4 pipeline access road. I know that APS will, you know,  
5 adhere to best management practices for, you know,  
6 introduction of invasive species and limiting the spread  
7 of those species through their --

8 MEMBER RICHINS: Who from WestLand drove  
9 the route?

10 MS. ESQUER: Drove the route?

11 MEMBER RICHINS: Yeah, did anybody go out  
12 on the ground at all?

13 MS. ESQUER: Yes. We have had biologists  
14 and archaeologists in the area many times to, you know,  
15 supplement studies previously completed.

16 MEMBER RICHINS: And then where is that  
17 found in the documents that you've given us?

18 MS. ESQUER: I would refer to APS-20. It's  
19 the draft EA that those supplemental studies have been  
20 completed.

21 MEMBER RICHINS: Oh, for the draft EA?

22 MS. ESQUER: Yes.

23 MEMBER RICHINS: Wasn't that done for the  
24 pipeline?

25 MS. ESQUER: No. The draft EA was done for

1 the transmission line for the proposed route. This is  
2 the NEPA side of this project.

3 MEMBER RICHINS: Oh, but that's the  
4 substation site, it's not the transmission line?

5 MS. ESQUER: The draft EA analyzes the  
6 entirety of the transmission line, as well as both  
7 substations, the switchyard, and a number of WAPA  
8 communication facilities.

9 MEMBER RICHINS: I must have misunderstood  
10 from earlier. Thank you.

11 MS. ESQUER: You're welcome.

12 CHMN STAFFORD: Right. Because the  
13 pipeline doesn't require the NEPA --

14 MS. ESQUER: Correct.

15 CHMN STAFFORD: -- process?

16 Okay. And what exactly did the mine  
17 have -- what kind of process did the mine have to go  
18 through to get the pipeline sited? I assume it had to do  
19 with the State Land Department, they had to get an  
20 easement and negotiate. And so State Land is going to  
21 have to survey the entire route for the pipeline to make  
22 sure there's no archaeological finds, there's no  
23 habitats, there's no, you know, owl burrows, what have  
24 you, they are required -- they're required by the State  
25 Land Department to address that for the entire length of

1 the pipeline?

2 MS. ESQUER: So the Aguila pipeline,  
3 regardless of, you know, federal nexus or state permit,  
4 like the CEC, would need to comply with the Endangered  
5 Species Act to prohibit, you know -- or prevent the take  
6 of any species listed on the Endangered Species Act.  
7 They would also need to comply with the Migratory Bird  
8 Treaty Act. The ASLD requires coordination with the  
9 State Historic Preservation Office for impacts to  
10 cultural resources. So outside of a federal or state  
11 permit there are still a number of laws that the Aguila  
12 pipeline had to comply with.

13 CHMN STAFFORD: Right. And that's by  
14 virtue of it being on State Land, correct? I mean, if it  
15 was private land, it would be a different story?

16 MS. ESQUER: Not necessarily. So  
17 Endangered Species Act applies to private activities,  
18 private land, I believe the Migratory Bird Treaty Act as  
19 well. And then the cultural is the only resource I would  
20 say that there are varying levels of compliance required,  
21 depending on the land.

22 CHMN STAFFORD: Thank you.

23 BY MR. DERSTINE:

24 Q. Are you ready to walk us through those exhibits,  
25 starting with Exhibit B?

1 A. (MS. ESQUER) Exhibit C?

2 Q. Did we cover B in its entirety already? Okay.

3 A. (MS. ESQUER) Yeah.

4 Okay. So Exhibit C characterizes the habitat  
5 present within the project area. So the project area is  
6 mapped within the Arizona Upland Subdivision of the  
7 Sonoran Desert scrub community. On the right here,  
8 you'll see some photos of that typical vegetation  
9 throughout the project area. You can actually see here  
10 some existing transmission infrastructure associated with  
11 those existing WAPA lines there in the background, but  
12 this is typical of the desert scrub seen in the project  
13 area.

14 Washes within the project area are composed as  
15 there are riparian vegetation, so this low-to-moderate  
16 density mesquite riparian vegetation here, so this is a  
17 photo here on the right of that typical drainage  
18 riparian. The project does avoid disturbance in  
19 drainages and associated riparian habitat. There are a  
20 number of conservation measures listed in the draft EA,  
21 which is Exhibit APS-20, about avoidance of disturbance  
22 and drainages during the season where sensitive species  
23 may be present, as well as the -- limiting the removal of  
24 riparian trees and, you know, using mechanical methods  
25 for trimming riparian vegetation rather than more, you

1 know, disturbance associated in those sensitive areas.

2 CHMN STAFFORD: Member Fontes, you have  
3 your hand raised?

4 MEMBER FONTES: Thank you, Mr. Chairman.  
5 I'll come back, you can answer at a later time, but I was  
6 just wondering if there's any other tenants on the State  
7 Land Trust that could be affected by this. We've seen  
8 that on other hearings where there's multiple tenants.

9 MS. ESQUER: No other tenants that I'm  
10 aware of, Member Fontes. There are some grazing leases  
11 there.

12 MEMBER FONTES: So there will be grazing.  
13 There will be cattle grazing? What kind of grazing?

14 MS. ESQUER: Yes, cattle grazing.

15 MEMBER FONTES: Okay. So are those going  
16 to be allowed to graze in and around the agricultural  
17 around the transmission lines? Do you have the rights to  
18 that or will they be segregated?

19 MR. DUNCAN: Member Fontes, I'm not aware  
20 of any plans to segregate the transmission corridor from  
21 grazing.

22 MEMBER FONTES: Okay. So there will be  
23 livestock in the nature of the transmission line or  
24 corridor, just for clarity?

25 MR. DUNCAN: If -- if livestock venture

1 into the corridor, then the answer is yes.

2 MEMBER FONTES: Okay. Thank you.

3 BY MR. DERSTINE:

4 Q. When you were -- the photos that you're showing  
5 there in terms of the typical desert scrub and typical  
6 drainage riparian, I saw some photos of areas that  
7 contained saguaro cactus in some numbers. Are those also  
8 present?

9 A. (MS. ESQUER) Yes. Saguaro is also present.

10 Q. And are there anything in the -- in the EA or  
11 any of the rules and regs regarding salvaging or  
12 preserving saguaros, for example, or other types of plant  
13 species?

14 A. (MS. ESQUER) Yes. So the project will comply  
15 with the Arizona Native Plant Law, which requires either  
16 essentially a stumpage fee or salvage of those protected  
17 plants.

18 Q. Okay. Anything else on Exhibit C?

19 A. (MS. ESQUER) Yes. So the project disturbance is  
20 relatively small compared to the surrounding landscape,  
21 the availability of this habitat type. You know, this is  
22 one of the benefits of co-locating the transmission line  
23 with the pipeline. Many times with the construction of  
24 transmission lines, you know, the biggest level of  
25 disturbance is associated with the construction of access

1 roads. With that Aguila pipeline access road existing  
2 and being able to utilize that, we really keep the  
3 disturbance associated with the project to a minimum.  
4 And the availability of surrounding similar habitat is  
5 great. So, yeah, we believe it to be relatively small  
6 compared to the surrounding landscape.

7 Q. Exhibit D, endangered species?

8 A. (MS. ESQUER) Yes. So three Endangered Species  
9 Act listed or candidate species were evaluated for their  
10 potential to occur. And these species were chosen based  
11 off of the U.S. Fish and Wildlife tool. It's Exhibit  
12 C-1, I believe, in the application is the IPaC tool is  
13 what it's called. And so that tool you enter -- it's a  
14 GIS exercise, essentially, and you're able to enter your  
15 project footprint and based on, of course, habitat and  
16 range mapping for a species, it will return a number of  
17 species that you should, you know, take a look at to see  
18 if your project could impact those.

19 So the three species that were returned for the  
20 project were yellow-billed cuckoo, northern Mexican  
21 gartersnake, and the Monarch butterfly.

22 Yellow-billed cuckoo, they generally prefer more  
23 developed riparian habitats than what is present in the  
24 project area; however, the project area could be used as  
25 a stopover habitat for the species during migration and



1 so, for that reason, there are some environmental  
2 protection measures that are included in the draft EA,  
3 and that's APS-20, Exhibit APS-20, around avoiding  
4 impacts to riparian habitat during the period that that  
5 species is present in the southwest, to mitigate any  
6 potential impact associated with that species.

7 Northern Mexican gartersnake typically needs  
8 more of perennial water, and the project area lacks that.  
9 The drainage of the project area lack perennial water.  
10 It's also outside of the known distribution and range of  
11 that species, so we don't believe that this species has  
12 potential to occur in the project area.

13 Monarch butterfly is a candidate species,  
14 candidate for listing on the Endangered Species Act, and  
15 it may occur, it can kind of occur anywhere. And there  
16 are, again, some environmental protection measures that  
17 are written into the draft EA that talk about impacts or  
18 mitigating impacts to the species. Some of those are  
19 doing milkweed surveys prior to construction, and then  
20 reseeding temporarily disturbed areas with a seed mix  
21 that contains native seed and milkweed seed.

22 So the project area generally lacks a suitable  
23 habitat for these species. Cuckoos and Monarch butterfly  
24 may occur, but the project is not anticipated to affect  
25 those species with the implementation of the protection

1 measures identified.

2 Q. Did WestLand perform any sort of field surveys  
3 to confirm its conclusions on that the project area lacks  
4 suitable habitat for those species?

5 A. (MS. ESQUER) Yeah. So in addition to reviewing  
6 the baseline bio report based on our other surveys in the  
7 area we feel confident on the determinations on these  
8 species.

9 CHMN STAFFORD: Did WestLand do any of its  
10 own surveys, I guess?

11 MS. ESQUER: So yes, there are -- there  
12 have been a number of surveys performed by WestLand in  
13 the project area and nearby the project area. And I  
14 can't -- I can't speak specifically to the dates of those  
15 reports at this time, but I can follow up with the  
16 committee on that.

17 CHMN STAFFORD: Okay. Please do. Thank  
18 you.

19 BY MR. DERSTINE:

20 Q. Your slide 87 references the letter from Arizona  
21 Game & Fish. That's APS Exhibit 17.

22 Can you speak to that, please?

23 A. (MS. ESQUER) Yes. So APS received a letter from  
24 Arizona Game & Fish just about a week and a half ago, on  
25 October 17th, and that is, as you said, APS Exhibit 17.

1 All of the comments made by Game & Fish in that letter,  
2 except for, as I said, the bighorn sheep comment, which  
3 I'll come to in a second, were included in a previous  
4 letter from Arizona Game & Fish on the NEPA side of  
5 the -- of the project.

6 So the letter made recommendations for  
7 mitigating impacts to Sonoran Desert tortoise, nesting  
8 and migratory birds, riparian areas, and all of those had  
9 been, you know, previously received, addressed, and  
10 incorporated into the draft EA. Bighorn sheep, that was  
11 a new one in this most recent letter. So the project  
12 area, we did have occurrences or observations of that  
13 species in the project area from the baseline biology  
14 report. And the project area does provide some dispersal  
15 habitat for the species, so, you know, they could walk  
16 through it, they could use it, but the project area does  
17 not contain optimal lambing habitat for that species.

18 And so one of the items that APS will implement  
19 is incorporating some worker awareness training around  
20 this species to limit human-sheep interactions as they  
21 recommended, training workers not to feed, approach, or  
22 harass that species if it's encountered in the project  
23 area.

24 Q. I think the Game & Fish letter included a  
25 recommendation that construction stop during this lambing

1 time period. What is that time period?

2 A. (MS. ESQUER) The time period is February through  
3 April.

4 Q. Okay. Does WestLand agree with -- well, I guess  
5 you commented that you don't think that this area of the  
6 project area is suitable habitat for lambing. What's  
7 your opinion on the Game & Fish recommendation to halt  
8 construction during that time window?

9 A. (MS. ESQUER) Yeah, so WestLand's opinion on that  
10 is that the project area lacks, you know, the optimal  
11 habitat needed by that species for lambing. They  
12 typically need really, really vertical, steep,  
13 high-relief areas for protection of their lamb. And the  
14 project area doesn't really provide that. And there  
15 is -- there is much better habitat for that purpose for  
16 that species nearby.

17 So it's WestLand's opinion that those timing  
18 restrictions aren't warranted, that there is, you know,  
19 nearby suitable habitat that would actually be much  
20 better for the species to use.

21 Q. Okay. And when you talked about the worker  
22 training, how does that cover the potential for lambing  
23 as, I guess, you think the likelihood of that to occur is  
24 very small, but would that worker training also include  
25 that to limit impacts on if there were a bighorn sheep

1 that wanted to have a lamb in this area, how would that  
2 be addressed?

3 A. (MS. ESQUER) Yeah, so the workers would be  
4 trained, essentially, to, you know, keep a distance from  
5 that individual at that time, not to approach or try to  
6 feed or harass it, to, you know, interrupt that process.

7 Q. Are bighorn sheep endangered species or  
8 candidate species?

9 A. (MS. ESQUER) They are not. They are a game  
10 species managed by Arizona Game & Fish Department, but  
11 they are not, you know, an ESA listed species or a  
12 species of greatest conservation need.

13 Q. And then you're saying the EA does cover and  
14 include mitigation recommendations concerning the Sonoran  
15 Desert tortoise and nesting and migratory birds; am I  
16 correct on that?

17 A. (MS. ESQUER) It does, yes. Yup.

18 So on Sonoran Desert tortoise, there would be a  
19 worker awareness training, as recommended by Arizona Game  
20 & Fish Department, that teaches workers. There would be  
21 essentially a designated person to identify and move a  
22 Sonoran Desert tortoise if it was encountered. That  
23 person would be licensed to do so and train workers to  
24 look around vehicles prior to moving, you know, a number  
25 of training measures to, you know, train workers to

1 identify and avoid that sensitive species.

2 Q. Are there provisions in the EA concerning  
3 monitoring or, again -- yeah, I guess monitoring of  
4 interactions or the kind of species that might be  
5 encountered?

6 A. (MS. ESQUER) I don't believe biological  
7 monitoring is something that is written into the draft  
8 EA. The draft EA really focuses on the implementation of  
9 a thorough worker environmental awareness program, which  
10 would, you know, cover all of these items.

11 Q. Okay. All right. Do you want to wrap up your  
12 biological resource testimony?

13 A. (MS. ESQUER) Yes. So, as I described, we don't  
14 believe there will be any adverse effects to  
15 threatened -- threatened or endangered species or their  
16 associated habitats with the implementation of the  
17 protection measures described. We believe the project  
18 would be compatible with wildlife and plant species, as  
19 well as their affected habitats, you know, based on the  
20 relatively small disturbance within that available  
21 habitat and the implementation of protection measures  
22 described.

23 Q. And the implementation of the protection  
24 measures, those are included in the conditions to the  
25 CEC, as well as provisions of the EA?

1 A. (MS. ESQUER) Correct.

2 Q. Okay. Okay. The next area of your testimony  
3 has to do with Exhibit E and the various components of  
4 Exhibit A, visual resources, and then cultural resources  
5 and recreation, correct?

6 A. (MS. ESQUER) Correct.

7 MEMBER HILL: Mr. Chair?

8 CHMN STAFFORD: Yes, Member Hill.

9 MEMBER HILL: Before we -- before we move  
10 on, I just -- I just want to reserve the right to ask  
11 questions about the EA that we received this morning. I  
12 just want to go through it. I might have questions  
13 tomorrow morning, but I do want to visit, in particular,  
14 the protection measures and other things just to make  
15 sure I understand the comprehensive nature of it and what  
16 that will look like. So I just wanted to just reserve a  
17 little space for that.

18 MR. DERSTINE: We're happy to have you ask  
19 questions about that or anything else and you don't have  
20 to reserve the right to do so.

21 MEMBER HILL: Well, I -- I guess it's hard  
22 for everyone to breathe a sigh of relief, we're done with  
23 that part, like, I might have some more questions, but  
24 I'll be studious this evening and get back to you in the  
25 morning, so thank you.

1 MR. DERSTINE: We understand. We're happy  
2 to answer your questions whenever they arise.

3 CHMN STAFFORD: All right. Well --

4 MEMBER LITTLE: Mr. Chairman?

5 CHMN STAFFORD: Yes, Member Little.

6 MEMBER LITTLE: I noticed that one of the  
7 questions that was asked by a member of the general  
8 public was how Joshua trees and saguaros would be handled  
9 if there happened to be those particular types of  
10 vegetation in -- in the -- would encounter them in the  
11 construction of the project. And I just was wondering if  
12 you would address that, please?

13 MS. ESQUER: Yes.

14 So through the Arizona Native Plant Law,  
15 the project, you know, would comply with that law. And  
16 so that would either be through paying a stumpage fee for  
17 those sensitive species identified or salvage of those  
18 species.

19 BY MR. DERSTINE:

20 Q. So a stumpage fee means simply that if you're  
21 going to have to remove, say, a saguaro or anything else  
22 that's covered by the Arizona Native Plant Statute that  
23 you'd have to pay a fee for that and/or remove it and  
24 preserve it and then replant it?

25 A. (MS. ESQUER) I --



1 Q. Or simply preserve it and it can be relocated?

2 A. (MS. ESQUER) Right. Yeah. So, yeah,  
3 essentially the stumpage fee is a calculation of the  
4 value and, you know, APS would pay that calculated  
5 ultimate total for those species.

6 Q. And who gets that money?

7 A. (MS. ESQUER) The Arizona State Land Department.

8 MEMBER LITTLE: Thank you.

9 CHMN STAFFORD: All right. Before you --  
10 before you go on to the next section, I think  
11 we're -- we've been going about 90 minutes. It's time  
12 for another break. The court reporter could certainly  
13 use one. And when we come back, are there any other  
14 questions from members on this before we move to the next  
15 subject?

16 (No response.)

17 CHMN STAFFORD: All right. Great. Let's  
18 take an approximately 10- to 15-minute recess.

19 We stand in recess.

20 (Recessed from 4:28 p.m. until 4:52 p.m.)

21 CHMN STAFFORD: All right. Let's go back  
22 on the record.

23 Mr. Derstine, before you continue with your  
24 witness testimony, I think we had probably better discuss  
25 the tour now amongst the committee members before it's

1 too late.

2 MR. DERSTINE: Yeah, we're ready to present  
3 it.

4 CHMN STAFFORD: Okay. Excellent. That is  
5 APS-14 is the tour route; is that right?

6 MR. DERSTINE: Correct.

7 Q. And I think Mr. Duncan is ready to kind of  
8 narrate and at least explain what's proposed for the  
9 route tour.

10 A. (MR. DUNCAN) Yes.

11 So the map here shown on the left screen is a  
12 graphical representation of what we -- of what we kind of  
13 intend for the tour to include. So it would be leaving  
14 from here, going north onto US 93 to our first stop  
15 point, which is -- I believe it's here. And that is at  
16 the entrance to the Santa Maria Ranch, which would give  
17 us an opportunity to have a potential in-person view of  
18 the -- of what the line would look like, maybe not  
19 exactly from where their residence is, but nearby it.  
20 From that point, we would continue on US 93 to -- we'd go  
21 up to State Route 97 where we would go about -- I don't  
22 have the mileages in front of me -- but we would go to a  
23 point where there is -- there are very few places for us  
24 to pull out that are near where the lines make their  
25 crossings, but there is a spot that we were able to find,

1 it's near where the line makes its crossing of State  
2 Route 97. So we would stop there, and it would give us a  
3 view as the line crosses State Route 97 overhead.

4 Then we would continue, I'm not going to point  
5 at the map, but I'm just going to articulate it, we would  
6 continue east on State Route 97 to the intersection of  
7 State Route 96 and State Route 97. We would turn left  
8 and go northward on State Route 96, again, to another  
9 point where there's limited places for us to pull off,  
10 but we would pull off at a point nearby where the  
11 crossing of the -- where the line would cross State  
12 Route 96. It is probable that we will not be able to see  
13 the line or the line would actually cross at this point,  
14 but it would give a characterization of what the area  
15 looks like.

16 And then from there because of how long this  
17 tour is because of the distance, we would continue on  
18 into the town of Bagdad and make a stop at Basha's to  
19 allow people to go to the restroom, get a snack, and  
20 before we make the drive back. And the estimated length  
21 of the tour would be about four to five hours, depending  
22 on how long we spend at each stop.

23 CHMN STAFFORD: Thank you. Questions,  
24 comments from members?

25 MEMBER GOLD: Mr. Chairman?

1 CHMN STAFFORD: Yes, Member Gold.

2 MEMBER GOLD: How far, approximately, is it  
3 from where we are in Wickenburg to tour stop number 1, it  
4 looks to me to be about 50 miles?

5 MR. DUNCAN: It is about 50 miles.

6 MEMBER GOLD: And on the roads that we're  
7 driving on, it's about an hour's drive?

8 MR. DUNCAN: Yeah, it would be about an  
9 hour's drive, because there are several roundabouts,  
10 yeah, that we'd have to slow down for and work our way  
11 through.

12 MEMBER GOLD: Okay. And tour stop 1 would  
13 be where that "Do not enter" sign was close to that ranch  
14 house?

15 MR. DUNCAN: It would be -- yes, it would  
16 be -- it wouldn't -- it -- that "Do not enter" sign was  
17 where the crossing is of US 93. We would pull into the  
18 entrance of Santa Maria Ranch near where -- near where  
19 they enter their ranch.

20 MEMBER GOLD: Okay. And they would agree  
21 to that, I'm sure?

22 MR. DUNCAN: Well, I don't know. I haven't  
23 spoken to them. It's not typical that when we plan route  
24 tours that we enter onto private property.

25 MEMBER GOLD: Okay. If they're here, we

1 can ask them.

2 Okay. Thank you.

3 CHMN STAFFORD: So, Members, do you think a  
4 tour would be valuable to evaluate this line or do you  
5 think that the testimony and the visuals provided were  
6 adequate?

7 MEMBER KRYDER: Mr. Chairman?

8 CHMN STAFFORD: Yes, Member Kryder.

9 MEMBER KRYDER: It's a -- it's a lot of  
10 time, but I had difficulty on the virtual tour getting  
11 ahold of it. I just -- it just didn't seem to fit for  
12 me. So I would like to see it, but do it all in  
13 20 minutes. Impossible, I know.

14 CHMN STAFFORD: Well, it seems that most of  
15 the questions that the members had related to the  
16 southern terminus of the line and near the ranch. Could  
17 we potentially just do a tour with only the one stop at  
18 the southern terminus, go out there, look at where the  
19 ranch is, look at the existing lines, look at where the  
20 new line and the substation would be, and then just call  
21 it a day at that point?

22 MEMBER KRYDER: If that would be possible,  
23 that would certainly be most interesting to me from what  
24 I saw on the virtual tour. Thank you.

25 CHMN STAFFORD: Okay. And that would be

1 about, like, a two-hour and however long the stop is  
2 duration. It would just be the drive there, get out,  
3 look at what we can see from that perspective, and then  
4 get back on the bus and come back to the hearing.

5 MEMBER GOLD: Mr. Chairman, that would  
6 suffice for me.

7 CHMN STAFFORD: Member Richins, thoughts?

8 MEMBER RICHINS: I have driven to Vegas so  
9 many times. I know exactly where all of this is. So I  
10 decline a tour.

11 MEMBER MERCER: I'm okay with a tour or  
12 half a tour.

13 CHMN STAFFORD: All right. So,  
14 Mr. Derstine, do you think -- that would be a  
15 significantly shorter tour, I think that's probably much  
16 more workable than the four to five hours that the whole  
17 trip would take.

18 MR. DERSTINE: Yeah, I mean, whatever  
19 the -- the committee would prefer, we don't have any  
20 objection to making it to the first stop, going to the --  
21 that entry point to the Santa Maria Ranch, seeing what  
22 can be seen from that location, and then returning at  
23 that point in time.

24 MEMBER GOLD: Mr. Chairman, I move we do  
25 the abbreviated tour.

1 MEMBER MERCER: Second.

2 CHMN STAFFORD: All in favor say aye.

3 (A chorus of "ayes.")

4 CHMN STAFFORD: Opposed?

5 MEMBER RICHINS: Nay.

6 CHMN STAFFORD: The ayes have it. So,  
7 okay, we'll do the -- the shortened tour. The one-stop  
8 tour, and then I think that will give the members the  
9 perspective from the southern terminus that they were --  
10 they didn't quite get from the virtual tour.

11 MEMBER KRYDER: I don't need the north, but  
12 the south I'm good.

13 CHMN STAFFORD: All right. Excellent.

14 MR. DERSTINE: Mr. Duncan --

15 MEMBER LITTLE: Mr. Chairman?

16 CHMN STAFFORD: Yes, Member Little.

17 MEMBER LITTLE: Did you look into the  
18 option that you and I discussed as if it would be  
19 possible to do, after the tour stop and when you go back  
20 on the record, to do a some kind of an inclusion of those  
21 of us who are not present?

22 CHMN STAFFORD: Well, we could do a  
23 FaceTime call to you, assuming that the technology will  
24 work in that area, so you could attend the stop remotely.

25 MEMBER LITTLE: I would love that. Just so

1 I could see the view from the ranch house-ish.

2 CHMN STAFFORD: Yes, I mean, I don't  
3 know -- I make no warranties on what a FaceTime video  
4 will look like, as opposed to the virtual tour. It may  
5 not even be as good as that. But I think we could  
6 certainly give it a try.

7 MEMBER MERCER: Mr. Chairman, we can call  
8 Elon Musk.

9 CHMN STAFFORD: Pardon me, Member Mercer, I  
10 didn't catch that.

11 MEMBER MERCER: We can call Elon Musk.  
12 Starlink.

13 (Inaudible discussion.)

14 CHMN STAFFORD: Hang on. So the cell  
15 service is spotty out there?

16 UNIDENTIFIED SPEAKER: Yeah, it is.

17 CHMN STAFFORD: Okay. Well, I'm hearing  
18 comments from the background that the cell service out  
19 there is subpar. So I guess we will -- we will give it a  
20 whirl, Member Little, and if we can't reach you, you'll  
21 know that we tried, but you'll have to hear back from us  
22 when we get back into the hearing room.

23 MEMBER LITTLE: Sounds great. Thank you  
24 very much.

25 CHMN STAFFORD: All right. Thank you.



1 BY MR. DERSTINE:

2 Q. I was just going to check with Mr. Duncan, so  
3 confirm transportation, meeting location and time?

4 A. (MR. DUNCAN) Transportation is confirmed. They  
5 will be here at 8:00 a.m.

6 Q. And we have us departing at 9:00 a.m. from the  
7 front lobby area?

8 A. (MR. DUNCAN) Yes, that is correct.

9 CHMN STAFFORD: Okay. So we'll -- we'll  
10 meet in the front lobby instead of in this room. We'll  
11 go on the record. I'll give the standard -- the warning  
12 to the members about no deliberations or questions to the  
13 applicant during the tour except at the stop where it's  
14 on the record before the court reporter. And we can load  
15 onto the bus and then we'll get back, I guess, when we  
16 return, will we return to the same spot in the front or  
17 just come back in front of this room?

18 MR. DERSTINE: Your pleasure. I mean, I  
19 guess that's a good point.

20 Q. If the Chairman wants to go on the record first,  
21 can we have the van meet us here and we all just meet  
22 here in the hearing room?

23 A. (MR. DUNCAN) Absolutely.

24 CHMN STAFFORD: We don't need to meet here,  
25 I mean. I think it's probably closer from everyone's

1 rooms to the front --

2 MR. DERSTINE: Oh, I'm sure it is.

3 CHMN STAFFORD: And the court reporter is  
4 very adept at doing this on the fly, because she has to  
5 pull all her gear out and set it up at the stop, which is  
6 out in the middle of nowhere, you know, it's not like --  
7 there's no outlets or plugs or anything, so I think we  
8 can start -- we can meet at 9:00 in the lobby, we'll go  
9 on the record, board the bus, and then take the tour.  
10 And then when we come back, we can come straight back  
11 here, then.

12 MR. DERSTINE: Very good.

13 CHMN STAFFORD: All right. Anything --

14 BY MR. DERSTINE:

15 Q. I think we have a comment from Mr. Spitzkoff or  
16 a question.

17 A. (MR. SPITZKOFF) Yes. Just want to make sure we  
18 go over some safety topics if we're going to be out there  
19 -- out in the wild. If everyone can make sure they have  
20 the proper footwear, close-toed shoes, good soles, you  
21 know, that aren't slippy. If we happen to be on the side  
22 of roadways, we have high-visibility vests for everybody.  
23 And I don't know if we have bottles of water, but most --  
24 most people nowadays have their own tumblers, so if you  
25 can bring your water and outdoor clothing, head covering,

1 that sort of stuff.

2 Q. And am I correct that breakfast is available in  
3 the dining area? Breakfast will be served before we  
4 depart at 9:00?

5 A. (MR. SPITZKOFF) Yes. And I'm being told in the  
6 morning, at least, it's supposed to be colder than it has  
7 been typically, so please be prepared with an outer  
8 garment.

9 CHMN STAFFORD: Here's hoping.

10 MR. DERSTINE: With that, I think we were  
11 going to conclude for the day rather than trying to jam  
12 in just a little bit of testimony. We'll just -- we'll  
13 wrap for today, and with your permission and we'll wait  
14 for public comment at 5:30 and go from there.

15 CHMN STAFFORD: That -- I am amenable to  
16 that plan, Mr. Derstine. I think we can take the break  
17 and we can make sure that the public commenters are ready  
18 to go and that -- make sure all the equipment's ready,  
19 and then we'll proceed with public comment and then we'll  
20 go -- we'll recess until tomorrow morning. We'll  
21 reconvene at 9:00 in the lobby to begin the tour.

22 And the public is welcome to follow us on  
23 the tour. But when we get to the stop, that will be a  
24 time for the members to ask the applicant questions, we  
25 won't be taking testimony from the -- any members of the

1 public who follow the tour. We could potentially take  
2 additional public comment later on in the hearing if it's  
3 warranted, but just letting the public know that at the  
4 stop, it's a time for the members to ask the applicant  
5 questions. The public will not be able to ask questions  
6 of the committee. They can certainly speak to the  
7 applicant and ask questions of the applicant, but that  
8 will also not be on the record. It's not part of the  
9 proceeding.

10 So with that, we will stand in recess until  
11 5:30, at which time we will commence with public comment.  
12 We stand in recess.

13 (Recessed from 5:06 p.m. until 5:31 p.m.)

14 CHMN STAFFORD: All right. Let's go back  
15 on the record.

16 Now is the time set for public comment for  
17 Line Siting Case 238.

18 First we have Heidi Chay.

19 MS. CHAY: How's this going to work?

20 CHMN STAFFORD: Excellent. We can hear you  
21 just fine.

22 MS. CHAY: Need any information from me or  
23 I can just start right in, Chairman Stafford?

24 CHMN STAFFORD: Your last name is spelled,  
25 C-h-a-y, correct?

1 MS. CHAY: That's correct.

2 CHMN STAFFORD: All right. Please proceed.

3 MS. CHAY: And that will do it. Okay.

4 So I'm Heidi Chay. I'm here with my  
5 husband, Dan Chay, who will be speaking next. And we are  
6 the owners and the residents who live at Santa Maria  
7 Ranch, which, as you know, is in close proximity to the  
8 southern terminus of this project. In fact, the proposed  
9 structures are about 800 feet from our front gate.  
10 You'll see that tomorrow.

11 In the first three-plus miles of the  
12 transition -- transition -- transmission line lie within  
13 our grazing lease. I really appreciated the little  
14 history lesson that we had earlier and you may not get a  
15 chance to hear it otherwise and since you're going to the  
16 vicinity of the ranch, I wanted you to know that the  
17 ranch has a history that goes back to the late 1800s.  
18 And it's been in our family since 1990.

19 In the late 1800s, there was a very active  
20 mining community between the proposed substation and the  
21 river. There are tons of rock structures and remains of  
22 the mining era from the late 1900s -- late 1800s, excuse  
23 me. And the ranch at that time provided meat for the  
24 miners, so we've been around since then. There also  
25 remains evidence of prehistoric habitation there.

1           The ranch has been in our family since  
2 1990, when Dan's parents, Eric and Tina Barnes fulfilled  
3 their lifetime dream of becoming ranchers by purchasing  
4 this property. Dan and I bought it from them in January  
5 of 2023, and the ranch continues as a working ranch, as  
6 well as a central gathering place for our extended  
7 family.

8           There's a sandy bank about a half mile  
9 north of the proposed substation, and it would be great  
10 if you could see that location, you may be too busy  
11 tomorrow. But that is a place that we call Katie's  
12 Beach. It's our family's favorite picnic and gathering  
13 spot. We celebrated my father-in-law's 90th birthday  
14 there not long ago, and we want to celebrate his 91st  
15 there as well.

16           So Dan and I have been learning about this  
17 project since May of 2023, when I first talked with  
18 Catherine Esquer after receiving the initial scoping  
19 letter, which went to this address and forwarded and  
20 forwarded, and finally got to us too late for us to  
21 participate in that early scoping process. But we've  
22 been following it closely since then.

23           Catherine provided good-quality maps, which  
24 we really appreciate. And then in February we went to  
25 the APS open house in Bagdad. And we've submitted

1 several requests for information. And Anna Chaulk has  
2 been very diligent about getting us good answers to those  
3 questions.

4 So after reading the application last week,  
5 we submitted detailed written comments this morning, and  
6 I don't think it will be available in the docket until  
7 maybe tomorrow is my understanding. These comments fall  
8 under the headings of native plants and re-vegetation,  
9 wildlife, visual impacts, communication, and safety, and  
10 I hope you'll have time to look at them in full, and that  
11 you'll have access. I'll just hit some highlights right  
12 now, if I may. I'm not keeping track of the time. Okay.

13 So the rationale for the project, as we've  
14 heard it again and again today, is to provide power for  
15 the expansion of Bagdad Mine. We also talked with  
16 representatives of the mine and we understand that,  
17 according to Freeport's just-published quarterly report  
18 in October, they have not made the decision whether or  
19 not to expand the mine. It's still a wait-and-see  
20 proposition based on world market conditions, and  
21 availability of staff, is what we understand.

22 So according to that quarterly report we  
23 expect that the decision whether or not to proceed with  
24 the mine expansion will happen by the end of 2025.  
25 That's the target date to announce to their investors,

1 and that's consistent with what we've also heard from the  
2 mine representatives.

3           Nevertheless, as you've seen and in some of  
4 the flyover today and as you will see firsthand tomorrow,  
5 the -- the exploratory work has begun. There's been a  
6 lot of digging. There's -- that's already taken place,  
7 that's already made a very large mark on the landscape.  
8 And in the comments that we've submitted you'll see some  
9 close-up pictures of the southern route -- you won't,  
10 that you may not be able to see from your one stop at our  
11 gate tomorrow.

12           Dan and I walked the first -- mile and a  
13 half, Dan -- of the -- of the bulldozer route  
14 that -- that the Freeport contractor, Ames Construction,  
15 made last November. One contractor went down the side of  
16 the Santa Maria River and removed that vegetation because  
17 they were doing soil samples. Another contractor came  
18 with a 12-foot-plus-wide bulldozer to make the track, the  
19 exploratory route of the hill. And, again, we don't know  
20 if that's -- we think the pipeline will be near that,  
21 it's not a road now. It's not drivable. It's very  
22 steep, and Dan and I walked the first 1.3 miles of that,  
23 and we've got pictures of the very dense saguaros on both  
24 sides. And -- and we counted 45-plus that were destroyed  
25 in that initial bulldozing. And when we got to an



1 intersection it was getting time for us to return, we  
2 could see saguaros as far as the eye could see along this  
3 bulldozed access road. And, as I said, parts of may be  
4 drivable right now, but we couldn't take our own ATVs up  
5 there now. We were hiking.

6           So from the perspective of the ranchers,  
7 the vegetation that is destroyed is the life blood of,  
8 you know, that's what feeds the cows and the calves. So  
9 re-vegetation is important. It's important not just to  
10 throw out the right seeds, but to make sure that the  
11 seeds germinate and the plants actually grow. And so  
12 we're very interested to see a substantive re-vegetation  
13 plan with follow-up, as is clearly recommended by your  
14 Game & Fish Department. And that's included in the -- in  
15 the application.

16           And as far as the visual impacts, I think  
17 that's the main reason why you're interested to go  
18 tomorrow and we are very honored that you'll take the  
19 time to visit. Since we won't be with you on the bus, I  
20 want you to be thinking about when you turn off Highway  
21 93, you'll turn onto Santa Maria Road, then you get to a  
22 Y, you'll hang a left and go onto Santa Maria Ranch Road,  
23 you'll go up and down a little bit. You'll crest the  
24 road and you really should stop there, because you'll see  
25 the existing transmission lines and you'll also see just

1 the beginning of the exploratory work for the pipeline  
2 that might be built in the future, and you see it quite  
3 clearly from that crest. And then you'll continue on  
4 down the road to our gate. And we look forward to seeing  
5 you there.

6           So our conclusion on the visual impacts is  
7 it's already very significant for people who live on the  
8 land. We don't stay in our living rooms and look out the  
9 front window. Ranchers spend time on the land. And  
10 they -- this entire blue area on your map that's been  
11 referred to as "State Land" all day is grazing land and  
12 that means that there are cows on it, they're quite  
13 dispersed, but they're out there grazing and that means  
14 that ranchers are out there working their cows and  
15 they're using all of that land. The first three miles of  
16 the transmission line are in our grazing lease. And  
17 north of there it's the Neshams' and they'll be coming up  
18 and saying a few words in a few minutes.

19           One quick word on Sonoran Desert tortoise,  
20 and that is it's not just within three miles of the  
21 corridor. We've seen one within 1,500 feet of the  
22 proposed substation. So they're very rare. We have seen  
23 them on occasion on the acres of grazing land that  
24 surround the ranch, but we ask that you to take special  
25 care with the tortoise. And I think those are -- those

1 are the main points that I wanted to hit. I'm going to  
2 turn it over to Dan next.

3 CHMN STAFFORD: Thank you for your comment.

4 Up next we have Dan Chay. Same spelling.

5 MR. CHAY: Same spelling, same  
6 pronunciation, usually.

7 I want to speak mainly to the siting of the  
8 substation. So I've been involved with utilities before.  
9 I know the need for power to Bagdad. But when I looked  
10 at the maps for the first time I had the same question as  
11 Member Gold, which was if you look at where Highway 97  
12 intersects Highway 93, that distance from the  
13 500-kilovolt pipeline to Bagdad is significantly shorter  
14 than from where TS-01 is proposed. And if you drive it,  
15 and you try to drive the pipeline access road that they  
16 punched in last spring, you'll see that it's infinitely  
17 easier to drive Highway 97.

18 Right now the road they punched in was with  
19 a D10 CAT. The blade on a D10 CAT is twice as high as I  
20 am high. It is a huge, 150,000-pound vehicle, and they  
21 just took a line from the edge of the Santa Maria where  
22 the digs had been done, went straight down into the  
23 river, took out the trees, and just went straight up and  
24 down the steep ravines up to an intersecting road, which  
25 was a miner's road, probably 500 or 1,000 feet in

1 elevation above. But the -- the verticals both up and  
2 down are steep enough in places where when you're walking  
3 up them, you can use your hands. They're probably  
4 45 degrees or so steep. In the neighborhood of that  
5 anyway.

6                   So it's really clear to me that that pretty  
7 darn wide road is not going to be sufficient to carry a  
8 truck with pipes in it. The guys in Ames Construction  
9 told me that, well, probably that road will have to be  
10 twice as wide or wider to pull the trucks up and we're  
11 going to have to improve the road quite a bit.

12                   So when we talked about environmental  
13 impact on the land, I think we're looking at something  
14 much, much bigger than what we've seen so far. And then,  
15 in addition to the pipeline road, you add the  
16 transmission road and all the Ts off the pipeline road to  
17 each transmission pole, we're talking about even more of  
18 an impact.

19                   The impact is not just the vegetation, it's  
20 also -- it also includes access by hunters and everything  
21 that hunters bring in, including their litter, invasive  
22 species, that sort of thing. So -- so that takes me back  
23 to, okay, environmental impact. Could we reduce the  
24 environmental impact if we sited the station at the  
25 intersection of 93 and 97? And in my mind it just seems

1 pretty obvious that we could.

2                   What are the obstacles to that? Well,  
3 we've heard there are engineering obstacles, maybe  
4 electrical transmission kind of obstacles, maybe economic  
5 obstacles, but none of those ring true enough that I  
6 couldn't be convinced -- that I would be convinced  
7 without evidence. And I haven't seen the evidence of  
8 that.

9                   So if you're considering this Certificate  
10 of Environmental Compatibility and options that you have  
11 here, one option being no further -- or no -- no expanded  
12 environmental impact on top of the pipeline versus the  
13 expanded environmental impact of the transmission line  
14 and the pipeline proceeding from the proposed site.

15                   So I think you would find that there would  
16 be less environmental impact if you sited the  
17 transmission substation at the intersection of 93 and 97.  
18 It also seems to me that it would be economically more  
19 viable. When we did transmission lines in Alaska we  
20 were, you know, looking at a million miles -- a million  
21 dollars a mile. So I think, even economically, it makes  
22 more sense to start at that intersection.

23                   I'd like to see the engineering details  
24 that would convince me that this site that you're going  
25 to see tomorrow would be better. It's on top of a hill,

1 and a road will have to be cut up a steep hill where you  
2 have to use your hands to climb as well to get to site  
3 that is relatively more level that overlooks a good part  
4 of the valley and the river. So those are my comments.

5 Or -- in addition, if you look at the  
6 visual -- if you look at the Environmental Assessment  
7 that was submitted this morning, I think, you can see  
8 some evidence that the original plan actually was to run  
9 that pipeline down 97 to the intersection of 93. There  
10 is a map that shows that route. And if you look on  
11 page -- let's see, 2.5, page 7, so that would be  
12 Chapter 20, on page 7, you can see the alternatives that  
13 they -- they mention in addition to this that don't  
14 include that intersection of 93 and 97.

15 So in one place we see that the pipeline  
16 originally was planned and the original baseline  
17 environmental study was done for a route that took you  
18 down to the intersection of 93 and 97. But in these  
19 alternatives they're not there that I could see.

20 There you go.

21 CHMN STAFFORD: Thank you.

22 Up next we have Stephen Nesham and Cecelia  
23 Fancher. It was unclear whether you wish to speak. I  
24 thought it was contingent on whether -- what the previous  
25 speakers had said.

1 MR. NESHAM: Okay. I'm Steph Nesham. We  
2 have the permit north of Dan and Heidi, a peak permit on  
3 State Land grazing. I guess my concern is just the  
4 construction on the reseeding and then this line will go  
5 through one of our horse pastures and holding pastures.  
6 And we've had problems with fence and people, stock  
7 getting out and hit on the highway on 97, and different  
8 stuff before with the -- just concerns of, you know, when  
9 the construction starts that we darn sure keep some gates  
10 closed and access. A lot of that country we -- it hasn't  
11 had any access to it. And that's what's benefited in the  
12 horse pasture. We haven't had problems.

13 With this I see we could have some  
14 problems, and liability is going to be a problem for  
15 everybody, people being people. So keeping the gates  
16 closed or access as much as we could, it is a big concern  
17 over there for us.

18 So I guess I'm done.

19 CHMN STAFFORD: Thank you. And Cecelia  
20 Fancher, did you also wish to speak or not?

21 MS. FANCHER: No.

22 CHMN STAFFORD: All right. That concludes  
23 all the public commenters in the room. Are there any on  
24 the WebEx or on the phone?

25 AV TECHNICIAN: Mr. Chairman, we do not

1 have any members of the public online.

2 CHMN STAFFORD: Okay. Well, then, we'll go  
3 off the record and wait until at least 6:00 to see if  
4 anybody else shows up to make comment. So let's go off  
5 the record.

6 (Recessed from 5:50 p.m. until 6:00 p.m.)

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

9 No new persons have come to the -- in  
10 person here to make comment. And is there anybody called  
11 in or on the WebEx?

12 AV TECHNICIAN: Still no members of the  
13 public online, Mr. Chairman.

14 CHMN STAFFORD: All right. Thank you.

15 Well, with that, we can conclude public  
16 comment. We will be back tomorrow morning at 9:00 in the  
17 lobby and from there we will begin the tour, which has  
18 been reduced to one stop. And then we'll be back in this  
19 room to commence the hearing after the tour.

20 With that, we stand in recess until  
21 9:00 a.m. tomorrow.

22 (The hearing recessed at 6:01 p.m.)

23  
24  
25



1 STATE OF ARIZONA )  
COUNTY OF MARICOPA )

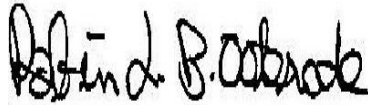
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4 BE IT KNOWN that the foregoing proceedings were  
5 taken before me; that the foregoing pages are a full,  
6 true, and accurate record of the proceedings all done to  
the best of my skill and ability; that the proceedings  
were taken down by me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

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

9 I CERTIFY that I have complied with the ethical  
10 obligations set forth in ACJA 7-206(F)(3) and ACJA 7-206  
11 (J)(1)(g)(1) and (2). Dated at Phoenix, Arizona, this  
12 2nd day of November, 2024.

13  
14



ROBIN L. B. OSTERODE, RPR  
CA CSR No. 7750  
AZ CR No. 50695

15  
16  
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\* \* \* \* \*

18 I CERTIFY that Glennie Reporting Services, LLC,  
19 has complied with the ethical obligations set forth in  
20 ACJA 7-206(J)(1)(g)(1) through (6).

21  
22



GLENNIE REPORTING SERVICES, LLC  
Registered Reporting Firm  
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