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BEFORE THE ARIZONA POWER PLANT

AND TRANSMISSION LINE SITING COMMITTEE

IN THE MATTER OF THE APPLICATION)  
 OF SOUTHLINE TRANSMISSION, )  
 L.L.C., IN CONFORMANCE WITH THE )  
 REQUIREMENTS OF ARIZONA REVISED )  
 STATUTES 40-360, ET SEQ., FOR A ) DOCKET NO.  
 CERTIFICATE OF ENVIRONMENTAL ) L-00000AAA-16-0370-  
 COMPATIBILITY AUTHORIZING ) 00173  
 CONSTRUCTION OF THE NON-WAPA- )  
 OWNED ARIZONA PORTIONS OF THE )  
 SOUTHLINE TRANSMISSION PROJECT, )  
 INCLUDING A NEW APPROXIMATELY ) CASE NO. 173  
 66-MILE 345-KV TRANSMISSION LINE )  
 IN COCHISE COUNTY FROM THE )  
 ARIZONA-NEW MEXICO BORDER TO THE )  
 PROPOSED SOUTHLINE APACHE ) AMENDMENT TO  
 SUBSTATION, THE ASSOCIATED ) DECISION NO. 75978  
 FACILITIES TO CONNECT THE )  
 SOUTHLINE APACHE SUBSTATION TO )  
 THE ADJACENT AEPSCO APACHE )  
 SUBSTATION, AND APPROXIMATELY 5 ) At: Tucson, Arizona  
 MILES OF NEW 138-KV AND 230-KV )  
 TRANSMISSION LINES AND ) Date: December 1, 2020  
 ASSOCIATED FACILITIES TO CONNECT )  
 THE EXISTING PANTANO, VAIL, ) Filed: December 8, 2020  
 DEMOSS PETRIE, AND TORTOLITA )  
 SUBSTATIONS TO THE UPGRADED )  
 WAPA-OWNED 230-KV APACHE-TUCSON )  
 AND TUCSON-SAGUARO TRANSMISSION )  
 LINES IN PIMA AND PINAL COUNTIES )  
 \_\_\_\_\_ )

REPORTER'S TRANSCRIPT OF PROCEEDINGS

VOLUME I  
(Pages 1 through 146)

COASH & COASH, INC.  
Court Reporting, Video & Videoconferencing  
1802 N. 7th Street, Phoenix, AZ 85006  
602-258-1440 Staff@coashandcoash.com

By: Kathryn A. Blackwelder, RPR  
Certified Reporter  
Certificate No. 50666

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1 BE IT REMEMBERED that the above-entitled and  
2 numbered matter came on regularly to be heard before  
3 the Arizona Power Plant and Transmission Line Siting  
4 Committee at the DoubleTree Hotel, 445 South Alvernon  
5 Way, Tucson, Arizona, commencing at 1:16 p.m. on the  
6 1st of December, 2020.

7

8 BEFORE: THOMAS K. CHENAL, Chairman

9 PATRICIA NOLAND, Public Member  
10 JACK HAENICHEN, Public Member  
11 JAMES PALMER, Agriculture  
12 LEONARD DRAGO, Department of Environmental Quality  
13 MARY HAMWAY, Cities and Towns (Videoconference)  
14 ZACHARY BRANUM, Arizona Corporation Commission  
15 (Videoconference)  
16 JOHN RIGGINS, Arizona Department of Water Resources  
17 (Videoconference)  
18 KARL GENTLES, Public Member (Starting at Page 76)

14

15

16 APPEARANCES:

17

For Joint Applicant Tucson Electric Power Company:

18

19 Snell & Wilmer  
20 Mr. J. Matthew Derstine  
21 One Arizona Center  
22 400 East Van Buren Street, Suite 1900  
23 Phoenix, Arizona 85004

21

22 For Joint Applicant Southline Transmission, L.L.C.:

23

24 Osborn Maledon  
25 Ms. Meghan H. Grabel  
2929 North Central Avenue, 21st Floor  
Phoenix, Arizona 85012

25

1 CHMN. CHENAL: Good afternoon, everyone. My  
2 name is Tom Chenal. I'm with the Attorney General's  
3 Office and Chairman of the Line Siting Committee.

4 And this is the time set to begin the hearing  
5 on the pleadings filed by TEP and Southline regarding  
6 CEC 173 and a modification to that CEC.

7 MEMBER NOLAND: Tom, I can't hear you. I'm  
8 sorry.

9 CHMN. CHENAL: Is that -- can you hear me  
10 better, Member Noland?

11 MEMBER NOLAND: I can.

12 CHMN. CHENAL: Okay, thank you.

13 May we begin with a roll call, please,  
14 starting with Member Noland.

15 MEMBER NOLAND: Patricia Noland representing  
16 the public.

17 MEMBER HAENICHEN: Jack Haenichen  
18 representing the public.

19 MEMBER PALMER: Jim Palmer representing  
20 agriculture.

21 MEMBER DRAGO: Len Drago representing ADEQ.

22 CHMN. CHENAL: And if we can ask to have the  
23 Zoom screen reflect at least the Members who are --  
24 have joined the meeting.

25 Member Hamway, would you introduce yourself?

1 MEMBER HAMWAY: I did. You cannot hear me?

2 CHMN. CHENAL: Now we can. Okay.

3 MEMBER HAMWAY: Okay. Yes, Mary Hamway  
4 representing cities and towns.

5 CHMN. CHENAL: And Member Branum.

6 MEMBER BRANUM: Zachary Branum with the  
7 Arizona Corporation Commission.

8 CHMN. CHENAL: Okay. Are there any other --  
9 Member Riggins?

10 MEMBER RIGGINS: John Riggins, representing  
11 the Arizona Department of Water Resources.

12 CHMN. CHENAL: Okay, thank you.

13 May I ask that the volume for the speakers on  
14 the Zoom -- attending by Zoom be increased? It's kind  
15 of hard to hear. That's helpful.

16 And may we also see them on the screen?

17 We're just working through a technical issue  
18 now to make sure that the Members' Zoom squares will be  
19 visible to us, and not simply when they speak.

20 MR. DERSTINE: Mr. Chairman, so is your  
21 request that all three Members be seen even when  
22 they're not speaking or simply when they're speaking?

23 CHMN. CHENAL: If that's possible.

24 MR. DERSTINE: Does it make sense to work on  
25 that technical issue while we move forward, or do you

1 want to make sure that they're all visible at once?

2 CHMN. CHENAL: We can move forward with it.

3 I was thinking this would be a simple fix. But if it's  
4 going to take a few minutes...

5 MS. GRABEL: There you go.

6 CHMN. CHENAL: Yeah, there you go. I thought  
7 that would be just a quick matter.

8 Okay. So may we have appearances from the  
9 applicants, please.

10 MS. GRABEL: Thank you, Mr. Chairman,  
11 Committee Members. Meghan Grabel from Osborn Maledon  
12 on behalf of applicant Southline Transmission Company,  
13 L.L.C.

14 MR. DERSTINE: Good afternoon. Matt Derstine  
15 of Snell & Wilmer appearing on behalf of Tucson  
16 Electric Power Company.

17 CHMN. CHENAL: All right. Thank you very  
18 much.

19 Our hearing is set -- we're going to do this  
20 remotely, some people appearing live, some people  
21 remote. And that may also be true for members of the  
22 public who wish to provide public comment. I  
23 understand there's a member of the public who would  
24 like to give comment now, which we can do after the  
25 opening statements so that person doesn't have to wait.

1           There will be some challenges probably with  
2 this. But I can report, and Mr. Derstine's aware of  
3 this, we had a hearing the week before last, which was  
4 partly live, partly remote, and it went off very well,  
5 so I don't expect any problems with our hearing. And I  
6 just think in the beginning we just have to make sure  
7 the volume is up and take care of a few technical  
8 issues, but we'll get those resolved.

9           We'll break every 90 minutes, as is our  
10 custom. The hearing is scheduled to last -- well, we  
11 have plenty of time reserved in the notice of hearing.  
12 But based on the conversations, the many conversations  
13 and meetings we've had with the applicant and counsel,  
14 I believe this hearing will end up probably Thursday,  
15 but we have plenty of time to accommodate the hearing  
16 and it is noticed as such. This evening we will have a  
17 public hearing, and the hearings will start at  
18 9:00 a.m. every morning and go until roughly 5:00.

19           Are there any matters we should discuss  
20 before we do the opening statements, Ms. Grabel or  
21 Mr. Derstine?

22           MR. DERSTINE: I don't think there are.

23           MS. GRABEL: No, sir.

24           CHMN. CHENAL: The public comment hearing  
25 this evening will start at 5:30.

1           The form of the document -- and I'm going to  
2 ask counsel to kind of go over this as part of their  
3 opening statements. The form of the document we'll be  
4 reviewing is going to be a little different than the  
5 standard CEC, and it's listed as Exhibit -- TEP Exhibit  
6 20. So it's -- procedurally, this is going to be a  
7 little different than our typical application and CEC.  
8 But the document we'll probably be working from, and  
9 we'll probably have some changes to review with Exhibit  
10 TEP-20, but I would ask the Committee Members to take a  
11 look at that and kind of prepare themselves for that  
12 document that we'll be reviewing.

13           There's no notices of intervention that have  
14 been filed specifically for this, and I'm unaware that  
15 the intervenors in the previous Southline case are  
16 entering an appearance in this hearing. And I'd ask  
17 counsel to confirm that, if that's their understanding  
18 as well.

19           MS. GRABEL: Yes, sir. My understanding is  
20 they filed something that they have entered an  
21 appearance in this case, but they do not intend to  
22 participate in these proceedings.

23           Mr. Derstine, would you concur with that?

24           MR. DERSTINE: Yes.

25           CHMN. CHENAL: All right, very good.



1           Just very briefly, as with the case a week  
2 before last, there's not going to be a physical tour  
3 just because of the COVID issues; but I have asked the  
4 applicant to prepare a more comprehensive flyover of  
5 the route, and I understand that's been done. So, you  
6 know, we won't be visiting in person, but we'll get the  
7 next best thing, a nice flyover.

8           I believe the parties have complied  
9 substantially with the procedural order. So other than  
10 my request that during your opening statements kind of  
11 give little of the procedural background here, I think  
12 we're ready for opening statements.

13           MS. GRABEL: Thank you, Mr. Chairman. That  
14 was a perfect transition into my first slide for  
15 opening. I'm going to kick it off briefly and then  
16 pass the baton over to Mr. Derstine, who will talk a  
17 little bit more about the evidence in this hearing.

18           So because this case has an atypical  
19 procedural posture, we thought a bit of background as  
20 to why we are here today was in order. The case was  
21 referred to the Line Siting Committee by the Arizona  
22 Corporation Commission to conduct an evidentiary  
23 hearing on a joint application to amend Decision  
24 No. 75978, which approved the CEC for Southline  
25 Transmission project, which is CEC 173, pursuant to

1 Arizona Revised Statute 40-252.

2 Southline Transmission, L.L.C., the developer  
3 of the Southline project, and Tucson Electric Power  
4 Company filed a joint application with the Commission  
5 to amend CEC 173 to permit the completion of the entire  
6 Southline project and authorize TEP to own, construct,  
7 and operate one of two 230 kV circuits that will be  
8 constructed on a 64-mile segment of the line between  
9 TEP's Vail and Tortolita substations.

10 The Commission, at an Open Meeting, referred  
11 the request back to the Line Siting Committee for its  
12 recommendation, and Southline and TEP filed a  
13 supplement to their joint application to present the  
14 Committee with the evidence and information typically  
15 presented in CEC proceedings. The case was noticed and  
16 set for hearing, which is why we are here today.

17 So for those of you who were not on the  
18 Committee for the proceeding underlying CEC 173 in  
19 2017, a bit of background on the Southline project.  
20 The Southline project involves the construction of  
21 approximately 370 miles of new and upgraded  
22 transmission lines and associated facilities in New  
23 Mexico and Arizona.

24 The Southline project is primarily in two  
25 segments. The first is a brand-new 249-mile

1 double-circuit 345 kV transmission line that begins in  
2 New Mexico, at the right end of the map there at Afton  
3 substation, and travels west into Cochise County,  
4 Arizona to the Apache substation near Willcox. That  
5 section was referred to as the new build section in  
6 CEC 173.

7           The second section was approximately 121  
8 miles of a 115 kV line that is owned now by the  
9 Western Area Power Administration, or WAPA, which will  
10 be upgraded to a double-circuit 230 kV line running  
11 from the Apache substation to a location near TEP's  
12 Tortolita section. That portion of the Southline  
13 project was referred to as the upgrade section in  
14 CEC 173.

15           Back in 2017, Southline requested a CEC only  
16 for the non-WAPA owned portion of the Southline project  
17 that was located in Arizona. The upgrade section was  
18 not included in CEC 173 because it was to be wholly  
19 owned and operated by WAPA, and was therefore outside  
20 of the Committee's and the Commission's jurisdiction.

21           Although the upgrade section was not part of  
22 the CEC application, it was subjected to the very same  
23 rigorous environmental review as the rest of the  
24 Southline project during the federal permitting  
25 process, which required an environmental impact

1 statement, or an EIS, under the National Environmental  
2 Policy Act. The full EIS and the subsequent Record of  
3 Decision were in the record during the Southline CEC  
4 hearing in 2017, which the Committee relied upon and  
5 adopted in making its recommendation to the Commission.

6 Because WAPA is not subject to the  
7 Commission's jurisdiction, the upgrade route was not  
8 included in CEC 173. As a result, the Committee  
9 conditioned the authorization to construct Southline on  
10 "WAPA owning and operating all of what is described in  
11 the application as the upgrade section with the  
12 exception of what is described in the application as  
13 the upgrade route." That's Condition No. 31. And  
14 you'll hear a lot about Condition 31 in these  
15 proceedings.

16 Am I going the wrong way? No.

17 After the Commission approved CEC 173, a wind  
18 developer expressed interest in using the Southline  
19 project to deliver energy from its project in New  
20 Mexico to Arizona by 2020, this year, a project in  
21 which TEP took interest. The Southline project was not  
22 likely to be online in 2020, so TEP and the wind  
23 developer explored options that used the existing  
24 transmission system to access a smaller wind project.

25 At the same time, TEP and Southline began

1 discussions about the Vail to Tortolita section of the  
2 Southline project, which is a portion of the upgrade  
3 section, which is the highest priority segment of the  
4 project to meet the region's transmission system needs.

5 This year, TEP and Southline executed an  
6 asset purchase agreement whereby TEP agreed to purchase  
7 the Vail to Tortolita segment from Southline. Because  
8 TEP intended to participate in that segment with WAPA,  
9 WAPA would no longer be the sole owner and operator of  
10 the upgrade section, which created a problem with the  
11 CEC given Condition No. 31.

12 For that reason, the parties agreed to  
13 jointly apply to the Commission for an amendment to  
14 Condition 31 of CEC 173 to allow the entire Southline  
15 project to be built notwithstanding the change of  
16 ownership structure on the Vail to Tortolita segment.

17 The entire Southline project addresses  
18 Arizona's need for an adequate, reliable, and economic  
19 electric supply as much today, with as little  
20 environmental impact, as it did when the Committee  
21 recommended the approval of and the Commission approved  
22 CEC 173 in 2017. TEP's ownership of the Vail to  
23 Tortolita segment of Southline will bring that  
24 high-priority portion online quickly, with benefits to  
25 both Tucson's customers and regional reliability.

1 Amending CEC 173 as requested will allow Southline to  
2 proceed with the entire project and facilitate TEP's  
3 participation in the upgrade section, both of which  
4 ends serve the public interest.

5 So now to elaborate just a little bit more,  
6 as the Chairman requested, on the governing law. Given  
7 the unique procedural posture of this case, we thought  
8 it might make sense to review the relevant statutes and  
9 decisions from the Commission.

10 The joint application to amend CEC 173 was  
11 brought to the Arizona Corporation Commission under  
12 A.R.S. Section 40-252, which reads that the  
13 "Corporation Commission may at any time...alter or  
14 amend any order or decision made by it." This would  
15 include a decision authorizing a Certificate of  
16 Environmental Compatibility.

17 Pursuant to that statute, the joint  
18 application to amend the CEC 173 was filed, and the  
19 Commission entered an order concluding that it is "in  
20 the public interest to...refer this matter back to the  
21 Line Siting Committee for additional evidentiary  
22 hearing." Pursuant to that decision, TEP and Southline  
23 filed a supplement to its original application, which  
24 is in your evidentiary exhibits, providing the  
25 information that's familiar to this Committee to

1 justify the award of a CEC for the Vail to Tortolita  
2 segment under the line siting statute. And that  
3 includes the various environmental and ecological  
4 factors that are required to be considered in A.R.S.  
5 40-360.06, as well as the balancing test that's found  
6 in A.R.S. Section 40-260.07. And that test, of course,  
7 states that the project balances the need for an  
8 adequate, economic, and reliable supply of power with  
9 minimal impact to the environment and economy of the  
10 state.

11 As the Chairman alluded to earlier, the  
12 Committee's role in this proceeding is a little  
13 different from your traditional CEC hearings. In this  
14 case, the Committee will vote on a Recommended Opinion  
15 and Order, which is not a typical CEC as is normally  
16 done. You'll find a draft of that Recommended Opinion  
17 and Order as Exhibit Number 20 in the binders in front  
18 of you.

19 The Recommended Opinion and Order will be  
20 presented to the Commission and will incorporate the  
21 Committee's findings and conclusion on, first, whether  
22 CEC 173 should be amended to allow TEP to construct,  
23 own, and operate the Vail to Tortolita project, and  
24 two, whether any additional conditions should be  
25 imposed on the construction of the project.

1           From an evidentiary perspective, during the  
2 hearing, Southline will present Doug Patterson,  
3 president of Southline Transmission, L.L.C., who will  
4 give an ownership -- overview, rather, of the Southline  
5 project, its history, its current status, and the  
6 events that led to the joint application to amend CEC  
7 173.

8           The EIS and the Record of Decision examined  
9 the Vail to Tortolita portion of the Southline project,  
10 and those documents were entered into evidence during  
11 the hearings underlying CEC 173. That evidence will be  
12 supplemented by the testimony of TEP's witnesses during  
13 this proceeding, as Mr. Derstine will discuss  
14 momentarily.

15           We believe that the record will show that an  
16 amendment of CEC 173 is in the public interest because  
17 it balances the need for an adequate, economical, and  
18 reliable supply of electric power, with the desire to  
19 minimize the impacts of that project on the environment  
20 and economy of the state.

21           And with that, I'd like to turn my time to  
22 Mr. Derstine to present more detail.

23           MR. DERSTINE: Thank you and good afternoon,  
24 Chairman, Committee Members. I'm going to start by  
25 talking about what's important. This is an important



1 project for -- certainly for Southline and for TEP, but  
2 I think it's important for me to tell you that the most  
3 important aspect of this case is the safety and the  
4 wellness of the folks in this hearing room and that  
5 we're able to conduct a safe hearing.

6 Certainly the management of Tucson Electric  
7 Power Company didn't take proceeding with this case  
8 lightly, and I'm sure that's true for Southline as  
9 well. But I think the success of your last hybrid  
10 hearing, which I was able to attend and was very much,  
11 I thought, a safe hearing environment, had all the  
12 protocols and the practices in place to protect the  
13 participants in the hearing, and we've employed those  
14 and -- those practices and those protocols here.

15 So again, the most important thing is that we  
16 have a safe hearing environment. We think we've done  
17 that. Before everyone in this room entered, we had a  
18 temperature check, we read the wellness questions, we  
19 certified the fact that we have not had symptoms, the  
20 standard kind of questions that everyone would ask in  
21 entering a building or an office environment. The room  
22 has been sanitized. The ventilation has been upgraded.  
23 Long story short, we think that what we've done here is  
24 to create a safe hearing environment, and we appreciate  
25 the Committee's willingness to do the business of the

1 Committee under these conditions but in a safe way.

2 And so again, thank you.

3           As Ms. Grabel mentioned, this isn't the  
4 typical type of hearing. This isn't a new CEC  
5 application. We're asking you to go back and look at  
6 CEC 173 and make some amendments to that decision to  
7 add the Vail to Tortolita project. But although you're  
8 not sitting and doing what you typically do in a CEC  
9 hearing, the evidence that you're going to hear, the  
10 testimony that you will hear will be very much the  
11 same. We have -- in addition to the application to  
12 amend that started this process, there was a supplement  
13 that essentially serves as a CEC application. And so  
14 that document contains all of the traditional  
15 information that the line siting statute and the rules  
16 require, and we will cover that as part of this  
17 hearing.

18           So let me talk about some of those  
19 traditional issues and subjects that you're used to  
20 hearing and the testimony and evidence you will hear in  
21 this case.

22           Why does TEP need the project? Well, it does  
23 a number of things. It allows for voltage stability;  
24 it gives -- this new 230 kV circuit gives a parallel  
25 path to the existing 138 kV system that is essentially

1 the sub transmission system that serves -- that allows  
2 TEP to serve the bulk of its customers; it improves the  
3 ability to schedule and respond to outages and  
4 maintenance; and it allows TEP to eliminate certain  
5 upgrades to its 138 kV system.

6 So this new system, in short, allows TEP to  
7 approve -- or, improve its ability to serve its  
8 customers, improve its ability to provide safe and  
9 reliable power, but do it in a way that has minimal  
10 environmental impacts.

11 What's the project? What will be built? The  
12 project involves a 64-mile segment of an existing  
13 Western Area Power Administration transmission line.  
14 That line is a 115 kV line built on wood H-frame  
15 structures. It's been there for approximately 50  
16 years. That 64 miles of line will be upgraded to a  
17 double-circuit 230 kV line. That double-circuit --  
18 those two 230 kV circuits will be strung on steel  
19 monopoles. TEP will own one of those two 230 kV  
20 circuits; WAPA will own the remaining circuit.

21 As I mentioned -- well, of the 64 miles, 52  
22 will be built in place. It will be structured in the  
23 existing WAPA alignment. 12 miles, however, are going  
24 to be built outside of the existing WAPA alignment, and  
25 those are going to be referred to as the reroute

1 segments, and you'll hear testimony about how those  
2 were developed. Those reroutes came about through the  
3 EIS process, the federal permitting process, with input  
4 from various stakeholders, that allowed for the study  
5 and the development of those four sections of the  
6 project that will move outside of the existing WAPA  
7 right-of-way.

8 Ms. Grabel mentioned the environmental  
9 studies, and you will hear a significant amount of  
10 testimony on the environmental studies that were part  
11 of and allowed the Southline project to move forward.  
12 That NEPA process was initiated when Southline  
13 requested a right-of-way from the Bureau of Land  
14 Management and requested to upgrade the existing WAPA  
15 line as part of its broader, longer Southline project.

16 The final EIS was issued in November of 2015;  
17 BLM and WAPA published their Records of Decision in  
18 April 2016. And importantly, that EIS and those  
19 Records of Decision included the Vail to Tortolita  
20 project.

21 But importantly, what we want you to  
22 understand is we're not simply relying on the federal  
23 record. We're not simply relying on the studies that  
24 were performed back in 2012 through 2015. We updated  
25 and performed the environmental study and analysis that

1 is required under our state siting statute. And that  
2 information, those environmental studies, the land use  
3 analysis, all the impact analysis that you see in a  
4 typical line siting case, those are contained in the  
5 supplement, which is TEP Exhibit 21.

6 So you'll hear testimony not only about the  
7 NEPA process, the environmental studies that were  
8 performed, but also about the recent 2020 environmental  
9 studies, visual impacts. All the typical factors that  
10 you as a Committee look at in granting a CEC, you'll do  
11 that again here.

12 What you'll hear from our environmental  
13 witnesses is that the Vail to Tortolita project is not  
14 likely to impact listed plants and wildlife, because  
15 the vast majority of this 64-mile project is being  
16 constructed in an existing right-of-way. The project  
17 is being rebuilt in place.

18 In addition, the impacts from the project are  
19 being minimized through conditions contained in the  
20 ROD, the Records of Decision; those are called the  
21 PCEMs. You'll hear about those PCEMs and what they do.  
22 You'll hear in testimony that TEP is bound by the  
23 PCEMs, that is, the mitigation protections that are  
24 included in the Records of Decision. And you'll also  
25 hear from the witnesses and -- the TEP witnesses that

1 TEP will also be bound by the conditions that this  
2 Committee placed on those portions of the Southline  
3 project that were included in the original Case 173 and  
4 that you adopted in your CEC to Case 173.

5 Visual impacts is a typical issue and  
6 something that the Committee looks at and considers.  
7 There will be visual impacts from this project. The  
8 75-foot wooden H-frame structures that now carry the  
9 WAPA's 115 kV line will be replaced by, in many places,  
10 130-foot steel monopoles carrying a double-circuit  
11 230 kV line in various portions of the project, crosses  
12 through portions of Tucson, crosses through portions of  
13 Marana. There will be visual impacts of visual change  
14 between the existing condition and the new condition.  
15 Those impacts were considered as part of the EIS, the  
16 federal permitting process, and you'll have an  
17 opportunity to look at those again here.

18 Public outreach. There was over five rounds  
19 of outreach that have been applied to the broader  
20 Southline project, including the Vail to Tortolita  
21 segment. Some of that occurred in the pre-NEPA phase  
22 of the project; much of that occurred during the EIS  
23 process.

24 And then there is new public outreach that we  
25 conducted for this hearing. We had a virtual open

1 house, we sent out newsletters to over 38,000 addresses  
2 within 1 mile on either side of the existing line, to  
3 give residents, landowners an understanding of this  
4 hearing, what this Committee would be considering, and  
5 give folks an opportunity to appear and comment.

6           The case will be presented through these four  
7 witnesses: Mr. Patterson on behalf of Southline;  
8 Mr. Beck on behalf of Tucson Electric Power; and then  
9 Cara Bellavia and Theresa Knoblock of SWCA, the  
10 environmental firm that did much of the environmental  
11 study work and analysis not only in the original NEPA  
12 process, but in the 2020 study and analysis that was  
13 performed for this hearing.

14           As we mentioned, the key exhibits are the  
15 supplement to the joint application. That serves  
16 essentially as a new CEC application for the 64-mile  
17 Vail to Tortolita segment. There are -- each of the  
18 witnesses prepared slides to support and supplement  
19 their testimony. You also have before you this place  
20 mat, the plastic covered maps, that show the project  
21 end to end, as well as the four reroute segments, and  
22 an expanded view of those segments are on the reverse  
23 side of the place mat.

24           We've also prepared a flyover simulation that  
25 will give the Committee, I think, a very good

1 understanding of the project, the 64-mile length of the  
2 project. Portions of it are in open country and open  
3 desert, but portions of it, as I mentioned, pass  
4 through the city of Tucson, the town of Marana, and  
5 you'll be able to see that in the flyover.

6 I think these are some of the key takeaways  
7 that -- things that I think are important for the  
8 Committee to understand. The Vail to Tortolita  
9 project, the Vail to Tortolita segment is 64 miles of  
10 the broader, longer Southline project, but this 64-mile  
11 segment underwent significant -- same degree of study  
12 and analysis through the federal permitting process,  
13 through the EIS process. TEP will be bound by, as I  
14 said, the PCEMs, the mitigation conditions contained in  
15 the Records of Decision. TEP also will accept and does  
16 accept all the conditions that are in 173 as they  
17 should apply to the 64-mile Vail to Tortolita segment.

18 And I guess the final point there is, WAPA  
19 already has authority to construct this line, not only  
20 the 64 miles, but the broader segment of its line that  
21 are part of the Southline project, but, you know, it's  
22 up to this Committee to decide whether or not you want  
23 to give Tucson Electric Power Company the authority to  
24 construct and own one of those circuits. And I think  
25 once you hear the testimony and the evidence in this



1 case, I think as Ms. Grabel alluded to and indicated,  
2 we think the evidence and the testimony will show that  
3 it is indeed in the public interest to amend 173 to  
4 allow TEP to construct, own, and operate this 64 miles  
5 of line, and that it not only serves TEP's customers,  
6 it benefits the electric grid in the region, in  
7 Arizona, in the broader region, and it's  
8 environmentally compatible. The measures that are in  
9 place through the federal process and through the  
10 conditions that you placed on other aspects of the  
11 Southline project in Case 173 apply to this segment of  
12 the line, protect and minimize the impacts of this  
13 project on the environment.

14 So with that, at the end of the case, we'll  
15 ask that you approve the amendment. It's a different  
16 document. It's a different piece of paper than what  
17 you're used to working through in terms of deliberating  
18 over conditions. It is a form of an opinion and order  
19 that amends your CEC in Case 173, but we're happy to  
20 preview that to you at the appropriate time in the case  
21 and talk through it. Thank you.

22 CHMN. CHENAL: Okay. Thank you, Mr. Derstine  
23 and Ms. Grabel.

24 Does the Committee have any questions?

25 Member Haenichen.

1 MEMBER HAENICHEN: Just so I'm sure I  
2 understand the project, at the end of the day when it's  
3 completed, will all of the existing structures from  
4 Vail to Tortolita be gone, disappear?

5 MR. DERSTINE: Yes.

6 MEMBER HAENICHEN: Okay. The new structures,  
7 who will actually construct them, own them, and service  
8 them? Just the structure part.

9 MR. DERSTINE: I will have Mr. Beck  
10 expand and answer your question more directly,  
11 Member Haenichen, but I think the answer is that that  
12 is still being worked out between WAPA and TEP in terms  
13 of who will actually construct the 64 miles of the  
14 line. At the end, whoever constructs it, Tucson  
15 Electric Power will own one of the 230 kV circuits and  
16 WAPA will own the other.

17 MEMBER HAENICHEN: Okay. I think Mr. Beck  
18 would be well suited to make some comments about  
19 existing situations like this between WAPA and private  
20 entities and how well they worked out.

21 MR. DERSTINE: We will do that.

22 MEMBER HAENICHEN: Thank you.

23 CHMN. CHENAL: Any other questions?

24 Let me just follow up with Member Haenichen's  
25 question then. So at least -- what will be done with

1 the WAPA line? At least the 64-mile segment -- I'll  
2 call it the TEP line and the WAPA line. The TEP line  
3 will be rebuilt, I mean, will be, you know, upgraded  
4 and rebuilt. But the WAPA line will as well at the  
5 same time?

6 MR. DERSTINE: So this project, this 64-mile  
7 segment of the existing WAPA line -- I'll ask  
8 Mr. Patterson and Mr. Beck to speak up and correct me  
9 if I am wrong in this -- but that existing -- the  
10 existing structures, the 50-year-old wood H-frames and  
11 the 115 kV circuit that those old wooden poles carry  
12 will be wrecked out and replaced by steel monopoles  
13 carrying two 230 kV circuits. One of those 230 kV  
14 circuits will be owned by Tucson Electric Power; one of  
15 them will be owned by WAPA; and that WAPA 230 kV  
16 circuit will replace the 115 that it's using to serve  
17 its customers along the route.

18 CHMN. CHENAL: Okay. Now, my follow-up  
19 question then. At the same time or before or after the  
20 64-mile segment is going to be rebuilt with the  
21 monopoles, with the WAPA line that -- from Apache west,  
22 will anything be done with the remaining portions of  
23 the WAPA line at this time?

24 MR. DERSTINE: I'm going to ask if you will  
25 hold your question and allow Mr. Patterson and Mr. Beck

1 to respond to that and clarify that, because I'm not  
2 sure I know the answer in terms of --

3 CHMN. CHENAL: That's fine.

4 MR. DERSTINE: I understand what the  
5 long-term plan is. But in terms of timing and that  
6 sort of thing, I think it's best to have the witnesses  
7 respond.

8 CHMN. CHENAL: I'm perfectly acceptable with  
9 that. Just if the witnesses would address that in  
10 their presentation testimony, I think that would be  
11 helpful for us.

12 MR. DERSTINE: We'll make sure that's  
13 covered.

14 CHMN. CHENAL: Sure.

15 Any other questions from the Committee?

16 (No response.)

17 CHMN. CHENAL: Okay. Before we begin with  
18 swearing in the witnesses and proceeding with the  
19 testimony, are there any -- and I know we're going to  
20 have a member of the public provide public comment.  
21 But before we have that person come in, are there any  
22 other preliminary issues we should discuss before we  
23 actually start the hearing?

24 MR. DERSTINE: If you want to take the public  
25 comment now, which I think is entirely appropriate,

1 that member of the public and any other members of the  
2 public, whether they come out during the course of the  
3 day or at the scheduled public comment time at 5:30  
4 this evening, we have a separate room set up that has a  
5 remote video feed. They're essentially appearing by  
6 Zoom. And so they will not come into the hearing room,  
7 but we will hear them appear, and it's a room just  
8 outside of the hearing room where the members of the  
9 Committee and where we are located presently. So  
10 that's how that appearance will take place.

11 CHMN. CHENAL: Okay, very good. And if we  
12 can hear from that person now, I think that would be  
13 good. They've made the effort to get here to provide  
14 public comment, and I think we should hear it and not  
15 make them wait.

16 MEMBER NOLAND: Mr. Chairman.

17 CHMN. CHENAL: Member Noland.

18 MEMBER NOLAND: I'm really sorry, but I  
19 cannot hear you. It's hard enough with the masks; but  
20 when we have the volume down, I can't understand you.

21 CHMN. CHENAL: Okay.

22 MEMBER NOLAND: Much better.

23 CHMN. CHENAL: I think I know the problem. I  
24 heard one of the tech people say the microphone will be  
25 able to pick you up without the microphone being close

1 to your mouth, and I don't think that's working, at  
2 least with the masks. So I'll just bring the mic  
3 closer.

4 But if we could have that person appear by  
5 Zoom. And if I could also ask, Ms. Darling, to let me  
6 know if other people appear in the Zoom room to provide  
7 public comment, you know, as a courtesy, I don't want  
8 to make them wait until 5:30 tonight.

9 MS. DARLING: So she's on audio. She does  
10 not want to be on video.

11 MS. ZEGEER: Hello?

12 CHMN. CHENAL: Yes, ma'am. This is the time  
13 set for the hearing for the line siting for the  
14 application on Southline. And I understand that you  
15 would like to provide public comment, and we don't want  
16 you to have to wait until 5:30 tonight to do that, so  
17 we would like to hear what you have to say. And before  
18 you leave, if you could make sure to provide your  
19 contact information to the TEP representatives in the  
20 event you need to be notified, at a future date, of any  
21 changes to whatever orders are issued, we would  
22 appreciate that. So at this time, if you'd provide  
23 your comment, we're eager to hear what you have to say.

24 MS. ZEGEER: Hello. My name is Abreeza  
25 Zegeer. I am chair of the West Side Development

1 Neighborhood Association, which is located -- the  
2 northern boundaries are Starr Pass, southern boundaries  
3 is 44th Street, and that is to the west of La Cholla  
4 Boulevard, so that's in the Tumamoc area plan.

5           These WAPA lines run directly through the  
6 middle of my neighborhood. There's -- 50 years ago,  
7 there wasn't a housing development just south of Starr  
8 Pass; now, there is. Those WAPA lines are kind of  
9 fenced in by houses right now, and special care needs  
10 to be addressed when removing those lines and  
11 addressing the public in the area.

12           Further south, south of San Marcos Boulevard,  
13 the line runs along San Joaquin Avenue until -- it ends  
14 pretty much at 44th Street. Along that line, since  
15 they were installed, there are now water lines, gas  
16 lines, and some of these gas meters are actually right  
17 next to the existing WAPA poles and also fire hydrants.  
18 So my concern is -- with this development is, I don't  
19 want people in the area to lose their utilities. And I  
20 understand that you're having this flyover. Flyovers  
21 don't necessarily show you what it looks like on the  
22 ground. That specific area going through my  
23 neighborhood we're really concerned about.

24           Also, I'm concerned about how you're going to  
25 deal with the removal of the old wooden poles, which of

1 course have been treated 50 years ago with who knows  
2 what, and how you're going to dismantle them, contain  
3 the dust, and dispose of them, because they're  
4 potentially hazardous.

5           Also, little thing. I went through your  
6 exhibits, and Exhibit I, just want to find out -- on  
7 Pages 4 and 5 you show decreasing EMF strength with  
8 increased heights at the sag area. This is -- I  
9 understand that part of it. What I don't see is a  
10 comparison between, say, the 115 -- or, the 135 versus  
11 the 230 kilovolt as far as the EMF strengths at  
12 different heights and spread. So you show how it  
13 compares to a microwave oven, but you don't show how it  
14 compares to this is what it looks like now at 75 feet  
15 and this is what it's going to look like later.

16           Those comparisons would be very good for the  
17 public to see, because the people in my area, right  
18 along there, are going to be affected by those EMF  
19 fields as far as transmission, AM/FM radios, TV  
20 signals. Considering there's the Tumamoc Hill and A  
21 Mountain there, we've already got signals being  
22 blocked.

23           So those are a couple of my concerns. I did  
24 send in, via the comment form yesterday, a comment  
25 which has my information in it, and I'm also looking at



1 -- there might be certain property rights along there  
2 given that the WAPA line pretty much helped develop  
3 that part of the city. By simply putting in a dirt  
4 road, it gave people access to buy property and develop  
5 them.

6 And the maps that show the line that moves  
7 from Vail to Tortolita, it's a big fat line. And when  
8 you look at the map, it seems like that big fat line, I  
9 don't know, represents maybe a whole block or a hundred  
10 feet. And I understand -- I know exactly where the  
11 line is going through in my neighborhood. I know where  
12 it crosses from the north...

13 CHMN. CHENAL: We've lost the audio.

14 MS. ZEGEER: I think there's probably at  
15 least 15 H poles going through my neighborhood.

16 So thank you, and this has been very  
17 informative to sit here and listen to you all talk.  
18 Thanks.

19 CHMN. CHENAL: Thank you, ma'am, for your  
20 comments.

21 We don't normally ask any follow-up questions  
22 of the public; but if there are any, in this case I  
23 think I'll make an exception, from the Committee.

24 (No response.)

25 CHMN. CHENAL: All right. Thank you, ma'am,

1 for the comments. Very helpful. And I suggest that  
2 your concerns will be addressed by the witnesses in  
3 this case. I suspect a lot of your concerns would  
4 already be a part of the record they plan to make, but  
5 maybe you have prompted them to get into other areas.  
6 But I can assure you that those questions will be  
7 answered one way or the other, and we thank you for  
8 that.

9 So again, if I can ask Ms. Darling to let me  
10 know if there are other people that appear remotely for  
11 public comment. We'll take them maybe after a break or  
12 something and not have them wait until 5:30.

13 With that, if there's nothing else -- it's  
14 like a joint application, right, so I don't know who I  
15 should look at. I'm going to always look at Ms. Grabel  
16 first, okay?

17 MR. DERSTINE: That's a wise choice.

18 MS. GRABEL: That's a good idea.

19 CHMN. CHENAL: Yeah. I've got a nice big  
20 huge camera right in my way, but we'll move that at  
21 some point. But if you'd like to start, we'll be happy  
22 to swear your witnesses in.

23 MS. GRABEL: Certainly. Thank you, Chairman.

24 Yes, Southline would like to call Mr. Doug  
25 Patterson, who is going to be presented on a panel with

1 Mr. Ed Beck. And Mr. Derstine will, of course, take  
2 Mr. Beck's testimony, but perhaps it makes sense to  
3 swear them both in right now since they are on a panel.

4 MEMBER NOLAND: Mr. Chairman.

5 CHMN. CHENAL: Yes, Member Noland.

6 MEMBER NOLAND: Ms. Grabel, I'm having  
7 trouble understanding you. I know it's partially the  
8 mask, but you also talk very fast, especially when  
9 you're reading. So if you could just slow it down a  
10 little bit and just get a little closer to that  
11 microphone, then maybe I can understand you and maybe  
12 the court reporter won't have a difficult time  
13 understanding you.

14 MS. GRABEL: Certainly, Member Noland. Thank  
15 you.

16 CHMN. CHENAL: And if I can just ask the  
17 audio crew to just up the volume a little just  
18 generally. I just think that will be a little easier.  
19 Maybe it's just me, but I think because of the size of  
20 the room and the distancing, I just think it would be  
21 easier if we just had the volume upped. Thank you.

22 Mr. Patterson, Mr. Beck, do you prefer an  
23 oath or an affirmation?

24 MR. PATTERSON: Oath, please.

25 MR. BECK: Oath as well.

1 MS. DARLING: Our computer shut down, so I  
2 can't show the maps until it reboots.

3 MS. GRABEL: There we go.

4 CHMN. CHENAL: All right. Well, I'll swear  
5 the witnesses in. And if we have to wait to get the  
6 computer rebooted, we can do that.

7 So would you both raise your right hands.

8 (Doug Patterson and Ed Beck were duly sworn  
9 en masse by the Chairman.)

10 CHMN. CHENAL: Ms. Grabel.

11 MS. GRABEL: Are you guys good back there?

12 (No response.)

13

14 DOUG PATTERSON AND ED BECK,  
15 called as witnesses on behalf of the Joint Applicant,  
16 having been previously sworn en masse by the Chairman  
17 to speak the truth and nothing but the truth, were  
18 examined and testified as follows:

19

20 DIRECT EXAMINATION

21 BY MS. GRABEL:

22 Q. Mr. Patterson, will you please state your  
23 name and business address for the record.

24 A. (BY MR. PATTERSON) Good afternoon. My name  
25 is Doug Patterson. My business address is 55 Main

COASH & COASH, INC.  
www.coashandcoash.com

602-258-1440  
Phoenix, AZ

1 Street, 3rd Floor, Tiburon, California 94920.

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

4 A. (BY MR. PATTERSON) I'm employed by Black  
5 Forest Partners and I serve as the managing partner.

6 Q. Do you have before you a document labeled TEP  
7 Exhibit 2?

8 A. (BY MR. PATTERSON) I do.

9 Q. Have you seen this document before?

10 A. (BY MR. PATTERSON) I have.

11 Q. Please identify TEP-2 for the record.

12 A. (BY MR. PATTERSON) TEP-2 is a PowerPoint  
13 presentation that I put together for this proceeding.

14 Q. Was Exhibit TEP-2 prepared by you or under  
15 your direction and control?

16 A. (BY MR. PATTERSON) It was.

17 Q. Are the statements contained in Exhibit TEP-2  
18 true and correct, to the best of your knowledge?

19 A. (BY MR. PATTERSON) They are.

20 MS. GRABEL: At this time, Mr. Chairman, I'd  
21 like to move for the admission of Exhibit TEP-2.

22 CHMN. CHENAL: Caught me off guard,  
23 Ms. Grabel. We usually do this at the end, and I have  
24 my little checklist here ready to go, but we're going  
25 to do it just now.

1           TEP-2 has been moved for admission. Any  
2 objections?

3           (No response.)

4           CHMN. CHENAL: Hearing none, TEP-2 is  
5 admitted.

6           (Exhibit TEP-2 was admitted into evidence.)

7           MS. GRABEL: Thank you.

8 BY MS. GRABEL:

9           Q. Mr. Patterson, please go ahead and take us  
10 through your presentation, Exhibit TEP-2.

11          A. (BY MR. PATTERSON) Thank you. Good  
12 afternoon, Mr. Chairman, Members of the Committee.  
13 Nice to see many of you again and nice to meet those of  
14 you who I haven't had the chance to meet. Appreciate  
15 your time and attention in these difficult times for  
16 this proceeding.

17           Little background on myself. Education, I  
18 have a bachelor's degree from Dartmouth College, and  
19 I'm a chartered financial analyst.

20           I come from the investment background and  
21 have 28 years of investment and development experience.  
22 My initial career was with Goldman Sachs & Company,  
23 where I was managing director and managed a team of  
24 investment personnel. Focused on many areas, but did a  
25 lot of work in the utility and energy sector. I left

1 in 2007 to form -- entrepreneurial activity and formed  
2 Black Forest Partners, which is a private investment  
3 development firm focused on electric infrastructure,  
4 including transmission, efficiency, and storage.

5 One of the aspects that Black Forest  
6 participates in, particularly in Arizona, is in lots of  
7 transmission planning. We're a member of the  
8 WestConnect Planning Management Committee, which is a  
9 regional transmission planning body, the SWAT group,  
10 which is the Southwest Area Transmission group, another  
11 regional transmission body, and other transmission  
12 planning entities and efforts, including the Arizona  
13 Corporation Commission Biennial Transmission  
14 Assessment, or BTA, and the WECC, Western Electricity  
15 Coordinating Council.

16 I serve as president of Southline  
17 Transmission, L.L.C., which is the project company that  
18 owns Southline and is a co-applicant in this  
19 proceeding. Southline is owned by Hunt Transmission  
20 Services and Black Forest Partners, and Black Forest  
21 serves as the managing member of Southline for the  
22 company.

23 I previously testified before the Line Siting  
24 Committee in the CEC 173 case, and have also testified  
25 before the New Mexico Public Regulatory Commission for

1 Southline siting cases as well.

2 Outline of my testimony today is to provide  
3 an overview of the Southline project, sketch out a  
4 little bit of the history, particularly for those  
5 Committee Members who maybe weren't part of the  
6 previous proceeding, as well as update the Committee on  
7 the current status of the project.

8 I'd also like to speak about the relationship  
9 of the Vail to Tortolita project in relation to the  
10 overall Southline project, and particularly, from the  
11 Southline's perspective, the reason that Southline  
12 thought it made sense to sell its rights in the Vail to  
13 Tortolita portion of the project to Tucson Electric  
14 Power and what the plans are for the rest of the  
15 Southline project.

16 Finally, I'd just like to recap the reason  
17 for the proceedings of why we believe the amendment is  
18 needed for the Southline CEC.

19 So, an overview of Southline. And some of  
20 this has been hit previously by Ms. Grabel and  
21 Mr. Derstine. But zooming out, the Southline project  
22 is an independent project that would connect the New  
23 Mexico and Arizona systems. As described previously,  
24 it is envisioned as part of two segments, a new build  
25 segment that would connect the southern New Mexico



1 system just outside of El Paso, Texas and Las Cruces,  
2 New Mexico at an existing substation called Afton --  
3 and I'll take the pointer, which is -- Afton is here on  
4 the map, for those of you following along, and that is  
5 part of the existing high-voltage system in New Mexico.  
6 And then we'd build a new 345 kV system along southern  
7 New Mexico following the Interstate 10 corridor and  
8 following existing transmission line corridors until  
9 you come into the Arizona/New Mexico border, at which  
10 point it would continue on with a new 345 kV line to  
11 come into Apache, which is the outer edge of Western  
12 Area Power Administration's system, and would connect  
13 in at AEPCO -- Arizona G&T Co-op, or AEPCO's, Apache  
14 substation.

15           Whoops, sorry.

16           The other portion of the project is what we  
17 refer to as the upgrade, which would run from Apache to  
18 Sahuaro/Tortolita, which is in between Tucson and  
19 Phoenix just across the Pima County line just into  
20 Pinal County. And it's roughly 121 miles between  
21 Apache and Sahuaro/Tortolita, and that's the existing  
22 WAPA, or Western Area Power Administration, line that  
23 is referred to, an old 115 kV H-frame wood pole line  
24 that was built 60 years or so ago as part of the  
25 federal effort to deliver the federal hydropower from

1 the federal hydro system along the Colorado River to  
2 the outer reaches of Arizona in this case.

3           The Vail to Tortolita project is identified  
4 here, and I think the easiest way to think about it is  
5 it's really the western-most portion of the project  
6 geographically. Think of it as the 64 miles in the  
7 western-most portion of the line. It might be a little  
8 easier to see on this map on the left, which calls out  
9 here is Vail and here is Tortolita. So this map is  
10 just intended to try to give you all a sense of the  
11 overview of where this segment of the project is and  
12 how it fits into the overall project.

13           Backing up a little bit on Southline, the  
14 overall project was really conceived to meet multiple  
15 needs. The intent was to find something that could  
16 provide benefits to multiple parties, that could  
17 improve reliability, could relieve congestion, could  
18 support growth, and could facilitate access to  
19 renewable resources, and it also was looking to do so  
20 in a way that could minimize environmental impacts.  
21 And that's why we've pursued looking for opportunities  
22 to upgrade existing lines, to parallel existing  
23 corridors, and that has led to the ultimate route that  
24 was selected through the federal and then state  
25 processes. 85 percent of the overall route either

1 upgrades or parallels existing infrastructure, one of  
2 the main ways to reduce overall impacts.

3           So to continue on the history a little bit,  
4 the original project thesis was that there was a  
5 growing regional need for infrastructure investment,  
6 and our view was that there was an innovative  
7 opportunity to find solutions that could maximize  
8 benefits while minimizing impacts. We took that  
9 thesis, and particularly with the idea of were there  
10 opportunities to upgrade existing lines or parallel  
11 existing infrastructure in a way that could minimize  
12 impacts.

13           And the beginning of our process back in 2009  
14 really started in the planning world, and so we started  
15 meeting with the different utilities and the different  
16 transmission planning entities to talk about ideas.  
17 And one of the ideas that came out was, there had been  
18 previous studies and analysis of this southern Arizona  
19 system, and the WAPA line, this WAPA Apache to Sahuaro  
20 line, had been identified as really a weak link in the  
21 regional system. It was old, it was facing real  
22 maintenance needs, it was limiting in terms of  
23 operating and reliability criteria. And it ran through  
24 an area where really Tucson has grown up around it, and  
25 so the existing location of it is incredibly important.

1           Through those planning discussions, Southline  
2 worked with these different planning entities. And it  
3 was identified that that upgrade of the WAPA Apache to  
4 Sahuaro line was beneficial, but the justification for  
5 it wasn't -- it wasn't -- the individual utilities and  
6 entities couldn't justify building that line on their  
7 own at that time. And so the thesis that we had was to  
8 combine the upgrade of this existing WAPA line with a  
9 new line that would connect into the New Mexico system  
10 in an attempt to make more connections, deliver more  
11 value, find other uses that could help drive the  
12 overall project.

13           That basic concept is what we then started  
14 studying, worked with the underlying planning entities  
15 and the utilities, and that helped frame a plan of  
16 service. The basic core concept of the design that  
17 we've talked about so far, in terms of what the new  
18 build looked like, what the upgrade looked like, those  
19 kind of criteria really evolved out of this planning  
20 period from, call it, 2009 to 2011.

21           The results of that were taken into real  
22 technical studies where, with the utilities and with  
23 the WECC group that I mentioned before, there were a  
24 number of technical studies performed to identify what  
25 would be the impacts on the system, what was the ideal

1 type of configuration that should be pursued, what  
2 could physically actually be built in places like the  
3 upgrade of the WAPA line. And all of that work and all  
4 of that coordinated effort with the utilities is what  
5 then we took and started to initiate the permitting  
6 process.

7 For us, the permitting process really kicked  
8 off with a pre-NEPA outreach, and between 2009 and 2011  
9 we really started just going out, talking to different  
10 parties as a project. This is Southline as the  
11 proponent of this project. We went out to get input on  
12 routing, on all different aspects of the project. This  
13 was not part of an official permitting process yet, but  
14 we used that to then help determine what our -- as a  
15 proponent, what our proposed routing would be.

16 And we used that and then submitted an  
17 application, as referenced earlier, to the Bureau of  
18 Land Management for right-of-way across federal lands,  
19 as well as to WAPA with our proposal to work with WAPA  
20 to upgrade their existing federal line. That  
21 application kicked off what's referred to as the NEPA  
22 process, or the federal environmental review process,  
23 and that led to more formal engagement of scoping  
24 meetings, where there were public meetings to evaluate  
25 the line and its impacts.

1           And you will hear a lot more information  
2 about this -- about what was done in the federal  
3 process by the environmental panel later, but the  
4 scoping period basically kicked off in 2012. And then  
5 that feedback was taken back and the agencies reviewed  
6 that, along with all their other analysis, and the  
7 Draft Environmental Impact Statement was produced and  
8 published in 2014. Then comments were received on the  
9 Draft Environmental Impact Statement and incorporated,  
10 and then the Final Environmental Impact Statement was  
11 issued in 2015.

12           Those were the core documents that the  
13 federal agencies -- we had two joint federal agencies  
14 in charge of our review process, the Bureau of Land  
15 Management and Western Area Power Administration.  
16 Those two federal agencies made their decisions, their  
17 respective decisions, BLM whether to issue a  
18 right-of-way and WAPA on whether to pursue upgrading  
19 the project and the alignment for the upgrade portion,  
20 they made their decision -- a Record of Decision in  
21 2016. Following that decision is when we initiated our  
22 State process and -- thank you -- and initiated an  
23 application with the Line Siting Committee for a CEC  
24 for Southline.

25           Now, as has been referenced before, the core

1 principle -- commercial principle that Southline had  
2 been pursuing with Western Area Power Administration is  
3 that we would work with WAPA to help upgrade their  
4 line, but WAPA would remain the owner and operator of  
5 their existing line, and Southline would have  
6 transmission capacity rights in exchange for our  
7 capital contribution. And for us that worked because,  
8 you know, really what we're trying to do is find  
9 customers to drive the overall project and we had our  
10 new build section coming in from New Mexico and then  
11 working with WAPA to upgrade their existing line, that  
12 framework worked.

13           This map before you is the map that was  
14 submitted as part of the -- is one of the maps that was  
15 submitted in the CEC 173 application, and what this  
16 shows is the portions of the project that Southline  
17 submitted for a CEC in Case 173. This map is the full  
18 project coming in from the New Mexico border on the  
19 right-hand side all the way over to Sahuaro/Tortolita  
20 on the far left-hand side. And I know it's a little  
21 difficult to see, but this blue line is the new build  
22 part of the CEC going to Apache, and then there are  
23 some -- the CEC upgrade section, which are the new  
24 connections to the WAPA line.

25           If we could advance to the next map. Thank

1 you.

2 So this map is just a zoom in of what was  
3 referred to in CEC 173 as the CEC new build. And this  
4 begins at the Arizona and New Mexico border, and the  
5 new 345 kV double-circuit line comes in parallelling  
6 existing corridors and then comes down to the Apache  
7 substation. And so that was part of what was sought  
8 and granted for the CEC new build part of CEC 173.

9 Could you advance to the next map, please? I  
10 think the other -- yes. No, this is right.

11 And this is a zoom in of the upgrade section.  
12 And so the portions that were brought before the  
13 Committee for approval from the Southline CEC 173 case  
14 included the new connections to the WAPA system. Since  
15 the existing WAPA system was going to be owned by WAPA  
16 and would continue to be owned and operated by WAPA, we  
17 really didn't have the -- WAPA really -- it wasn't for  
18 us really to make that application, but the new  
19 portions of the project were certainly jurisdictional  
20 and we sought approval for those. And that included a  
21 new connection at Pantano, which is an Arizona G&T or  
22 AEPCO substation, and then three connections to TEP  
23 substations, the first at Vail, which was about --  
24 which is about 2 miles away from the existing WAPA  
25 line. So there was approval sought for a connection to



1 Vail, and Mr. Beck will have more to say about that,  
2 and then in the center of Tucson at the DeMoss Petrie  
3 substation and then at the outer end of the project  
4 that we've already spoken about at Tortolita. So those  
5 were the three -- or, those three TEP and the one AEPCO  
6 substation, those new connections were what was  
7 referred to in CEC 173 as the CEC upgrade portion.

8           The conclusion of the CEC 173 process was in  
9 2017, and then we went on to New Mexico and went before  
10 the New Mexico's siting process to get approval in New  
11 Mexico, which was -- which was also granted in 2017.

12           In parallel with these efforts, one of the  
13 core efforts has been the commercial process for  
14 Southline. As mentioned, Southline is an independent  
15 project, and it really -- for Southline to be built, it  
16 has to be -- have commercial commitments from parties  
17 who want to use the line and who will be willing to pay  
18 for the line. And as part of that, we had to seek an  
19 authorization from FERC, the Federal Energy Regulatory  
20 Commission, to really give us the authority to pursue  
21 that type of authorization, which we did in 2015.

22           And then we initiated an open solicitation  
23 for Southline, and really what that was for,  
24 Southline -- for the capacity on Southline, the use of  
25 Southline. And we had kicked that process off in 2016,

1 and that was running in parallel, some of you may  
2 recall, when we were before the Committee back in 2016.  
3 And so we were in process, having discussions with  
4 parties on who wanted to use the line and how, and at  
5 that time -- and Mr. Beck can speak more to that -- but  
6 some of you may recall that TEP had mentioned that they  
7 had interest in the project, and particularly had noted  
8 the area that ran through Tucson, what we're now  
9 referring to as Vail to Tortolita, although they were  
10 evaluating the overall project as well.

11           So moving on -- so that kind of catches us  
12 up, I think, to where we were in 2016 when we were  
13 before the Committee last. What we've been doing since  
14 then, the project has been doing a number of  
15 preconstruction activities, working with underlying  
16 utilities that we interconnect with, in New Mexico that  
17 is El Paso Electric, and then in Arizona with Arizona  
18 G&T Cooperative or AEPCO, as well as TEP and WAPA, of  
19 course, have been working on some of the preliminary  
20 design work and working on some of the associated lands  
21 work, for example, rights of entry in order to perform  
22 surveys and that type of work. But really one of the  
23 main activities that we've been focused on are lining  
24 up the commercial arrangements to move the project  
25 forward.

1           As I mentioned, the open solicitation  
2 discussions had kicked off in 2016, and TEP had  
3 indicated interest. We had also received an indication  
4 of interest from a wind developer who was looking to  
5 build a large wind project in eastern New Mexico that  
6 would use the existing El Paso system to reach  
7 Southline, and then Southline would help deliver that  
8 project to the markets. That party really needed to  
9 make a 2020 in-service date to make the larger project  
10 work. And there was interest that the project -- the  
11 wind project provided some really interesting and  
12 compelling products in terms of a wind resource that  
13 really fits in well and complements existing Arizona  
14 solar and other resources.

15           And so Southline and TEP and this wind  
16 developer engaged in some exploratory three-way  
17 discussions; but as we went on, it became clear that  
18 2020 was going to be a challenge to get the  
19 transmission side in place. It was a challenge for  
20 multiple different purposes. There were technical  
21 challenges in terms of what would be needed to get  
22 across the existing system to Southline in that time  
23 period, but there were also commercial challenges in  
24 terms of lining up -- that it would require a big  
25 project, a big project on the wind side, as well as

1 additional users on the transmission side.

2 Lining all that up at the same time became  
3 challenging to meet a 2020 in-service date, and yet --  
4 and I'll defer to Mr. Beck on this, but the wind was  
5 very compelling for TEP and its customers, and they  
6 agreed with the wind developer to continue to explore  
7 it. And they looked into ways, could they access that  
8 wind using the existing system, and they were able to  
9 access that in a smaller project, using an existing  
10 system, in order to make a 2020 time frame. So TEP and  
11 the wind developer moved forward with that and really  
12 led to the Oso Grande wind farm that you may have read  
13 about, but I'll defer to Mr. Beck to discuss.

14 But then in parallel, TEP and Southline  
15 continued discussions on Southline, and in particular  
16 the portion of the project that parallels the existing  
17 system in Arizona where it could be used for the  
18 benefits, the reliability and operating side, and other  
19 aspects that Mr. Beck will be able to amplify.

20 So the relationship of Southline to the Vail  
21 to Tortolita project is an aspect I wanted to touch on  
22 a little bit. From Southline's perspective, the reason  
23 for Southline selling this segment to TEP and not  
24 pursuing the overall project -- there are a number of  
25 aspects here. First, we really view this as the

1 initial phase for the overall project, from our  
2 perspective, and really it's one of the critical  
3 elements where the system needs this to get into place  
4 and really it's the highest priority. And essentially,  
5 it was an element that was ready to go, where the rest  
6 of the project still needs work. It's still in the  
7 development phase.

8           The concept of selling this project, as  
9 opposed to talking with TEP about TEP using  
10 Southline -- which, if you recall, when I was  
11 describing the open solicitation process, that process  
12 was really framed where Southline was seeking customers  
13 for the use of Southline. But as the discussions  
14 evolved with TEP, and in particular when we were zoning  
15 in on this portion of the project that really is right  
16 in the heart of TEP's system, TEP was clear, and  
17 Mr. Beck can elaborate on this more on the reasons, but  
18 TEP owning and operating part of that line made a lot  
19 more sense for TEP. And so we looked for ways to  
20 essentially restructure, and that's what led to the  
21 exploring the sale of the portion of this project, as  
22 opposed to looking at the use of capacity on the part  
23 of this project.

24           So that leaves the remaining part of  
25 Southline, which would run from Afton to Apache to

1 Vail, and we continue to advance that project and  
2 continue to develop that project and it's very much  
3 alive and we're very much pushing that ahead and very  
4 much believe that that will come into service and  
5 provide lots of value to the region. The fundamentals  
6 continue to improve --

7 CHMN. CHENAL: Member Noland.

8 MEMBER NOLAND: Thank you. Mr. Patterson,  
9 quick question. And I don't mean to interrupt your  
10 flow.

11 MR. PATTERSON: Sure.

12 MEMBER NOLAND: Have you sought any amendment  
13 to your plans in New Mexico?

14 MR. PATTERSON: No, we haven't sought any  
15 amendment to our plans in New Mexico at this time.

16 MEMBER NOLAND: I thought I remembered a  
17 portion -- the original application in New Mexico was  
18 going to go from the northern portion and a wind farm  
19 there down to the line that ran east -- or, westward  
20 into Arizona. Is that correct?

21 MR. PATTERSON: Member Noland, I think you  
22 might be confusing Southline with the SunZia project.

23 MEMBER NOLAND: You're right, I am. Yes,  
24 you're absolutely right, I am. Part of that came down  
25 almost in the same area, correct, to go westward?

1 MR. PATTERSON: Correct. Correct.

2 MEMBER NOLAND: Okay, I am. Thank you.

3 MR. PATTERSON: In a couple other slides I'll  
4 show you a map, and I could point that out for you just  
5 to clarify where the two projects are, if that would be  
6 helpful.

7 MEMBER NOLAND: Perfect. Thank you.

8 MR. PATTERSON: Sure.

9 So the remaining part of Southline will  
10 continue to advance. From our perspective, the  
11 fundamentals continue to improve: There's increased  
12 demand, and the costs of renewables and storage  
13 continue to decline; there are very supportive regional  
14 and national policies momentum; regional coordination  
15 benefits, we believe the project will -- or, could help  
16 provide additional coordination benefits to the region  
17 over time; there's a lot of infrastructure policy  
18 momentum, we believe, headed our way; and different  
19 changes in regional utility ownership and organization  
20 changes, we think, lead to opportunities to look for  
21 coordination between parties. And really we see our  
22 role as trying to do things that maybe the existing  
23 entities can't do, and so we're trying to bridge gaps  
24 between utilities, and we think that that pace  
25 continues. As well as, over time, if there's a

1 movement to markets or development of the energy  
2 imbalance market and other factors like that, we think  
3 that Southline can help provide an option to different  
4 parties in the area.

5 All of that really is just support or  
6 information to help you understand our perspective that  
7 we are pursuing the Vail to Tortolita project with TEP  
8 because it's ready to move to construction and they can  
9 really make it happen and the benefits really can  
10 accrue to TEP's customer and to WAPA and to the system;  
11 meanwhile, we'll continue to pursue the rest of  
12 Southline, and we are pursuing the commercial  
13 commitments necessary to really move that portion of  
14 the project from development to the construction stage.

15 Could you advance the map to Map Number --  
16 actually, yeah, let me just touch on that one real  
17 quick, briefly.

18 Just backing up a moment, talking about the  
19 overall Southline project and what it's focused on,  
20 this, just briefly, is a map of renewable resources,  
21 wind on the left, solar on the right. There's a really  
22 tremendous wind resource. The wind resource that we  
23 were talking about, for example, that TEP is accessing  
24 using the existing system over here in this purple is  
25 really attractive. There is some good wind here along



1 where Southline would run here, as well as using the  
2 existing system to bring it in from New Mexico,  
3 possibly even west Texas. And then the solar corridor,  
4 really this whole entire area from New Mexico through  
5 Arizona, is just -- it is the best solar in the country  
6 and just -- and that's exactly where Southline runs.

7           Could you advance to the next map, please?

8           And Member Noland, I'll hit your question on  
9 this map as well.

10           What this map shows is the existing  
11 extra-high-voltage system in New Mexico on the right  
12 and Arizona on the left. The color schemes are  
13 different voltages, but really this doesn't really show  
14 the lower kind of 115, 138, and below. This is -- and  
15 doesn't really show much of the 230, I don't believe.  
16 But essentially, what this is trying to depict is how  
17 Southline ties into the existing system.

18           Here is Afton, where the cursor is, at the  
19 edge of the -- or, here outside of El Paso and Las  
20 Cruces, would tie into the existing 345 kV system, run  
21 parallel to it until you get over to Apache. This  
22 is -- this green corridor, that's the new build  
23 Southline. And then the upgrade portion of Southline  
24 would go from Apache, in this blue corridor, to  
25 Tortolita. And the Vail to Tortolita section is called

1 out with this little triangular shape here and runs  
2 from Vail to Tortolita.

3 And Mr. Beck will elaborate on this too, but  
4 one of the important parts of this project technically  
5 is that it's really tying together the high-voltage  
6 system. You can see the gap, really, here. And of  
7 course, TEP's local system is in here. But it helps  
8 provide really an important bridge there.

9 And Member Noland, just to touch on your  
10 question, so Southline runs from here across, you know,  
11 really the southern portion of the state. The SunZia  
12 project is targeting wind up in this region of central  
13 New Mexico and is looking to build new transmission  
14 down. We would be in a similar corridor from kind of  
15 the Deming area until the state line. And then they  
16 continue to go across, I believe, and then we would  
17 head south and upgrade the existing system, whereas I  
18 believe the SunZia project goes through Cascabel and  
19 some areas here. But anyway, I don't know if that  
20 answers your question, Member Noland.

21 MEMBER NOLAND: It does, thank you.

22 MR. PATTERSON: Sure.

23 So just to talk a little bit about the reason  
24 for Southline's CEC amendment, and this has been hit by  
25 Ms. Grabel and Mr. Derstine, but essentially, and I'm

1 sure we'll have lots of discussion around this, it  
2 revolves around this construct with WAPA that we talked  
3 about before where WAPA was the owner of the upgrade  
4 line today, it would be the owner of the upgrade line  
5 in the future under Southline's CEC 173 case, and  
6 Southline would just have rights. And through that  
7 discussion in CEC 173, Condition 31 was put in place,  
8 which really conditioned the certificate on WAPA owning  
9 and operating all of this upgrade section.

10 And so because that's how the Committee heard  
11 it and that's what the condition was, that's really why  
12 we need to amend the CEC in order to really accommodate  
13 this different structure where, as I had mentioned  
14 before, previously Southline -- WAPA would be the owner  
15 and Southline would have capacity rights. What TEP and  
16 WAPA are looking to do is have joint ownership where  
17 they each own one of the circuits. And so under that,  
18 it would require an amendment to Condition 31.

19 But I think one of the things that's  
20 important and was made -- point was made previously as  
21 well was that while the CEC 173 process did not --  
22 while the process didn't cover the Vail to Tortolita  
23 segment from the certificate perspective, it is  
24 important to note that all of the environmental work  
25 and analysis that was done to route and site and

1 determine appropriate mitigations for the project  
2 through the federal process, all of that was done for  
3 the whole project, including the Vail to Tortolita  
4 project.

5           And so the Vail to Tortolita portion had gone  
6 through a very extensive multiple-year environmental  
7 review and engagement with feedback to reach those  
8 conclusions. And so in addition to the new and  
9 supplemental work that other witnesses will take you  
10 through -- but just to make the point that while  
11 process-wise Vail to Tortolita wasn't covered,  
12 fundamentally, from the analytical approach and  
13 analysis, it was through the federal process.

14           And then could we go to the last -- yeah, the  
15 photo. Is there any way to make this bigger?

16           So I just wanted to close -- this is a photo  
17 of the existing WAPA line outside -- in Tucson on, I  
18 believe, Silver Bell Road. And you can see in the  
19 distance some of the wooden H-frame existing poles --  
20 H-frame poles, and then this is an example of a steel  
21 monopole pole that has been replaced, similar to the  
22 design that we're looking to replace this with.

23           And to me, this -- and you'll hear from other  
24 witnesses. Mr. Beck will have some additional  
25 technical and other comments on the design, and our

1 environmental panel will have a lot more information on  
2 the visual simulations and talking about the visual  
3 impacts. But to me, this picture kind of tells a  
4 million words in that -- what are we trying to do? I  
5 mean, really what the project is looking to do is  
6 replace this old wood H-frame structure with this new  
7 double-circuit design in the same right-of-way. And  
8 what does that do? Why do you want to do that?

9 Well, the existing H-frame old 115 kV line  
10 has about 120 megawatts of capacity; this new line  
11 could ultimately support something closer to a thousand  
12 megawatts. And so in the same right-of-way, you can  
13 essentially get almost eight times the amount of  
14 capability in a corridor that's running through key  
15 portions of Arizona and of Tucson, you know, and really  
16 improve this structural strategic backbone of the  
17 area's infrastructure.

18 But it's not without impacts, and this also  
19 raises -- Mr. Derstine made the comment, there will  
20 be -- there will be impacts. I think it's a question  
21 of weighing those impacts. Clearly, these poles will  
22 be taller. But there's a trade-off, I think, to be  
23 made. And when you think about what this will do, and  
24 Mr. Beck can speak to this as well, but this has the  
25 potential to help defer other projects and really

1 provide a buttress and support to this critical  
2 infrastructure.

3           One of the things that's worth mentioning is  
4 this WAPA line, as mentioned, really originally came  
5 from delivering the federal hydropower from the federal  
6 hydro system along the Colorado River and really, in  
7 some ways, is at the nexus of the water and power  
8 infrastructure that's been so critical to this region's  
9 growth and development. This is an important backbone  
10 that, for a very long period of time in the future,  
11 could help sustain and drive progress and growth and do  
12 so in a way that -- it's not that it doesn't have any  
13 impacts. It's just that it has impacts minimized  
14 relative to the benefits, from our perspective.

15           And so with that, I think the only other  
16 point to make is that I think -- so we think there's an  
17 opportunity to replace this old line, improve the  
18 structure, provide a lot of benefits. I think there's  
19 also an opportunity here -- this new structure,  
20 ownership structure -- for the Committee and the  
21 Commission itself, actually -- if we don't go down this  
22 path, if Southline can't sell our rights in the project  
23 to TEP and if TEP can't own part of the circuit with  
24 WAPA, that doesn't mean that this won't happen anyway  
25 at some point. WAPA will have to determine on its own

1 at what point it needs to upgrade that line. I can't  
2 tell you exactly when, but at some point those old  
3 lines will need to be upgraded; and if that's the case,  
4 then they can probably just move ahead under their own  
5 federal process. And so I believe that there's also an  
6 opportunity for --

7 I know there was a lot of discussion in the  
8 last proceeding where the Committee had interest in  
9 this portion of the line, but it really wasn't  
10 jurisdictional. And I think that there was some  
11 frustration, for lack of a better word, for that. I  
12 think this is an opportunity to -- for the project to  
13 be built and to be built in a way that takes into  
14 consideration the thoughtful conditions and evaluation  
15 that had gone on for the balance of the project that  
16 was jurisdictional; and as has been mentioned before,  
17 TEP is proposing to implement those conditions. And so  
18 I think that's a real opportunity here to incorporate  
19 those local state guidelines -- not guidelines, but  
20 requirements into a project that may not otherwise  
21 utilize those if it doesn't happen.

22 So with that, that was the end of my prepared  
23 remarks, but I'm happy to take any questions or clarify  
24 anything.

25 CHMN. CHENAL: Member Haenichen.

1 MEMBER HAENICHEN: Thank you.

2 Mr. Patterson, you may or may not remember, I  
3 was a Member of the Committee on the other case. And I  
4 have a couple of questions regarding the thought  
5 processes that we went through at that time.

6 In particular, how did you address the  
7 question of voltage; in other words, going to 230, as  
8 opposed to a higher voltage, which would have been a  
9 lot more capacity? And then the corollary question to  
10 that is: Now, four years later, things are a lot  
11 different. The demographics in the west are changing,  
12 particularly with regard to what's happening in  
13 California. And I'm wondering if you rethought this  
14 now, while you had the opportunity, since you're  
15 replacing all these structures, of going to a higher  
16 voltage like 345 in order to get even more capacity for  
17 future use? Now, I understand that that costs somewhat  
18 more; although, the conductors wouldn't have to be  
19 sized that way.

20 But I'd just like you to answer this  
21 question: If you were rethinking the whole Southline  
22 project today, would you consider a higher voltage?

23 MR. PATTERSON: Sure. Member Haenichen,  
24 thank you for the question. I absolutely remember, and  
25 it's nice to see you again.



1           It's a good question, but my answer -- and,  
2 you know, it might be interesting to ask Mr. Beck for  
3 his perspective as well. But I don't think we would  
4 change it, and really the main requirements -- the  
5 voltage really evolved out of a number of factors.  
6 Part was looking at the studies of what would be  
7 needed, but a lot also came down to since this is  
8 WAPA's system and WAPA's plan, in other areas they've  
9 already moved to upgrade their 115 to 230. And so  
10 their overall plan, I think, ultimately would be to  
11 move all of their 115 to 230 kV, and so for them to  
12 have a voltage that was something different could be  
13 problematic. That was one consideration.

14           But particularly in this area, for the Vail  
15 to Tortolita, a bigger consideration to not go with a  
16 higher voltage is the size. Really it was determined  
17 that this double-circuit 230 was really what could work  
18 within the existing corridor. And so in order to  
19 minimize impacts and not have to try to go out and get  
20 additional right-of-way and create additional impact on  
21 residences or landowners, the analysis really was that  
22 a double-circuit 230 was as big as they thought they  
23 could put through their corridor from WAPA's  
24 perspective. Now, maybe out in some of the other areas  
25 where it's more rural, maybe something else could be --

1 physically could be built, but then you still have that  
2 standard question of the different voltages.

3 But that's my perspective on it, so I don't  
4 think I would change it even if I had the opportunity.  
5 But, you know, it might be interesting to hear  
6 Mr. Beck's perspective on that as well.

7 MEMBER HAENICHEN: Help me understand the  
8 right-of-way issue. Why would it take more studying on  
9 that question to go to 345?

10 MR. PATTERSON: Well, as I understand it, and  
11 Mr. Beck can probably answer this better than me, but  
12 either we'd need higher right-of-way or much taller  
13 towers to bring 345 through that area. That's my  
14 understanding.

15 MEMBER HAENICHEN: Would you be afraid of  
16 viewshed issues with the higher structures?

17 MR. PATTERSON: Well, I think given the urban  
18 nature of a good portion of this project, I would. I'd  
19 be -- I'd be concerned about adding incremental visual  
20 impacts and physical impacts to residences with bigger  
21 structures than these.

22 MEMBER HAENICHEN: Well, thank you for that.  
23 And later on, when Mr. Beck testifies, I'd like you to  
24 answer the same question. Thank you, sir.

25 CHMN. CHENAL: Mr. Patterson, kind of a

1 follow-up question to what I had asked before. And  
2 maybe Mr. Beck is the better witness to ask the  
3 question. But what, if you know, is WAPA intending to  
4 do with their portion of the line that's not being  
5 taken over by -- being acquired or purchased by TEP?

6 MR. BECK: Mr. Chairman, our discussions with  
7 Western are along the lines that as this line gets  
8 built, the existing line will be wrecked out and  
9 removed. So the existing structures go away, and they  
10 get replaced by the new single pole structures. Where  
11 the reroutes are -- that, we will talk about in further  
12 testimony. Where the reroutes occur, we will build the  
13 new portion and then wreck out the old. Where we're  
14 building in the existing right-of-way and utilizing  
15 that right-of-way, we're going to have to coordinate  
16 what goes in and out together, because it will be done  
17 more or less simultaneously.

18 CHMN. CHENAL: Okay. And that answers the  
19 question I asked, because my question wasn't properly  
20 asked. What I'm asking is: Except for the 64-mile  
21 segment that's under consideration here, for the  
22 remaining portion of the WAPA line, what is happening  
23 to that?

24 MR. BECK: So Mr. Chairman, again, they are  
25 still working with Southline and relying on the

1 potential for the further balance of the Southline  
2 project to go forward. And if that can happen,  
3 Southline will be financing that rebuild of those  
4 structures.

5 At some point, and it's indeterminate at this  
6 point whether it's the next year or next five years,  
7 the old poles are getting to the point where they're in  
8 jeopardy. And Western has really slowed down their  
9 maintenance, with the anticipation they were going to  
10 rebuild the line through the Southline process. But  
11 they're reaching a point where they're going to be  
12 identifying poles that are in imminent danger of  
13 failure, and they're going to go out and start  
14 replacing those.

15 And to your point, I think the question is:  
16 Do they replace them as a double-circuit structure or a  
17 single-circuit? They're going to look very similar.  
18 The pole that's actually on the screen right now on  
19 that left picture was replaced as a double-circuit pole  
20 as part of the anticipation of Southline.

21 Now, if Southline -- on the balance of the  
22 project, if Southline doesn't go forward, it's not  
23 likely Western is going to pay to put in double-circuit  
24 poles, because all of that cost will go to their  
25 existing customer base. And that's why they haven't

1 gone to 230 at this point on their system is they  
2 cannot convince their customers the value exists for  
3 increasing to 230 kV. The basics for the Western  
4 system is, it's funded by the preference power  
5 customers. Preference power customers are those that  
6 are nonprofit organizations. And in the Western  
7 organizational structure, they have a requirement to  
8 provide preference to those customers. And so all of  
9 that preference power is basically spoken for; those  
10 customers have the capacity they need; they see no  
11 value in increasing it. And without having commitments  
12 from other users to go beyond that level, they can't  
13 get a source of funding for the 230 conversion.

14 But where they replace poles piecemeal, they  
15 do put them in as 230 kV single-circuit structures.

16 CHMN. CHENAL: Good. I understand that.

17 Can we go back to a map of Apache to  
18 Tortolita?

19 MS. DARLING: Do you want more detail?

20 CHMN. CHENAL: That's probably good.

21 Oh, this is horrifying. My trusty laser is  
22 not working.

23 So I guess I'm trying to get a chronology  
24 here from Apache to Tortolita. And I understand this  
25 project is Vail to Tortolita. It's presently a --

1 thank you. So the existing WAPA line is what?

2 MR. PATTERSON: Is a 115 kV H-frame that runs  
3 from Apache to Sahuaro/Tortolita area.

4 CHMN. CHENAL: And single-circuit or  
5 double-circuit?

6 MR. PATTERSON: It's a single-circuit, wooden  
7 pole H-frame.

8 CHMN. CHENAL: So if TEP wants to install or  
9 construct the structures for a 230 kV line from Vail to  
10 Tortolita, I mean, they can't upgrade to 230, can it?  
11 Can Tucson Electric upgrade to 230 before the Apache to  
12 Vail line becomes 230?

13 MR. BECK: So Mr. Chairman, the proposal that  
14 we have with Western is that we would build a  
15 double-circuit 230 kV capable transmission -- two  
16 lines, two circuits. The TEP circuit would be operated  
17 at 230 between Vail, DeMoss Petrie, and Tortolita,  
18 where it's connected to the TEP system. We'll have  
19 transformation to get to the 230 on our system. The  
20 Western circuit would be operated at 115 kV until the  
21 future when they can get their customers to pay for the  
22 transformation to go up to 230.

23 MR. PATTERSON: But the conductor would be  
24 230 capable.

25 CHMN. CHENAL: Okay. So I guess you're

1 answering my question. But the WAPA line from Apache  
2 to Vail is going to be 115 kV, and then at Vail  
3 transferred up to 230 for the TEP line from Vail to  
4 Tortolita?

5 MR. BECK: For the TEP line it would be built  
6 to and operated at 230. The other circuit would be  
7 capable of operation at 230, but it would still  
8 continue as 115 until such time as Western were to put  
9 transformation at any one of their subs between Vail  
10 and Tortolita. So they could take a section of that  
11 new line and operate at 230 if they put the  
12 transformation in. Their initial plan, at this time,  
13 is not to do that. They just want that 230 capability  
14 for future growth on their system.

15 CHMN. CHENAL: And any power coming in from  
16 Apache -- or, on the WAPA line to Vail is at 115 kV,  
17 and that power would need to be transferred up to 230  
18 to continue on the TEP line from Vail to Tortolita?

19 MR. BECK: So there will be no  
20 interconnection, at this point, between the Western  
21 line and the TEP circuit.

22 CHMN. CHENAL: Okay. All right. Sorry.  
23 That answers the question. I had the idea in my head  
24 that it was very linear and it just goes from one and  
25 then continues on, and that was stumbling me up a

1 little. So now I understand. There's no  
2 interconnection between the two lines?

3 MR. BECK: Right. There will be two linear  
4 parallel circuits.

5 CHMN. CHENAL: Member Haenichen.

6 MEMBER HAENICHEN: Just so I'm clear on the  
7 WAPA part. After this is all built, you said it would  
8 be 230 capable. Does that include the lines and the  
9 insulators and everything, they can just simply change  
10 the transformer?

11 MR. BECK: They'll have to change  
12 transformation at each of their connecting points. So  
13 for example, their line today -- there's some real  
14 nuances in how their system is connected. But up until  
15 very recently, it connected at Sahuaro and then it hit  
16 several substations on the way down.

17 And when I get into my PowerPoints, you're  
18 going to see some of those substations. It will be  
19 helpful to explain at that time.

20 But they could put transformation in at any  
21 of those substations, which they are doing at Tucson  
22 station. They did that in anticipation of the  
23 Southline project, because they were building -- or,  
24 expanding Tucson station. If they put transformation  
25 at one of the other substations at the end of that



1 portion of their circuit, they could operate that  
2 portion at 230. But for the time being, they intend to  
3 just leave it at the 115 kV level.

4 MEMBER HAENICHEN: But the insulators have to  
5 be different than 115 insulators, don't they?

6 MR. BECK: They will be 230 kV insulators.

7 MEMBER HAENICHEN: Okay. That was my  
8 question.

9 MR. BECK: So arguably overbuilt for a 115  
10 operation, but they're prepared for the future.

11 MEMBER HAENICHEN: I understand. Thank you.

12 CHMN. CHENAL: Member Noland.

13 MEMBER NOLAND: Thank you.

14 Mr. Beck, as I said earlier, it's good to see  
15 you back again. We knew you wouldn't go away forever.

16 The statement was made that the WAPA  
17 customers did not want to pay for an upgraded line. So  
18 are Tucson customers going to be paying for the  
19 upgraded line for WAPA?

20 MR. BECK: Effectively, in the end, that is  
21 the case. Our customers will pay a little bit of  
22 incremental cost on their bills that is actually  
23 rebuilding that Western line. But the alternative for  
24 TEP to build a standalone line of its own, whether it  
25 be 138 or 230, it's still a benefit to us to utilize

1 that Western alignment.

2 MEMBER NOLAND: Well, when and if WAPA  
3 increases their lines, will there be any payback to the  
4 Tucson Electric that can be given back to the  
5 customers?

6 MR. BECK: That's not anticipated at this  
7 time. So again, it's cost beneficial to TEP to utilize  
8 that Western right-of-way and alignment versus building  
9 its own line, but there is a cost to doing it.

10 MEMBER NOLAND: You know, my biggest concern,  
11 and I really don't see this as a huge part of it, is  
12 that Arizona customers and Tucson customers pay for  
13 somebody else's lack or inability to increase their  
14 lines, and that it also then eventually then ends up  
15 going to California that can't seem to handle anything  
16 that their electrical system. And, you know, I just --  
17 there's got to be a point where we say, if you want  
18 this, you're going to have to pay for it, and it's  
19 going to have to have some kind of rebate to the people  
20 that paid for it in the first place. And that's just  
21 my statement. You don't have to make a comment to  
22 that.

23 One last thing. If you would mention during  
24 your presentation how the taller monopoles will be  
25 spaced as compared to the current poles, going back to

1 our public comment on the concerns with the poles and  
2 the new poles and the dismantling of the old poles. If  
3 I remember right, and we've talked about this before,  
4 there should be fewer of the monopoles because they are  
5 of greater height?

6 MR. BECK: That's true, and I will touch on  
7 that.

8 MEMBER NOLAND: Touch on that, please,  
9 because I think that will be important for the public  
10 to know about and the Commission. Thank you.

11 CHMN. CHENAL: Any other questions at this  
12 time from the other Members that are appearing  
13 remotely?

14 (No response.)

15 CHMN. CHENAL: If not, maybe this is a --  
16 there may be some follow-up questions of Mr. Patterson,  
17 but maybe this is a good time to take our afternoon  
18 break. It's actually a little later than we would  
19 normally take it, but I didn't want to interrupt the  
20 flow of the questioning. I thought it was very good.  
21 So why don't we take our 20-minute break and we'll come  
22 back around 3:30 and resume.

23 (Off the record from 3:09 p.m. to 3:42 p.m.)

24 CHMN. CHENAL: Let's resume the afternoon  
25 session. And when last we left, Mr. Patterson had, I

1 believe, completed his initial questions, but there may  
2 be some follow-up questions.

3 Ms. Grabel.

4 MS. GRABEL: No further questions from me,  
5 Chairman.

6 CHMN. CHENAL: Okay. Well, you know how that  
7 works, Mr. Patterson. It's like Hotel California; your  
8 testimony is finished, but it's not finished.

9 Okay. Mr. Derstine, do you have any -- are  
10 you going to ask questions of Mr. Beck at this time?

11 MR. DERSTINE: That's our next chapter in the  
12 hearing.

13 CHMN. CHENAL: That would be fine. And I  
14 think we need the volumes turned up, if you don't mind.  
15 Yes, Mr. Derstine's for sure.

16 MR. DERSTINE: Mr. Chairman, I didn't know if  
17 you wanted the record to reflect Member Gentles.

18 CHMN. CHENAL: Yes, thank you. Member  
19 Gentles is here present in person, but he had been  
20 listening on the Zoom remotely for most of the morning  
21 -- most of the hearing this afternoon.

22 Okay. Mr. Derstine.

23 MR. DERSTINE: Thank you.

24 ///

25 ///

1 DIRECT EXAMINATION

2 BY MR. DERSTINE:

3 Q. Mr. Beck, you've been sworn, but for the  
4 record, why don't you go ahead and restate your name.

5 A. (BY MR. BECK) Ed Beck.

6 Q. And Mr. Beck, you're retired. I don't know  
7 that you have a business address. I don't know if you  
8 want to give the address for your workshop or who sits  
9 at your desk back at TEP. If you have an address, go  
10 ahead and give it.

11 A. (BY MR. BECK) My address is 7641 North  
12 Camino De Maximillian -- and it's always tough to fit  
13 it on an address line -- Tucson, Arizona.

14 Q. All right. We're looking -- on the right  
15 screen here in the hearing room is your education and  
16 experience.

17 Before we start with that, you have a slide  
18 presentation that you've prepared. It's marked as TEP  
19 Exhibit 1. And you're going to be using that to  
20 support and supplement your testimony, is that right?

21 A. (BY MR. BECK) Yes, I am.

22 Q. And I think there are a couple slides where  
23 you're going to make a correction to a corridor width  
24 or some other information, but we'll do those as we  
25 move through your presentation. Is that okay?

1 A. (BY MR. BECK) Yes, that's fine.

2 Q. Well, let's start with your education and  
3 experience, please.

4 A. (BY MR. BECK) I have a master's in business  
5 administration, as well as a bachelor of science in  
6 civil engineering from the U of A. I'm a member of the  
7 American Society of Civil Engineers and have over 41  
8 years of experience in the electric utility business.

9 Q. And you have testified before this Committee  
10 on a number of occasions?

11 A. (BY MR. BECK) Yes, I have.

12 Q. Now, the first section in your slide  
13 presentation is an overview of the WAPA and the TEP  
14 systems.

15 Before we go there, do you want to take a  
16 minute and address Member Haenichen's question about --  
17 and I may be not doing it justice, but I think it asked  
18 for some sort of an explanation or your viewpoint on  
19 working relationships for the private-public  
20 partnership with WAPA?

21 A. (BY MR. BECK) Yeah. Well, my understanding  
22 was, in general, knowledge of any working relationships  
23 with WAPA. Tucson Electric, in fact, has had several  
24 projects that we have worked together with Western on  
25 in the past. We worked with them on the rebuild of a

1 115 kV line through the northern part of Tucson. It  
2 would be quite similar to this project in that TEP paid  
3 for the rebuild, got the use of their right-of-way, we  
4 got our circuit, a 138 kV circuit, on the opposite side  
5 from their 115 kV line. At the time that project was  
6 taken forward, Western did not have plans for  
7 conversion to 230 -- this is many, many years ago --  
8 and so they were only looking to have that 115 kV line  
9 on their side. Worked very well with our 138, and we  
10 built that as a double-circuit.

11 We, in fact, built one segment of that from  
12 our Rillito sub to the La Canada sub, which is on  
13 La Canada Road in northern Tucson. That worked so well  
14 for us we continued on with a future project which went  
15 from La Canada up to Rancho Vistoso, which is on  
16 Tangerine Road in northern Tucson. And both of those  
17 segments were with Western Area Power.

18 We had a slightly different project, but  
19 again, it was a partnership with Western, on the south  
20 side of Tucson along Valencia Road where we had the  
21 need for a 46 kV line, but we wanted the ability to in  
22 the future convert that to a 138. Western needed to  
23 build a 115 kV line to serve the Central Arizona  
24 Project west of Tucson. And so we jointly -- went with  
25 a joint venture on that project in which the

1 right-of-way, in that case, is owned a hundred percent  
2 by Western, the structures in that case are owned a  
3 hundred percent by Western, but TEP owns its circuit,  
4 and that extends for approximately 15 miles on the  
5 south side of Tucson.

6 So we have had instances of working with  
7 Western on very, very similar projects to this in the  
8 past, and they have worked very well for us.

9 MR. DERSTINE: Member Haenichen, did that get  
10 to what you were asking?

11 MEMBER HAENICHEN: It did. Thank you.

12 BY MR. DERSTINE:

13 Q. All right. Mr. Beck, why don't you move  
14 forward with this first section of your presentation,  
15 overview of the WAPA and the TEP systems.

16 A. (BY MR. BECK) Okay. Just to give a little  
17 bit of background, you've heard a little bit about it  
18 from Mr. Patterson, but shown on the slide up on the  
19 screen is the Western Area Power what is called the  
20 Parker-Davis transmission system. It's all of these  
21 green lines that basically extend from the northwest  
22 part of Arizona, where the Parker-Davis Dam is, come  
23 down through the Phoenix area and beyond Tucson to the  
24 Apache station, which is where the Apache generating  
25 station of AEPCO is located. There is also a link of



1 that line that goes down to southwest Arizona.

2           Again, as I mentioned previously, this is all  
3 part of the Parker-Davis system that was built for  
4 preference power customers who had preference to the  
5 power coming out of the Davis Dam specifically. And  
6 for the most part, those consist of electric districts  
7 and other -- the nonprofit groups that extend through  
8 the area between Phoenix and Tucson surrounding  
9 Phoenix. Up there it's a lot of electric districts; in  
10 the Southern part, AEPCO has a piece of that. So those  
11 customers get preference power out of Parker-Davis, and  
12 they utilize this Western transmission system to get  
13 that power to them.

14           The Parker-Davis Dam is what it is; it's not  
15 growing or being expanded. So they're not adding any  
16 capacity, and so there's no driver to build capacity  
17 from that standpoint.

18           Western has their ultimate goal of building a  
19 230 -- or, upgrading to a 230 kV system for  
20 flexibility, but they're hard pressed to convince the  
21 customers to pay for that use of that system today to  
22 pay for that incremental cost of converting to 230. So  
23 as they replace poles under maintenance, they do put  
24 them in as a 230 kV because it's very minimal cost, and  
25 they're going to incur cost anyway; but where the poles

1 are working, they just leave them alone. And so that's  
2 why this portion of the project is a big opportunity to  
3 them, to get a 230 kV circuit out of the process.

4 Now, relative to the Western system, on the  
5 screen this purple line is indicative of the upgrade  
6 segment of the Southline project. So that extends all  
7 the way from Apache, again, in southeast Arizona, back  
8 up to the Sahuaro substation that is just across the  
9 Pinal County line.

10 There's some nuances in how the Western  
11 system is connected today. It originally tied into  
12 Sahuaro. Because of some overloading issues they had  
13 in the past couple of years, there was a  
14 reconfiguration, and so the line doesn't technically  
15 drop into Sahuaro. That line goes from Apache on up to  
16 an ED5 substation that's further up in Pinal County.

17 But if you look at that purple line, I'm  
18 going to click and you're going to see the smaller  
19 segment, which is the Vail to Tortolita project we're  
20 talking about in this case. This is the section that  
21 would be the 230 extending from the TEP Vail substation  
22 in southeast Tucson up across the Pinal County line to  
23 our Tortolita substation, which is right adjacent to  
24 the Sahuaro substation of APS.

25 Again, on the left side you see the overall

1 Southline transmission system map, just to give you  
2 context. That's the 360-mile-plus project.

3 Q. So Mr. Beck, when you're referencing the  
4 Tortolita substation and the Sahuaro substation, am I  
5 correct in understanding those two substations are  
6 located in close proximity to one another and the TEP  
7 circuit will terminate at TEP's Tortolita substation,  
8 the WAPA 230 circuit, which I think, from your  
9 testimony, will be energized at 115 kV, will then tie  
10 in at Sahuaro? Is that where it ties in?

11 A. (BY MR. BECK) I think that the current  
12 thinking of Western is they're still not going to tie  
13 that back into Sahuaro; instead, they're going to keep  
14 that going on up to the ED5 location.

15 So Sahuaro is on the east side of Interstate  
16 10, again, just across Pinal County line. And on the  
17 west side of Interstate 10, Western has severed the  
18 line that went into Sahuaro and tied it to be a  
19 continuous line up to ED5 in northern -- up towards the  
20 Phoenix area -- actually, in Eloy, basically. So I  
21 think they intend to keep that connectivity, as opposed  
22 to putting it back into Sahuaro.

23 But Sahuaro is 1 mile away from the Tortolita  
24 substation, and we would be -- TEP would be extending  
25 the line from that Western alignment over to the

1 Tortolita substation.

2 Q. All right, thank you.

3 A. (BY MR. BECK) And the next slide I brought  
4 up, this is, again, zooming in on the Vail to Tortolita  
5 project. So on this map, lower right-hand corner is  
6 the Vail substation. It's adjacent to the Pima County  
7 Fairgrounds. The Western line runs up south of  
8 Interstate 10, along the west side of Interstate 10,  
9 crosses Interstate 10 at Grant Road to get to their  
10 Tucson station, crosses back across I10 and heads in a  
11 northwesterly direction up into the Marana area, and  
12 then heads east to the Sahuaro area. So that,  
13 specifically, is the project we're talking about in  
14 this case.

15 Q. Can you go back? I'm sorry, Mr. Beck. Can  
16 you go back one slide?

17 A. (BY MR. BECK) One more?

18 Q. So this is Slide 5. No, I'm sorry. Advance  
19 one, please. Well, I was looking for the map you  
20 showed of the larger segment of the Vail to Tortolita  
21 project. That one. Thank you.

22 The blue, what's shown in blue there in those  
23 segments, talk about what we're seeing there.

24 A. (BY MR. BECK) So those are areas that we're  
25 going to talk about further in further slides, but

1 these are areas where we're deviating from the Western  
2 alignment. And in this one case at Vail, it's a  
3 proposed change in corridor width.

4 So the connections from the Western alignment  
5 to the TEP system were approved in the Case 173 CEC,  
6 those little tie lines. At Vail what was approved was  
7 that -- what is the left-hand side or westerly  
8 alignment there. Subsequent to the CEC process and  
9 discussions between Southline, TEP, and Western, as  
10 were developed in the interconnections, we realized  
11 that it would be better to go slightly east with that  
12 connection point.

13 So we're proposing, in this case, two options  
14 for connection; and as a result, we will propose a  
15 wider corridor in that strip. And there will be some  
16 detail on that coming up.

17 The next area in blue is this east/west piece  
18 right in the bottom right-hand quadrant of that map.  
19 That's along Old Vail Road alignment. And as I will  
20 discuss, it was at the request of Pima County and  
21 others that the alignment for Western be relocated  
22 there, and I'll talk about the reasons for that.

23 The next area is up right in here. It's  
24 Tumamoc Hill, which is a research facility of the  
25 University of Arizona, and jointly they work with Pima

1 County on a lot of research activity there. It's got  
2 some historic aspects to it, which you will hear about  
3 from our environmental consultants. In that area, the  
4 U of A, Pima County, and others requested that the  
5 alignment across Tumamoc, where it diagonaled through  
6 their property, be relocated, and I'll have a little  
7 more information on that in other slides.

8           And then as we head up to the northwest, up  
9 in the Marana area right in here, there's a little bit  
10 of blue which is a reroute that is proposed related to  
11 the Marana Regional Airport. And that was at the  
12 request of the Town of Marana, as well as the Regional  
13 Airport, plus we had input from the Army National  
14 Guard. And those -- the three reroutes, not the Vail  
15 piece at the bottom right, but the other three reroutes  
16 were all through the process -- the NEPA process that  
17 was done by Western as part of their environmental  
18 analysis.

19           Q. All right. Sorry to slow you down. I  
20 appreciate you talking through what's red and what's  
21 blue on that map.

22           A. (BY MR. BECK) Sure.

23           Q. So again, here is the map with the Western  
24 system, just highlighting the Vail to Tortolita segment  
25 down in blue right there. And then adding on top of

1 that, the TEP transmission system, our EHV, or  
2 extra-high-voltage, which is 345 and 500 lines that tie  
3 TEP to the Four Corners area, used to tie up to the  
4 Navajo power plant -- the lines are still there, but  
5 the power plant is shut down -- gives us a tie up to  
6 our generation resources in the Palo Verde area, as  
7 well as in Gila Bend, and to a power plant that we have  
8 over in southern New Mexico at Luna that we share with  
9 others.

10 CHMN. CHENAL: Mr. Beck, real quick, the WAPA  
11 power lines -- so did you say that most of the WAPA  
12 power is hydropower, it comes from the Colorado River,  
13 Hoover Dam?

14 MR. BECK: The majority of it comes from, on  
15 this system, Parker-Davis. Some of it is Hoover power.  
16 So it's hydropower on the western system. But this  
17 particular project in this area is called the  
18 Parker-Davis, so it's primarily dedicated to  
19 Parker-Davis.

20 CHMN. CHENAL: Thank you.

21 MR. BECK: So next, I was going to give a  
22 little bit of background relative to TEP's history with  
23 Southline. Mr. Patterson covered some of it this  
24 morning, maybe add a little bit of color to it.

25 There are several projects -- and I don't

1 know if we can zoom in on the map on the left or not.  
2 But just to give a little bit of context, and this kind  
3 of goes to Member Noland's comment earlier, these are  
4 projects -- this is a Western map, Western Area Power  
5 map, just showing major projects in the west in the  
6 Western area.

7           The red or orangish line that runs across  
8 from kind of middle of New Mexico over towards  
9 California was the -- or, is the SunZia proposed  
10 project. The Southline project is below that one, hard  
11 to decipher between the two. The one on the left edge  
12 of Arizona is Ten West Link, which I think you're aware  
13 of. And then these other two projects -- I had written  
14 down this one is TransWest. And I can't read that one,  
15 but it's another project proposed in California.

16 BY MR. DERSTINE:

17           Q. I think it says Westlands Solar Park.

18           A. (BY MR. BECK) Yeah. Okay. That's a  
19 renewable development project proposed in California.

20           There's also a small segment that shows up  
21 here that's an ED -- I believe ED5 project. Of these  
22 on this map, that's the only one that's up and  
23 operational and actually recovering dollars or being  
24 charged to customers. The rest are projects in  
25 development.



1           These are large projects. And the Southline  
2 project, 360 miles, is a thousand megawatts. The  
3 SunZia project was 500-plus miles, and they're talking  
4 about 3,000 megawatts of capacity. Ten West Link is  
5 114 miles and proposed 3,500 megawatts. For these  
6 projects to go forward, you need to get funding. And  
7 the larger the project, the harder it is to get  
8 commitments that come together in the right time frame  
9 to actually build the project.

10           So the Southline project is kind of -- it was  
11 a unique project, from our perspective, in that it was  
12 a merchant project being driven by a merchant, but it  
13 was one of the smaller and lower cost projects of all  
14 the ones in the region. And that's one reason that TEP  
15 looked to that project with some interest.

16           So in 2016, an entity was created through the  
17 Southline Transmission group called SU FERC, and that  
18 was an entity developed to market the capacity on the  
19 Southline project. And they performed their open  
20 solicitation, basically a bidding process, for  
21 transmission rights on the Southline project.

22           While that was going on, the CEC process was  
23 going on, and TEP actually supported the Southline  
24 project in that case with my providing some testimony.

25           And then in June -- and here is one

1 correction, this should have been 2016, not 2019 -- TEP  
2 submitted our interest in the potential ownership of  
3 what was identified in the project as the upgrade  
4 portion of the Southline project. And so again, just  
5 to try and make that clear for the Committee, we were  
6 interested in the portion of the project that basically  
7 went from Sahuaro/Tortolita over to Apache. And we saw  
8 some value in that for getting us towards renewables  
9 that were potentially going to come out of the New  
10 Mexico region, especially wind.

11 TEP is very highly involved in solar  
12 renewables. And the winds -- wind products that are  
13 available in New Mexico are a very good complement to  
14 our solar projects in that their capacity tends to peak  
15 at times when our solar is not at peak. So it helps to  
16 fill in the trough of energy that we're trying to --  
17 when you're depending on solar, you have really high  
18 output at the peak of the sun, and then of course on  
19 either side it's down. Well, the wind product was kind  
20 of opposite of that; you're getting wind generation  
21 over there in the evening and at night and helping to  
22 balance out the renewable aspect of our projects. So  
23 we were looking to New Mexico wind as a good resource.

24 So we actually went out with an RFP for  
25 renewables, while we were having these discussions with

1 Southline about different options, and ultimately we  
2 entered a purchase agreement for 250 megawatts of wind  
3 on the east side of New Mexico with an entity called  
4 EDF. And as Mr. Patterson mentioned, they were an  
5 initial anchor tenant for the Southline project. They  
6 were going to be kind of a base user of the project,  
7 which then would reduce the need for selling the  
8 balance of that capacity.

9 But as Mr. Patterson indicated, one of the  
10 issues was a 2020 time frame for EDF for their  
11 projects, and TEP faced that same issue. And it was  
12 all related to the tax credit -- credits available  
13 through the federal government. They were all going to  
14 start going down considerably at the end of 2020. So  
15 if you didn't get your project in service by the end of  
16 the year, you started losing big chunks of the  
17 offsetting revenue credits that you would get for the  
18 wind project.

19 So as we were in the RFP process, it actually  
20 increased our interest in the Southline project,  
21 because we could potentially go all the way to Afton  
22 with the project and just have a short segment to get  
23 to the wind farm. Problem was, the timing wasn't  
24 working out for either us or EDF to commit to the 2020  
25 date and make that project go as well as Southline.

1           So TEP and EDF backed off from working with  
2 Southline on that to actually coming up with capacity  
3 across the El Paso system that would get that energy  
4 from our -- the wind farm to the TEP boundary where we  
5 had existing transmission. And so that kind of backed  
6 us off of the bigger Southline project to, okay, we  
7 still have a strong interest in the portion of the  
8 project that now is the subject of these hearings. We  
9 actually reduced our interest, not going all the way to  
10 Apache, but only going from Vail to Tortolita, that  
11 segment, because it was right adjacent to our system.

12           And over the years, we had had a lot of  
13 discussions with Southline and we agreed that, as  
14 Mr. Patterson had indicated, this was an opportunity  
15 for phased or incremental building of the Southline  
16 project. TEP took the position we needed to have  
17 ownership of facilities so that we could put it into  
18 our rate base and get rate recovery, and Southline saw  
19 the opportunity to have us be kind of the seed project  
20 that would help build the balance of the Southline  
21 project.

22           And so in April of 2020, or April of this  
23 year, we reached agreement with Southline on purchasing  
24 the development rights for the Vail to Tortolita  
25 portion of the Southline project, which would then

1 allow us to work with Western to develop our agreements  
2 between TEP and Western. And there were two conditions  
3 in that purchase agreement with Southline, one of which  
4 was amending the CEC for Southline that would allow TEP  
5 to develop the 230 circuit because of the specific  
6 language in the one condition that currently says that  
7 Western system had to be fully owned by Western and  
8 Western only. Southline had different interests from  
9 the standpoint they just needed some capacity rights to  
10 be able to sell, so they could live with that kind of a  
11 restriction. TEP needs to have ownership both for  
12 control over the system, as well as for the ability to  
13 get rate recovery.

14 Q. So what I took from walking us through that  
15 history is that TEP no longer has a need or an interest  
16 in Southline as a transmission line to bring wind in  
17 from New Mexico, but that TEP still has a strong  
18 interest and need for the Vail to Tortolita segment of  
19 the project; is that right?

20 A. (BY MR. BECK) That's correct. We have no  
21 strong need for anything beyond Vail to Tortolita at  
22 this time, but that's not to say that if Southline  
23 starts getting their project filled up with capacity  
24 requests that TEP might not jump in and say, we want a  
25 little piece of that so that we can expand our wind or

1 other resources to the east. But at this time, our  
2 foreseeable needs are the stuff right around Tucson, so  
3 that's why we're really interested in Vail to Tortolita  
4 right now.

5 CHMN. CHENAL: Let me ask a question,  
6 Mr. Derstine, at this point.

7 I hope my questions here are going to make  
8 sense. TEP has independent reasons, which you're going  
9 to get into, why it needs this line, this Vail to  
10 Tortolita line. It seems to me, I guess we'll get into  
11 this, that you don't need Southline, in a sense, for  
12 that. You could come in and get a CEC for Tucson  
13 Electric to build its own line without involving  
14 yourself -- I say yourself -- TEP involving itself with  
15 Southline. I mean, that could have happened.

16 So I'm trying to ask myself, so why is Tucson  
17 Electric involving itself in kind of a joint venture,  
18 if you will, for this portion of the line, because it  
19 seems to me it's also true that Southline is still --  
20 there's no guarantee the project will ever come to  
21 fruition. I mean, the previous slide you showed kind  
22 of went into the various larger projects that, as you  
23 indicated, Mr. Beck, require large amounts of  
24 financing. And as in any development, I'm sure this is  
25 one of the aspects of development is getting enough

1 customers in order to get the financing and allow for  
2 the further development.

3           So I guess what I'm leading up to by that is:  
4 What happens if Tucson Electric, TEP, builds the  
5 project or gets the CEC -- builds the project, but  
6 Southline doesn't come through with the financing or  
7 whatever other development requirements are necessary  
8 for Southline to be able to execute the Southline  
9 project? I'm just trying to get a feel for the -- how  
10 interconnected this project to the -- the Vail to  
11 Tortolita aspect, how dependent that is on the  
12 Southline project being developed or whether it is  
13 somewhat, in a sense, independent and can be  
14 constructed independent of whether or not Southline  
15 succeeds or not.

16           MR. BECK: So Mr. Chairman, if we've led you  
17 to believe that it's a joint venture in some fashion  
18 between TEP and Southline, that's not the case. The  
19 agreement between TEP and Southline is that TEP buys  
20 the development rights for the Vail to Tortolita  
21 segment only. The balance of the Southline project is  
22 Southline's, and it develops or it doesn't. We see  
23 future value in it if it does, but that doesn't --  
24 we're not going to go build it. That's strictly up to  
25 Southline.

1           But there's a huge value in the Vail to  
2 Tortolita portion to TEP. And basically once we close  
3 our deal with Southline, which is -- as I said, there  
4 are two conditions that it's subject to, the CEC  
5 adjustment, as well as our agreement with Western Area  
6 Power, which we're working on. At the point we close,  
7 Southline is effectively out of the Vail to Tortolita  
8 project. That's strictly going to be between TEP and  
9 Western, and we'll build that and we'll work with  
10 western.

11           If the Southline project -- balance of the  
12 Southline project gets built, TEP may or may not take a  
13 position in that project, but there's no commitments  
14 and there's no -- we haven't contractually said we're  
15 going to take that. It's just that it's an opportunity  
16 that's out there in the future if it comes to fruition.  
17 And they have the hurdle of coming up with enough  
18 offtakers to make it financially feasible to do it, and  
19 whether that will happen remains to be seen.

20           But as far as the Vail to Tortolita project,  
21 it will be strictly a TEP/Western project in the end.  
22 But because it has the potential to connect to  
23 Southline if Southline moves forward, it's kind of a  
24 building block towards the Southline overall project.  
25 It supports the overall Southline.



1           And at the time when Southline is moving  
2 forward, if they get to that point, we'll be having  
3 some negotiations about the use of that capacity on  
4 Vail to Tortolita. We have not committed, through the  
5 agreement that we have in place, that there's anything  
6 there for Southline. It will be subject to what's  
7 available and going through our normal transmission  
8 access policies for them to get access to it, or any  
9 customer.

10           So it becomes two separate projects. We just  
11 saw that because the CEC covers the tie points to the  
12 TEP system -- there had been a lot of discussion  
13 throughout the CEC 173 case about some of the federal  
14 analysis that was done, the NEPA and EIS and Records of  
15 Decision, the PCEMs and all that other, that should  
16 cover most of the environmental, and we feel it does.  
17 That rather than coming through and creating a  
18 brand-new siting case and blazing a new trail, that  
19 there was a benefit to just coming in and modifying  
20 this CEC. And that's what we worked with Southline to  
21 come up with an agreement that would work for both of  
22 us, that would allow us to go down that path and try  
23 and get that to work.

24           To your point, yes, we could have gone out  
25 and done our own CEC. The other issue is that there

1 was a contract between Western and Southline where  
2 Western and Southline had committed to work together to  
3 build the Southline project. So it wasn't as simple as  
4 TEP goes to Western and says, oh, you give up on  
5 Southline and come with us or work with us, because  
6 they have contractually committed already. So by  
7 working with Southline to get through those issues, it  
8 cleared our path to work with Western on the project.

9 CHMN. CHENAL: So TEP has the benefit of  
10 basically co-locating a line with an existing WAPA  
11 line, which presumably is less controversial than going  
12 a different route into Tucson, and Southline has the  
13 advantage of having at least a portion of its project  
14 constructed by TEP, in this case, but without impeding  
15 its project because it's going to be relying on the  
16 WAPA -- on the other WAPA -- on the circuit, the other  
17 circuit on this Vail to Tortolita line because of a  
18 contract Southline has with WAPA. So it won't act --  
19 TEP won't act as a roadblock to capacity, because that  
20 capacity is still going to be there on the WAPA  
21 circuit, right?

22 MR. BECK: Yeah. I mean, they would need  
23 some probably modifications of their agreement, because  
24 their agreement was for a certain capacity of two  
25 lines. But to the point that Western now has a 230

1 circuit versus a 115, there's some opportunities there  
2 for them to work together to move that forward. And  
3 not to say that -- at the time that the Southline  
4 project were to move forward, they would probably also  
5 come to TEP and say, hey, what's available on your  
6 circuit over and above your needs? And that could also  
7 help their process.

8 CHMN. CHENAL: Okay. Mr. Beck, thank you. I  
9 understand much better now. I didn't mean to imply it  
10 was a joint venture. I used the words joint venture,  
11 but --

12 MR. BECK: I just wanted to be clear. Yes.

13 CHMN. CHENAL: That was very helpful to  
14 clarify for me that this is an independent project from  
15 the Southline project. It's just co-located really,  
16 more of a co-location than a partnership.

17 MR. BECK: Correct. And maybe this is the  
18 time to just address Member Haenichen's earlier  
19 question that Mr. Patterson addressed relative to, you  
20 know, given the choice today to go forward, would you  
21 do something different from a 230 kV line.

22 Ideally, we'd put 345 or 500 kV, but we know  
23 we can't go out there and get right-of-way to do that  
24 in this area in the vicinity of where it's at. In the  
25 proximity of the Western system through the western

1 part of Tucson in a very urban area now, that  
2 right-of-way has a lot of value, but they have a  
3 hundred-foot right-of-way. And without expanding that  
4 right-of-way, you can't go over 230 kV. So that's kind  
5 of the limit to leave you at 230. Plus, it's part of  
6 Western's long-term plan for their system to be 230.  
7 So to work with Western at least, you're kind of  
8 restricted to that 230 maximum.

9 So yeah, you could get more capacity by going  
10 with a bigger line, and that would be nice. We don't  
11 necessarily have the need for it right now. That 230  
12 supplies all of the support we need on our system. We  
13 might even have a hard time justifying paying the  
14 additional cost of that higher voltage line when we got  
15 into a rate case.

16 MEMBER HAENICHEN: The thing I was just  
17 getting at is more hypothetical, and that is that this  
18 area is expanding like crazy, and it seems to me you  
19 want to be really careful about putting in facilities  
20 that in 10 years you'd have to dismantle again. But if  
21 the urbanization issue is so strong in there, you  
22 probably couldn't get by with widening the  
23 right-of-way.

24 MR. BECK: Member Haenichen, that's the  
25 issue. To try and expand that right-of-way would be

1 very difficult. And as far as growth in that area,  
2 it's starting to get filled in. I mean, there's still  
3 open space, but it's filling in. So it's more on the  
4 periphery is where that growth is going to be, and we  
5 have some facilities out there at the higher voltages.  
6 It's that middle part of the city, especially DeMoss  
7 Petrie sub, where this 230 gives us a great big bang  
8 for the buck.

9 MEMBER HAENICHEN: Thank you very much. Good  
10 explanation.

11 CHMN. CHENAL: So I have a question for  
12 Mr. Patterson then, kind of back to why is Southline  
13 doing this deal with TEP. Because it seems like you're  
14 giving up control of one of your two 230 kV lines --  
15 for that 64-mile section, you're giving up some  
16 capacity that you may not get back if you can't -- if  
17 Tucson Electric doesn't have any capacity left on that  
18 line. So, I mean, is that correct?

19 MR. PATTERSON: Well, partially. But I would  
20 look at it a little differently in that before, with  
21 the whole project going all the way to Tortolita and  
22 Sahuaro, our commercial options were -- say users of  
23 Southline were try trying to deliver from an east to  
24 west direction. So either you're looking to deliver to  
25 entities who are directly connected to the line, like

1 Tucson or potentially WAPA's customers, or you're  
2 looking to come across Southline and then use the  
3 existing system to get to other market delivery points,  
4 in which case you would need to work with Tucson  
5 Electric or WAPA, most likely those two players, to get  
6 to the market points.

7           Going forward, if TEP and WAPA own Vail to  
8 Tortolita, that doesn't really change the end  
9 participants that we have to interact with on a  
10 commercial basis. So we could still -- as Mr. Beck had  
11 mentioned, if we ultimately had customers who wanted to  
12 bring, for example, some resources in from New Mexico,  
13 and they come across Southline, then we would need to  
14 work with TEP to get from Vail to some other point on  
15 TEP's system, or we would need to work with WAPA to get  
16 from Apache to somewhere else on WAPA's system.

17           And so it doesn't change the end parties we'd  
18 have to deal with; but to Mr. Beck's point, it does  
19 change some of the configuration; to your point, it  
20 would change some of the capacity, and so there is some  
21 trade off. But in our minds, it was worth it to get  
22 that portion moving and in service, and it's still  
23 commercially viable is the point.

24           And at the end of the day, we're trying to  
25 work with our partners/customers. In this case, we

1 were trying -- TEP we identify as an important really  
2 initially customer. They were very clear on what they  
3 really needed and wanted, and we were trying to find a  
4 way that could work for them that was beneficial for  
5 TEP, that was beneficial for WAPA, and worked for us,  
6 and it worked for all three parties.

7 CHMN. CHENAL: All right. That makes sense.  
8 I mean, you're taking a two-lane highway down to a  
9 one-lane highway, at least when you hit Vail, but your  
10 customers are going to be probably Tucson Electric and  
11 WAPA. I guess it could impede the amount of energy  
12 that flows across the state to California, but I guess  
13 that's a calculation. Like you say, you're getting  
14 part of your project up and running, in a sense, and  
15 that has benefit too.

16 MR. PATTERSON: Yeah. And I don't know that  
17 it necessarily takes it down to a one-lane highway. So  
18 from Vail westward -- I mean, it would depend on what  
19 was available on TEP's system and on WAPA's system.  
20 There's still opportunity to take either of those  
21 lanes; it's just we don't have controlling ownership of  
22 as big a part of that highway, if it was a toll road.  
23 But at the end of the day, we were still going to have  
24 to pay a toll to someone else to get where we needed to  
25 go anyway, and so it still works.

1 CHMN. CHENAL: All right. Member Haenichen.

2 MEMBER HAENICHEN: Mr. Patterson, has a  
3 careful analysis been done by somebody about the  
4 potential amount of renewable resources in New Mexico  
5 to fill up all these facilities like SunZia and  
6 Southline? Has that been done and do you think there  
7 is enough?

8 MR. PATTERSON: There's definitely been  
9 analysis of it. There are some studies going on right  
10 now in the planning area. It's a little tricky, from a  
11 consolidated perspective, because these are independent  
12 projects, and so there's no single entity really  
13 looking at seeing them all together in service at the  
14 same time.

15 I mean, if you ask me, ultimately, I mean,  
16 given the trends of renewable cost and demand, there  
17 probably is a need for many of these projects; I don't  
18 know if for all and I don't know the timing. You know,  
19 that's one of the reasons why we've approached  
20 Southline from a phased approach, and we think that  
21 there might be the need or the ability to bring part of  
22 the project in service at different times.

23 But I think directly to your question, I  
24 don't think there's a comprehensive study that I'm  
25 aware of looking at all of those projects kind of



1 simultaneously, but I don't know if Mr. Beck knows  
2 anything else.

3 MR. BECK: Member Haenichen, I don't know of  
4 a specific study that looks at that. But you just look  
5 at the volume of renewable potential in New Mexico, and  
6 the push to go to renewables a hundred percent over  
7 time, New Mexico is a good resource for the region just  
8 because they have such high-quality wind, at least from  
9 a wind resource standpoint. The issue is, they don't  
10 have transmission. And it's, how do you get that  
11 transmission built? It's kind of the chicken and the  
12 egg.

13 That's where SunZia took the position they're  
14 going to go right to the mouth of those resources and  
15 try and get that across. They haven't got their  
16 project going yet. Southline took a little different  
17 approach and said, we'll take an incremental and a  
18 smaller approach at a lower cost, and they got close to  
19 it. But again, it's putting the deal together that  
20 meets all of the requirements at the same time.

21 So you've got a renewable developer who has a  
22 project he wants to sell, you have buyers at the other  
23 end who have -- want to buy, but they both want set  
24 prices. And to get that middle piece, the  
25 transmission, and lock it all in together has been what

1 is difficult, and you can't get that commitment to come  
2 together. Again, it's a lot of timing issues and  
3 financial issues that are involved.

4 MEMBER HAENICHEN: Well, yeah, because I'm  
5 sure the initial investors in projects like this will  
6 be asking the same kind of question I did, is there  
7 going to be enough resources to fill up these projects.  
8 Even if it's not the one they're considering financing,  
9 it will have an impact on them.

10 MR. BECK: Well, I think the bottom line is  
11 that the resources are there, the demand is there; it's  
12 when do those who are putting these deals together  
13 decide that enough is enough and they don't need to  
14 make any more money. Because they also see that  
15 opportunity that, well, that demand is really high, so  
16 we're going to have a really high price, and their  
17 deals just aren't coming together.

18 MEMBER HAENICHEN: Another timing issue.

19 MR. BECK: Yeah.

20 CHMN. CHENAL: Thank you both. That's very  
21 helpful. I mean, you read the words in the documents,  
22 but there's always these unanswered questions of kind  
23 of how this deal really fits together, what's really  
24 going on here. That was very helpful to me, so thank  
25 you.

1 BY MR. DERSTINE:

2 Q. Mr. Beck, I guess closing the loop on the  
3 Chairman's question, am I correct in understanding that  
4 the Vail to Tortolita segment of the Southline project  
5 for TEP, it's a standalone project that isn't  
6 contingent upon completion of Southline?

7 A. (BY MR. BECK) That is correct. Once we've  
8 finalized on the execution of our agreement, again,  
9 subject to conditions that are there, it becomes a  
10 TEP/Western project for the Vail to Tortolita portion,  
11 and we'll work with Western to get it built. And all  
12 of our discussions with Western, they're fully on board  
13 to go there. They want to get it built too. Again,  
14 it's to the issue that they've got a line that's ready  
15 to fall down, so the sooner they can get that replaced  
16 the much better for them. And if we're there to help  
17 fund that, they're fully supportive.

18 Q. And our next section was -- you were going to  
19 tell the Committee and talk through the drivers for  
20 TEP's need for the project. But I keep staring at my  
21 watch and thinking, is it really 4:30 already and am I  
22 going to have time to get done the things I'd like to  
23 get done today. And I think one of the things we had  
24 talked about wanting to do today was to do the flyover.

25 MEMBER NOLAND: Mr. Chairman.

1 CHMN. CHENAL: Yes.

2 MR. DERSTINE: Member Noland, can't hear me?

3 MEMBER NOLAND: No. You're looking --

4 MR. DERSTINE: I'm looking at him.

5 MEMBER NOLAND: -- at Mr. Beck and your mouth  
6 is looking that way too and we can't hear you.

7 MR. DERSTINE: My mouth, yes. Let me keep my  
8 mouth looking at the microphone while my eyes look at  
9 Mr. Beck. How about that?

10 BY MR. DERSTINE:

11 Q. Is it more important for us to do the  
12 flyover, I guess, is my question? Is there value in  
13 stopping here with need and moving to the flyover? I  
14 think we've estimated it's a half hour, maybe a little  
15 more, for the flyover, but I think there's value in  
16 having the Committee see this project kind of end to  
17 end and get a better sense of it.

18 A. (BY MR. BECK) I agree with that. I think  
19 the context that the flyover will give will help for  
20 discussions about the further items anyway.

21 MR. DERSTINE: Can we queue up the flyover,  
22 AV folks?

23 (Virtual tour plays.)

24 MR. BECK: If we could take it to 02.

25 So this is a flyover representation that the

1 companies have done to represent what the Vail to  
2 Tortolita project will look like once it is built.

3 If you could back up just a little bit.

4 So what you're seeing on this shot right now  
5 is the project area. Extending on the bottom  
6 right-hand side, the Vail substation down at the bottom  
7 of this path. This is the path, the yellow line, going  
8 up along through this piece of land to DeMoss Petrie  
9 substation, then continuing on up through Marana and  
10 ultimately to Tortolita sub. So on this picture you're  
11 seeing those three substations, which are the  
12 connection points to TEP.

13 And then if you go to 11.

14 And then we've shown intermediate points  
15 along the way, and I'll talk about them as we're going  
16 through the flyover. But just to give a little bit of  
17 context, we're going to start out by going south to  
18 north -- north to south along the alignment. So we're  
19 going to start at Tortolita and come south. We're not  
20 going to have the detail of the structures shown in  
21 that view. We'll have the alignment shown, talk about  
22 the terrain, what you're going to see along the way.  
23 And then when we get down to Vail, we'll turn around  
24 and go back up, and on that view you're going to see  
25 the actual structures superimposed on the right-of-way

1 and on the corridors.

2 BY MR. DERSTINE:

3 Q. When you say the actual structures, you're  
4 talking about simulations of what the 230  
5 double-circuit would look like?

6 A. (BY MR. BECK) That's correct.  
7 Representations of what that will look like.

8 Q. Okay, thank you.

9 A. (BY MR. BECK) Let's continue on. Now,  
10 again, we're just zooming into the earth, coming into  
11 the Tortolita area. This is the Tortolita substation  
12 right here. Just to the north of it there's a big  
13 solar field that is tied into APS. This is the APS  
14 Sahuaro station. So there's generation at that site,  
15 as well as a 500 kV yard in the upper part of the  
16 picture. Below that, the generation, and then to the  
17 left is a 115 kV yard right in here.

18 The corridor that you're going to see that is  
19 proposed and is what was in original Case 173 will be  
20 shown in this yellow block. We'll continue. And  
21 you're going to notice, as we're going along, in the  
22 upper right-hand corner will be kind of a location map  
23 relative to land forms. And then along the bottom  
24 there's a color code, I know it's hard to see, but just  
25 indicating what the different colors represent.

1 CHMN. CHENAL: Can you read what those are,  
2 Mr. Beck, or can somebody read what the colors --

3 MR. BECK: It needs to be someone closer than  
4 me.

5 MR. RAATZ: The yellow is TEP corridor and  
6 substations, that's on the left-hand side. The purple  
7 is WAPA corridor reroute. The green is parks and open  
8 space. The blue is airports. The orange is Tohono  
9 O'odham Nation. And the pinkish color is correctional  
10 facility.

11 MR. BECK: So as we're flying through, you're  
12 going to see these colors show up on the map, kind of  
13 in the base map. Yellow will represent the TEP-type  
14 corridors. The purple are going to show where the  
15 reroutes, the four reroutes that we talked about, are.  
16 The green will be some parks, the Tucson Mountain Park  
17 and some other city parks and so on. And then we'll  
18 talk about -- the blue is the airport, and one of them  
19 being -- well, two of the relocations related to that.  
20 And then the Indian tribal lands, as well as some  
21 prisons along the way.

22 And we're headed in a westerly direction.  
23 We're crossing Interstate 10 here. You'll see that  
24 yellow line got a lot narrower. This is the existing  
25 Western alignment, so we would be using their

1 right-of-way. You start to go around, it's a square  
2 corner, we go around the Pinal Airpark, which Pinal  
3 Airpark is a storage facility for planes. When COVID  
4 struck in March, American Airlines, for one, put a  
5 bunch of their planes in storage out here. And then  
6 this is also -- the Air National Guard flies some Black  
7 Hawk operations out of here, and we had some  
8 communications with them about their helicopter  
9 flights. They do a lot of night training and infrared  
10 flight, I guess it's infrared flight, where they're  
11 flying in the dark, basically, and so obstacles are  
12 very critical to them.

13           So we're turning to the south, slightly east,  
14 and you'll see -- in this area you're going to see a  
15 lot of farmland as we're progressing in a southerly  
16 direction. There's a wash there. You can see the  
17 green and then all of the farmland here.

18           You'll see there's some encroachment that has  
19 occurred from the just development along the way over  
20 the years. You know, at one time, this was all just  
21 farmland. Now, there is some -- a few little buildings  
22 and stuff in there, and you'll see more as we move  
23 south.

24           The Marana Tap substation is a WAPA  
25 substation. You'll see in this area there's really no



1 development between this wash and this wash, and you  
2 get back into some farmland right adjacent to -- this  
3 is the Marana Regional Airport, and their request  
4 was -- today, the Western alignment comes -- from the  
5 south, it's coming on a diagonal and comes up and hits  
6 this corner here and runs another straight line. The  
7 request was to move it a little bit further away from  
8 the runways. Or, actually, no, not further away. This  
9 is the realignment. Yes, further away from the runway,  
10 because this is the existing alignment, so it moves it  
11 out a little ways.

12 BY MR. DERSTINE:

13 Q. So that Marana Airpark segment where we moved  
14 out of the purple WAPA alignment and what's now shown  
15 in yellow is one of the -- that's the first reroute  
16 section that you and our other witnesses will provide  
17 more testimony on later in the case, right?

18 A. (BY MR. BECK) Yeah. I think it will be the  
19 fourth one I talk about, because I think I started from  
20 the south, but it's one of the four.

21 Q. Okay. So it may be the last on the list, but  
22 it's one of the four?

23 A. (BY MR. BECK) Correct.

24 Again, the yellow line, we start moving now  
25 in a more east, southeasterly direction.

1           This here is the Rattlesnake substation,  
2           which is a WAPA substation. Its purpose is to feed a  
3           Central Arizona Project pumping plant, which is right  
4           there on the Central Arizona Project. So the canal  
5           runs through here. So that's one of the services that  
6           Western is providing, that service to CAP.

7           You'll see here this is -- where Twin Peaks  
8           Road comes and goes over these hills and becomes Silver  
9           Bell Road, you'll see right here a subdivision that  
10          went in probably within the last five years. It's a  
11          fairly recent subdivision. It's on the north side of  
12          the road, away from the Western alignment, but it's in  
13          the vicinity.

14          And then as you come up over the hill and you  
15          hit Silver Bell Road, you'll see there's a lot of  
16          encroachment up to the Western alignment. I remember  
17          not too many years ago this was all open space out  
18          here, and it's now all filled in with subdivisions and  
19          housing.

20          And this is the edge of -- I believe this is  
21          Sahuaro National Park. It's one of the parks, so  
22          that's why it's the bright green.

23          The alignment moves a little bit over closer  
24          to the river and to Interstate 10, and this is a lot of  
25          flooding area in here. This floods a lot. So you

1 don't see as much in the way of development here, and  
2 so, you know, it's a good place for a transmission  
3 line.

4           There's a lot of gravel operations along in  
5 here on the east side of Interstate 10, and then  
6 commercial on the -- or, on the west side of  
7 Interstate 10 and then commercial on the east side of  
8 Interstate 10.

9           Here the line is going through Christopher  
10 Columbus Park, which is a park on the northwest side.  
11 Compatible use with the transmission line, it works  
12 good.

13           Again, this is Silver Bell Road. Here is the  
14 line coming over, and it's going to cross over  
15 Interstate 10 right there and it comes into the Tucson  
16 station, which is on the east side of Interstate 10  
17 just north of Grant Road. That's the Western  
18 substation. Across the street from that is the TEP DMP  
19 substation, and you'll get a little better view on the  
20 return trip.

21           And as we leave Tucson station, we'll cross  
22 back over Interstate 10, and here is where we're  
23 approaching -- which is Tumamoc Hill right here. And  
24 you'll see that -- we just missed it -- just behind  
25 this was El Rio Golf Course, there's another little

1 park in there, and then you get to Tumamoc Hill, which  
2 is this hill with all the green around it. The  
3 existing Western alignment is the purple line that cuts  
4 through the middle of that, and the proposed route goes  
5 westerly and then runs south along Greasewood. And  
6 generally, the agreement was that the alignment would  
7 be placed on the Tumamoc side of those two roads,  
8 Anklam and Greasewood. And because Western doesn't --  
9 they need to have ownership of right-of-way, actual  
10 land, they would not build in road right-of-way like  
11 TEP would, so they would buy a strip of land adjacent  
12 to the roadway.

13 Q. Mr. Beck, this Tumamoc Hill, that's one of  
14 the four realignment areas, and I think the record  
15 should be clear that TEP isn't asking to move the line  
16 off of the existing Western alignment. This reroute,  
17 moving from the purple line to the wider yellow path,  
18 is a reroute that came about through the environmental  
19 impact process that was developed with input from  
20 various stakeholders. Our environmental witness panel  
21 will testify to that and how that came about. But am I  
22 correct that this is not a TEP ask, you didn't ask to  
23 move the line here? That's something that came about  
24 through the federal permitting process, correct?

25 A. (BY MR. BECK) That's correct. That was

1 something already part of the EIS process. So it's not  
2 a TEP-driven request, but we're supportive of it.  
3 We've worked, over the years, with Pima County and the  
4 U of A, so we support reducing encroachments upon  
5 that research area. But again, it's not our request,  
6 per se; but if we're working jointly with Western,  
7 indirectly it is.

8 CHMN. CHENAL: Quick question. The lady who  
9 gave public comment today, she lives in this area, and  
10 I confess I don't know exactly the streets that she  
11 was discussing as impacted by her comments. But could  
12 you --

13 MR. BECK: You know, Renee, was she just to  
14 the west of --

15 MS. DARLING: She's further south. She's at  
16 Starr Pass -- between Starr Pass and 44th.

17 MR. BECK: Okay. So somewhere further south  
18 down here.

19 CHMN. CHENAL: Okay, thank you.

20 MR. BECK: Okay. We can continue, I think.

21 If you don't know, Tumamoc Hill is a big area  
22 for hiking. People go out for exercise out there.

23 Come over a few hills, that's less developed  
24 in here, and the line starts heading in a easterly  
25 direction for a ways. And then it will come into --

1 right adjacent to a strip mall right along Interstate  
2 19 here. The Santa Cruz River is just to the west of  
3 the alignment as we get to this point. Del Bac  
4 substation is a Western substation.

5 We hit the Tohono O'odham reservation here,  
6 and the line diagonals across the reservation. Very  
7 little development. There was one group of buildings  
8 there; but otherwise, it's all open space.

9 Get to this point, and the line will cross  
10 over the Old Nogales Highway, which is in here. And  
11 the airport, the Tucson Airport, is this blue area  
12 shown up on the left-hand side of the screen. This is  
13 the area that, as you head east of Old Nogales Highway,  
14 it's the other reroute that we'll be talking about, or  
15 one of the other ones, this one requested by Pima  
16 County, ADOT, and had input from this one subdivision,  
17 which I believe is right here, Summit, on the location  
18 of the line. The existing line is the purple line.  
19 And the request was that that line be squared up,  
20 basically, come down to the Vail Road alignment and  
21 then run along Vail Road. And we'll talk further about  
22 that in some slides later.

23 Some of you were involved in our Sonoran  
24 substation case, Sonoran to Wilmot. That's the Sonoran  
25 substation location. There will be a little bit of

1 repetition in my slides from that case regarding what  
2 the Pima County interests were in the so-called Sonoran  
3 corridor and what's driving some of that reroute with  
4 the Western project in this area.

5           You'll see at the top of the screen is a  
6 prison complex; that's the pink area. So the line  
7 would basically go up close to that prison and then  
8 turn south and then come back in and hit the existing  
9 WAPA alignment.

10           This is as we're getting up towards the Vail  
11 end of the project. Here's the two line options for  
12 connecting the WAPA alignment up into Vail. You'll see  
13 some more detail on that later.

14           But we're basically at the south end of the  
15 project, so at this point we'll flip around to go back  
16 to the north.

17           Q. So can I have you pause it right there just  
18 on that Vail substation relocation or reroute. And I  
19 may have these reversed, but I think it was the western  
20 route in was approved in CEC 173. What we're asking  
21 the Committee to do is to consider expanding the  
22 corridor for that reroute that was already approved in  
23 173 to give TEP the flexibility to work with State  
24 Land, which I understand is the land ownership there,  
25 to see if there is a better route in a little bit

1 further east. Did I say that right?

2 A. (BY MR. BECK) That is correct. And there  
3 will be a slide with a little more detail. But what  
4 was approved in Case 173 was a 600-foot corridor  
5 basically centered on this line here on the left-hand  
6 side going up to the Vail sub, which is in the middle  
7 of the picture right now, basically. And the new  
8 alignment that looks better from a connectivity and  
9 construction standpoint is this one that's further  
10 east.

11 And so what we're going to propose here is  
12 that for this 2-mile stretch between Vail substation  
13 and the WAPA alignment, that we would ask for a  
14 3,350-foot corridor in that. And I know Member Noland  
15 is shaking her head. And when we look at it closely,  
16 you'll see the area, there's no development out there,  
17 you'll see what's out there, but I'm sure we'll have  
18 lots of discussion.

19 So there's a shooting target range up here  
20 for the law enforcement. There's a gas compressor  
21 station just south and east of the Vail substation,  
22 because there's a gas line that runs along the  
23 railroad, which is just south of where we're at. And  
24 to the east, which would be just beyond the right-hand  
25 bottom corner of this map, is the Pima County



1 Fairgrounds and a couple of racetracks down there.

2 CHMN. CHENAL: Member Noland.

3 MEMBER NOLAND: Mr. Beck, is that all located  
4 on State land where you're asking for that expanded  
5 corridor?

6 MR. BECK: I believe it's a combination of  
7 State land and TEP land. We can verify that.

8 MEMBER NOLAND: Please.

9 MR. BECK: So now we're heading south. The  
10 left-hand is what we would propose; the right-hand is  
11 what was approved for a right-of-way corridor.

12 As we get south, at this point we're joining  
13 the Western existing alignment here. If you look, and  
14 they're there, they're not real easy to see, but there  
15 are representations of poles along here.

16 Prison coming up again on the right-hand  
17 side, the pink.

18 This here is Nogales substation, which is a  
19 Western substation. That used to feed UniSource  
20 Electric, our sister company down -- TEP's sister  
21 company down in Nogales. And that was no longer  
22 needed, from a UNSE perspective, when we did our  
23 Case 144 that went through the Commission to build a  
24 138 extending from Nogales up to our Vail sub, so  
25 likely this substation potentially goes away as part of

1 this rebuild. We're working with Western on that now  
2 to make that determination.

3           And you'll see we're coming up to the  
4 reroute. This is the Old Vail. Going straight, the  
5 purple is the existing alignment. The yellow would be  
6 the reroute. And as we get closer, you're going to see  
7 that on the purple we have the representation of the  
8 current H-frames. The new alignment shows the  
9 monopoles. Those that went on the Sonoran field trip  
10 might recall some of the gravel pits and stuff out in  
11 that area.

12           So here is the H-frames on the left-hand  
13 side, and these will be monopoles in here on the  
14 yellow.

15 BY MR. DERSTINE:

16           Q.    And Mr. Beck, do you want to pause it here.  
17 Is this an opportunity to talk about the difference in  
18 the span lengths? I think that question came from  
19 Member Noland.

20           A.    (BY MR. BECK) Yeah. So the span lengths for  
21 the new structures can potentially be longer than what  
22 the wood H-frames are. Design has not been done, so we  
23 don't know for sure what that will look like. But it  
24 will be our goal to try and span those out, work with  
25 Western to get them spanned out as much as possible to

1 limit the number of structures that go in.

2           There is a trade-off, of course, between  
3 number of structures and the height of the poles. So  
4 the taller you go, the more you can span out, but then  
5 the flip side is you're going taller with your poles.  
6 So there's some visual impacts that need to be looked  
7 at.

8           And one of the things -- I'm sure we'll  
9 probably talk more about color. But relative to the  
10 color issue, there's a requirement in the PCEMs that  
11 BLM take a look at that. And even though there's not a  
12 lot of -- there's only one little piece of BLM land in  
13 this particular portion of the project, to the extent  
14 we commit to the PCEMs, then they'll at least have a  
15 say in the color and so on through their visual  
16 simulation process. And you're going to hear more  
17 about that process from our environmental consultants.

18           MEMBER NOLAND: Mr. Chairman.

19           CHMN. CHENAL: Member Noland.

20           MEMBER NOLAND: Along the current WAPA line  
21 and the poles that are going to be taken down, the  
22 wooden structures, what's going to happen to that  
23 right-of-way?

24           MR. BECK: That will either -- I don't know  
25 if it will revert to the landowners or Western will

1 trade it off possibly. Depending on ownership,  
2 there's -- some of this land is owned by the Airport  
3 Authority, so there may be some opportunities for them  
4 to trade out some of that right-of-way. Those details  
5 are yet to be worked out. But they won't keep it.  
6 They'll either sell it or transfer it back or in some  
7 way get rid of it.

8 MEMBER NOLAND: Thank you.

9 MR. BECK: And just to the extent any of it  
10 is State land, of course, then it's just the end of a  
11 lease on the State land.

12 This is just a visual simulation. This is  
13 looking in an easterly direction along the Old Vail  
14 Road. So if you're looking in the foreground, that  
15 white, that is Vail Road heading east. And then you  
16 look to the right, you'll see the existing H-frames  
17 that are on that existing right-of-way.

18 CHMN. CHENAL: Mr. Beck, what are those  
19 buildings, the clump of buildings to the left? There's  
20 a whole series of them there.

21 MR. BECK: So something I did not mention at  
22 the start of this is, this is new software that this  
23 particular consultant is using. It's not Google Earth  
24 that we're used to. Their software comes through and  
25 takes data from like Pima County records, square foot

1 of building and so on, and somehow models structures.  
2 So these are representations of the structures that are  
3 out there.

4 I question some of them. I think they're  
5 showing as what would appear to be two-story or  
6 three-story, and more than likely they're only single  
7 story. But their modeling system, that's what they  
8 came up with. So any comments you might have after  
9 this case is over relative to what your thoughts are on  
10 this particular flyover versus previous ones you've  
11 seen from us would be appreciated. That was one issue  
12 that we did see as we got this back is that those  
13 structures looked kind of strange.

14 BY MR. DERSTINE:

15 Q. But I guess to the Chairman's question, do we  
16 know what they are? Can you identify what those  
17 buildings are there?

18 A. (BY MR. BECK) Well, some of those are homes  
19 in there. There's a subdivision down in that area. We  
20 can get you more detail on that.

21 MEMBER NOLAND: Mr. Chairman.

22 MR. BECK: We'll verify, but I think it's  
23 part of the subdivision down there and it's houses.

24 CHMN. CHENAL: We're a little past it in this  
25 view, but, yeah, it would be just nice to know, because

1 it looks like it comes pretty close to those structures  
2 there on the reroute.

3 Member Noland.

4 MEMBER NOLAND: Mr. Beck, where's Raytheon?

5 MR. BECK: It will be up and to the right. I  
6 mean, I don't think you really see it, per se.

7 MEMBER NOLAND: You see the airport. You  
8 should be able to see the campus of Raytheon in  
9 relation to this.

10 MR. BECK: We may have on that other  
11 direction. Let's continue on and see how much of it we  
12 can see, because it will be coming up, to your point.

13 Actually, pause it one second.

14 Again, this is Vail Road, but the majority of  
15 it is not paved and it's showing up as a paved road.  
16 So some little issues, I think, with the software that  
17 they used.

18 Pause it there maybe.

19 Raytheon would be off to the right. I think  
20 our view is just kind of catching maybe the edges of  
21 it.

22 Now we'll cross Old Nogales Highway and we're  
23 going across the Tohono O'odham reservation again.  
24 You'll see that the only development appears to be  
25 right here on the reservation itself that's in the

1 vicinity of the line.

2 Here we're coming up to I19, we cross over  
3 I19.

4 Maybe if you could back it up just a little  
5 bit, pause it and back it up. A little bit more, just  
6 so we can see Del Bac. Just a little bit further.

7 So this here is the Del Bac substation. It's  
8 a Western Area Power substation. I mentioned earlier  
9 that TEP had a joint project with Western. That is the  
10 line that runs from this substation in a westerly  
11 direction, approximately 14, 15 miles west, along  
12 Valencia Road. And so that was one where TEP actually  
13 did the construction on behalf of Western. In the end,  
14 Western owns the right-of-way, they own the poles, they  
15 own their circuit, TEP owns the other circuit on the  
16 opposite side. And in that case, it was built to 138  
17 standards on both sides, and they operate theirs at  
18 115.

19 Now, we're heading north kind of along I19.  
20 Again, this little strip mall area. Cross through the  
21 strip mall, cross Santa Cruz River, and back into some  
22 residential area that developed along the line.

23 This is just a picture that shows -- there's  
24 the H-frame and proximity of houses to the line.  
25 They're right there.

1           Go across a few hills here, it's a little bit  
2 more open space, not so much development. You've got a  
3 parkway here. And then you're going to be approaching  
4 Tumamoc from the south right in here. So the commenter  
5 today was probably somewhere in this region. We  
6 haven't looked at the address yet.

7           But again, the purple line is the straight  
8 line that was the existing alignment for Western. And  
9 what they've agreed to is to relocate along the  
10 periphery of the property for the Tumamoc desert  
11 research area.

12           MEMBER NOLAND: Mr. Chairman.

13           CHMN. CHENAL: Member Noland.

14           MEMBER NOLAND: Okay. What do you mean  
15 "they" have agreed? WAPA has agreed?

16           MR. BECK: So Western agreed through the --  
17 Western and Southline agreed, through their EIS process  
18 with the stakeholders that were interested, to relocate  
19 it there. And they went through their federal NEPA/EIS  
20 process, solicited comments how they'd do it in that  
21 NEPA process, and that was the end result in the EISs  
22 for this relocation. So when I say "they," it's kind  
23 of a combined group of stakeholders that were part of  
24 that process.

25           MEMBER NOLAND: And then the potential



1 relocation is going to be on the east side of  
2 Greasewood there, correct, across from the school and  
3 then the residences, but still on the park land?

4 MR. BECK: That is the intent. That's our  
5 understanding of the intent is that it will be on the  
6 Tumamoc property on the boundary, but on the east side  
7 of Greasewood and the south side of Anklam.

8 MEMBER NOLAND: Thank you.

9 MR. BECK: Just to the east is A Mountain,  
10 which you're probably familiar with. Tumamoc just sits  
11 behind to the west of A Mountain. There's an  
12 interesting history to Tumamoc and the land. I believe  
13 it started with federal ownership and it got  
14 transferred down to local, and now it's a combination  
15 of the U of A and Pima County controlling that.

16 Now, you can see development in here, some of  
17 it being commercial. This is looking back across  
18 Tumamoc to the existing turning structure, that  
19 three-pole structure there.

20 Now, we're headed in a northerly direction  
21 crossing Speedway, crossing by the park. Then we turn,  
22 come over towards the interstate, cross Interstate 10  
23 right in here. The TEP DeMoss substation is here. So  
24 this is -- the line comes across the TEP property. The  
25 TEP DeMoss Petrie substation is on the east side of

1 Interstate 10 between the interstate and Fairview Road.  
2 And we also own this piece of property, this bare piece  
3 of ground right here. We used to have storage  
4 facilities there.

5 And then this big yellow area at the bottom  
6 of the screen is the Tucson station. That's the  
7 Western existing substation. This is a substation  
8 where they rebuilt a portion of that to 230 kV with the  
9 thought that if Southline moved forward, they're going  
10 to have 230 tied in there at least on one circuit. So  
11 that will sit until some future date when they actually  
12 need it.

13 The TEP lines will -- circuit will drop into  
14 this area right here, where we will convert from 230.  
15 We'll have transformation to go from 230 down to 138,  
16 which is the voltage across the street there.

17 This is an industrial area pretty much along  
18 that stretch of Fairview. Here we cross back across  
19 Interstate 10. Some U of A property, some farm area  
20 here, research stuff. You'll see a little bit of  
21 development just to the south of the alignment. Again,  
22 we're coming back up to the park, Christopher Columbus  
23 Park, and the golf course there on the right-hand side.

24 MEMBER NOLAND: Mr. Chairman.

25 CHMN. CHENAL: Member Noland.

1                   MEMBER NOLAND: Just for clarification,  
2 Mr. Beck, is it safe to say that most of that  
3 development has taken place after the WAPA line was in  
4 place?

5                   MR. BECK: Yes, ma'am, definitely.

6                   MEMBER NOLAND: Thank you.

7                   MR. BECK: This is the Pima Animal Control  
8 Center right there. And then this is, again,  
9 Christopher Columbus Park.

10                   Right in here we're crossing from city of  
11 Tucson into the town of Marana, that little red line  
12 that appeared briefly.

13                   Again, a lot of flooding area in here. The  
14 confluence of the Rillito Creek and the Santa Cruz  
15 River was, I believe, just back from this point, so  
16 you've got a lot more water coming through this area.  
17 So anything from Silver Bell Road towards the river is  
18 pretty low land in there.

19                   Little bit of development right here near the  
20 line; again, built recently. These are larger  
21 homesites on hilly terrain.

22                   You're getting into more of the main part of  
23 Marana. All old, of course, agricultural farmland  
24 that's been turned into housing through here.

25                   This is Silver Bell Road. And as we go up

1 over this hill, it turns into Twin Peaks Road. Those  
2 areas are probably 10 years old or so, this subdivision  
3 probably five or less.

4 So again, this is the Rattlesnake substation,  
5 a Western sub. CAP pumping plant is right there.

6 Just a point of information, the CAP canal  
7 comes down, and they have to pump at this point to get  
8 it up to the top of the hill to continue its gravity  
9 feed downhill. So there's a number of pumping plants  
10 along the CAP canal that -- part of the reason Navajo  
11 plant was built was to supply all of those pumping  
12 plants, and then Western had a large part in delivery  
13 to all of the pumping plants along the way.

14 This greenish area, bluish, to the right is  
15 again the Marana Regional Airport. So we're coming up  
16 to the reroute related to that. You'll see the purple  
17 line is existing alignment. There's a monopole right  
18 there. And they're kind of hard to see, but there's  
19 some H-frames showing right along there. We're going  
20 to be requesting a 300-foot corridor in this stretch.

21 You get kind of a bird's eye view here  
22 towards the airport. The majority of this out here is  
23 State land.

24 I think our developer got a little bit tired.  
25 He speeded it up a little bit here.

1 Marana Tap substation is another Western Area  
2 Power substation.

3 And here is another case where those  
4 buildings just don't look right. We had asked our  
5 consultant about that. They didn't have time to fix  
6 this, though.

7 This area up in here gets a lot of flooding,  
8 sheet flow, so that's one reason why you don't see much  
9 in the way of any developments out here.

10 Now, we're coming up north and we're going to  
11 turn easterly and we'll be heading back towards  
12 Tortolita and Sahuaro substations.

13 There's a solar facility right there,  
14 probably in Trico's service territory.

15 This is where the corridor deviates to take  
16 the line into Tortolita. So this is the tie line  
17 between the Western alignment and TEP's Tortolita  
18 substation.

19 Maybe if you could just back it up just a  
20 little bit. Stop there. Right there.

21 Just this corner in the upper left corner of  
22 what is Tortolita substation is our 500 kV yard, and  
23 that ties back -- there's two lines that run right  
24 along those lines there that tie to the Sahuaro 500  
25 yard. So that's one key import point for TEP.

1           On the bottom upper part of Tortolita is our  
2 138 kV yard, and we have multiple 138 lines running  
3 from there to the south into Tucson.

4           MEMBER PALMER: Mr. Chairman.

5           MR. BECK: And we put a 230 transformer right  
6 in this corner. It will be our tie between the two  
7 parts of the system.

8           CHMN. CHENAL: Member Palmer.

9           MEMBER PALMER: Yeah. Mr. Beck, the corridor  
10 that ties in from the WAPA line into the substation,  
11 was that part of the corridor that was approved in 173?

12           MR. BECK: Yes, Member Palmer, that was part  
13 of the Case 173 approval.

14           MEMBER PALMER: Okay, thank you.

15           MR. BECK: So that is pretty much the  
16 flyover. We back out to the original screen.

17           MR. DERSTINE: I think that's probably all we  
18 have time for today. I think public comment is noticed  
19 on the agenda at 5:30. I've got about 5:20. But we're  
20 happy to -- I know in the past we have done the flyover  
21 and then we've had the actual route tour and then we've  
22 done the flyover again. If you want to see that again  
23 at any point during the hearing, we're happy to replay  
24 it and maybe speed it up, whatever your preference is.  
25 But we appreciate all your time and attention today on

1 day one.

2 CHMN. CHENAL: Yeah, I think that's a good  
3 time to stop. I, for one, think we'd like to probably  
4 -- I would like to see it tomorrow morning when we  
5 start up again, but at a faster speed, and just kind of  
6 go through it just to see it. I think it will be good  
7 to see it a second time and set the stage for some of  
8 the rest of the testimony. I think it was well done,  
9 and I certainly appreciate the efforts to get a more  
10 robust flyover to take the place of a tour in person.

11 So I know we start in about five minutes for  
12 the public comment session. Is there anything we  
13 should discuss before we adjourn to 9:00 a.m. tomorrow?

14 (No response.)

15 CHMN. CHENAL: If not, let's adjourn. It was  
16 a great first day. This obviously has taken longer  
17 than -- this is going to take some time to go through  
18 all this material, but we'll see everyone tomorrow at  
19 9:00 a.m. and then we'll reconvene at about 5:30 for  
20 the public comment. Thank you.

21 (Off the record from 5:23 p.m. to 5:34 p.m.)

22 CHMN. CHENAL: Okay. Good evening, everyone.  
23 This is the time set for the public comment in  
24 connection with the application to amend the Southline  
25 CEC. We adjourned for the evening from our regular

1 hearing and will resume tomorrow at 9:00 a.m.

2 We noticed, as part of our public notice for  
3 this hearing, a public comment session for this evening  
4 at 5:30. And we, as a Committee, value public comment.  
5 It informs us of issues of concern and helps us to ask  
6 questions and the applicant to present -- maybe revise  
7 a presentation to get into areas and issues that are  
8 raised by the comments.

9 So with that said, if the person on the line  
10 and other people that might show up for this could  
11 provide us their name and provide the contact  
12 information to the applicant in case in the future they  
13 are to be notified of any changes to any order that's  
14 issued by this Committee or the Corporation Commission,  
15 they can be notified with their contact information  
16 provided. But with that, we'd like to hear your public  
17 comment. So if you could state your name and provide  
18 us your comment, we'd appreciate it.

19 MR. UTZINGER: Yeah, my name is Benjamin  
20 Utzinger. Would you want me to provide my contact  
21 information live right now while we're speaking, or  
22 would you prefer to have me send it some other way?

23 CHMN. CHENAL: Sir, the volume was down.  
24 Could you restate your name and what your question was?

25 MR. UTZINGER: Yes. Is this better?



1 CHMN. CHENAL: Better.

2 MR. UTZINGER: Okay. My name is Benjamin  
3 Conrad Utzinger. Would you like me to provide my  
4 contact information via the chat, or would you like me  
5 to speak it for the record right now? What would you  
6 prefer?

7 CHMN. CHENAL: Chat is fine.

8 MR. UTZINGER: Okay. I will do that after my  
9 comment, if that's okay with you then.

10 CHMN. CHENAL: That's absolutely fine.

11 MR. UTZINGER: Okay. Yeah. I have a couple  
12 questions, one of my first ones being, why is the  
13 proposed voltage going to be 230 kilovolts? Why not  
14 any other value? Why not round it up to an even 250?

15 CHMN. CHENAL: Well, sir, here is the  
16 situation with public comment. As a Committee, we  
17 cannot engage in kind of back-and-forth questions. The  
18 way this is set up is we hear your comments, pro, con,  
19 or just your comments.

20 Having said that, the applicant is willing to  
21 engage with you and answer any questions you have,  
22 which we can set up at the end of this public comment  
23 session, because I believe you're the only person  
24 that's appearing.

25 MR. UTZINGER: Yes.

1 CHMN. CHENAL: So they can answer your  
2 questions. As a point of fact, we've covered that in  
3 the hearing already today, so they'll be able to  
4 provide you with the answers to that question.

5 MR. UTZINGER: All right. Thank you very  
6 much. If that's the case, that I cannot go back and  
7 forth, the one comment I would like to make as a  
8 potential con for this is the fact that this current  
9 system does not travel through the neighborhood of  
10 Winter Haven. I feel as though right now Winter Haven  
11 has had an unfair advantage, when it comes to where  
12 lines have been placed, due to their large amount of  
13 contact and their organization when it comes to TEP.  
14 And I feel like any potential new system that should be  
15 built should be done in such a way that would  
16 negatively affect them due to their large advantage  
17 that they have had in the future.

18 CHMN. CHENAL: Thank you, sir. That's an  
19 interesting observation, and there might be some  
20 follow-up questions that we have to the applicant.

21 But your question before, and you may have  
22 some additional questions, are germane to the hearing.  
23 So I don't think we have to do this in a public format  
24 so much as an ability of having one of the TEP  
25 representatives answer your questions. Because this is

1 remote and it's Zoom -- normally, I'd just ask the  
2 applicant to have a sidebar conference with you. I'm  
3 not quite sure how to do that with a Zoom conference.

4 MR. DERSTINE: Mr. Chairman, I think we could  
5 establish a time to either call back or do a Zoom call  
6 with the commenter, who I don't see, but I hear his  
7 voice. So through the chat, we will coordinate and  
8 schedule a time to either have a call or a Zoom  
9 conversation and answer his questions.

10 CHMN. CHENAL: I think that's fair, because  
11 we don't want to take up the time. And we have a court  
12 reporter here taking everything down, and that would  
13 not be the normal process to answer the questions, but  
14 I think the question was good and deserves an answer.

15 What is your last name, sir?

16 MR. UTZINGER: Utzinger, U-T-Z-I-N-G-E-R.

17 CHMN. CHENAL: Utzinger?

18 MR. UTZINGER: Utzinger.

19 CHMN. CHENAL: Utzinger. Okay, Mr. Utzinger,  
20 thank you for your comments. The applicant will get  
21 back with you to set up a time to answer your  
22 questions. Do you have any other comments you'd like  
23 to make?

24 MR. UTZINGER: That is it, especially with  
25 your comment earlier that they should be made privately

1 to TEP. I will do so then.

2 CHMN. CHENAL: Well, thank you, and thank you  
3 for your interest.

4 Are there any other members of the public  
5 that are either in person or on the Zoom conference  
6 that would like to make a comment on it?

7 MS. DARLING: Not that they've typed in the  
8 chat, but let me ask them.

9 Hello, this is Renee Darling of TEP. Do any  
10 of the attendees want to make a public comment? If so,  
11 please raise your hand using the button at the bottom  
12 of the screen or type your question into the Q and A.

13 (No response.)

14 MS. DARLING: There's a lot of people on, but  
15 nobody is raising their hand or typing.

16 CHMN. CHENAL: Sorry. Could you repeat that,  
17 Ms. Darling?

18 MS. DARLING: I said there are a lot of  
19 people on the call, but there's no one typing a  
20 question or raising their hand to ask a question.

21 CHMN. CHENAL: Well, we understand there are  
22 people that are online in the Zoom conference call, but  
23 we need to have people step forward and make their  
24 public comment, because this is the time to do that.  
25 And we can do it any number of ways, either by having

1 you type questions -- or, comments, I should say, not  
2 questions, but comments, or alternatively, speaking up.  
3 We'd like to hear your comments. But if there are no  
4 further comments either via chat or orally, we're going  
5 to have to bring this public comment session to a  
6 close.

7 Now, there are other opportunities during  
8 this hearing to make public comment. If you would join  
9 the Zoom conference or the Zoom hearing at a later time  
10 tomorrow or thereafter while the hearing is being held  
11 and you indicate your desire to make public comment, we  
12 will fit you in right before or after a break. So this  
13 is not your only opportunity. But if you want to make  
14 your comments tonight, that window is closing quickly.  
15 So we're going to have to hear or we're going to have  
16 to adjourn.

17 (Cell phone rings.)

18 MEMBER PALMER: Apparently the Fighting Irish  
19 want to make a comment.

20 CHMN. CHENAL: So hearing no further comment,  
21 I think we'll bring this public comment session to a  
22 close.

23 MS. DARLING: Hold on. There was a comment  
24 typed into chat. So he said he commented online,  
25 and --

1 MR. GREIVENKAMP: The comment was mine, and I  
2 think you have my contact information as previously  
3 requested.

4 MS. DARLING: So he wants to know if you want  
5 him to tell you it also. I don't think that's  
6 necessary, but...

7 CHMN. CHENAL: I think what we're going to  
8 need to do is have a microphone for Ms. Darling,  
9 because I cannot hear what she's saying and it's not  
10 fair to the court reporter to make it part of the  
11 record.

12 But what I think I heard was that  
13 Mr. Utzinger provided his contact information?

14 MS. DARLING: No. We have somebody who  
15 commented through the online comment form for the  
16 project, and they're on the call and want to know if  
17 you want them to tell you the comment that they've  
18 already submitted.

19 CHMN. CHENAL: Yes.

20 MS. DARLING: Okay. Jake, this is Renee with  
21 TEP. The Chairman would like to hear the comment that  
22 you submitted online. So can you unmute yourself?

23 Where did he go? I lost him. Hold on.  
24 There he is.

25 Okay. Jake, you should be able to speak.

1 MR. GREIVENKAMP: Okay. So I just had some  
2 comments, because I'm in a community along the affected  
3 route. I think I e-mailed back and forth a couple  
4 times with Renee showing the site path, and I had a  
5 comment about the -- if it was to be along the exact  
6 existing route, because the -- we kind of talked about  
7 this already, but the plan that she sent was kind of  
8 going closer to our community. And I think it was  
9 already discussed that it was -- TEP is not open for  
10 alternate proposal routes to kind of use the vacant  
11 dump up by Silver Bell, the ex-Silver Bell dump, to put  
12 the power lines over that. So I just want to make sure  
13 that my e-mail comments were recorded in the public  
14 record.

15 CHMN. CHENAL: Well, sir, the comments that  
16 we are hearing are the ones you just gave.

17 MR. GREIVENKAMP: Okay. So I wrote a pretty  
18 good e-mail, so that was much more eloquent for myself.  
19 But I just wanted to ask about the routing in my  
20 neighborhood and if that's final and resolved and not  
21 something that can be, what do I say, changed.

22 CHMN. CHENAL: Well, I think this is -- so  
23 your comment is whether -- you're not in favor of the  
24 route that's proposed by your house, and you've made  
25 that public -- you made that comment in an e-mail.

1 MR. GREIVENKAMP: Yeah.

2 CHMN. CHENAL: I think this is another one  
3 perhaps a TEP representative could get back and discuss  
4 with you. This is -- the application is for a pretty  
5 defined route that's based upon a federal system that's  
6 already gone through hearings, so it's maybe difficult  
7 to change the route, at least the applicant isn't  
8 proposing it. So I would ask the applicant to get back  
9 with you and at least confirm what your comment is as  
10 to what change you'd like to see in the route.

11 MR. DERSTINE: Mr. Chairman, I hope I'm not  
12 doing too much damage to the commenter's name.  
13 Greivenkamp?

14 MR. GREIVENKAMP: Greivenkamp.

15 MR. DERSTINE: Greivenkamp, thank you.  
16 Apologize. So I think we do have Mr. Greivenkamp's  
17 online comment. It's going to be summarized in our  
18 exhibit of all the comments that we've received through  
19 the recent round of outreach. And we'll present that,  
20 as well as the response.

21 But, Mr. Greivenkamp, if you would like to,  
22 in the chat, contact Ms. Darling or just place it in  
23 the chat, we will schedule another time to discuss your  
24 comment if we haven't fully responded to it to your  
25 satisfaction.



1 MR. GREIVENKAMP: Okay, thank you.

2 CHMN. CHENAL: Okay. Any other members of  
3 the public that wish to make public comment at this  
4 time?

5 (No response.)

6 CHMN. CHENAL: If not, we'll close the public  
7 comment session. I want to thank the people that took  
8 the time to make their comment, and we will resume the  
9 hearing tomorrow morning at 9:00 a.m. Thank you.

10 (The hearing adjourned at 5:48 p.m.)

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1 STATE OF ARIZONA )

2 COUNTY OF MARICOPA )

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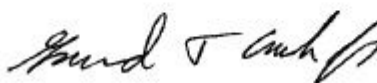
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