

BEFORE THE ARIZONA POWER PLANT AND TRANSMISSION LINE SITING COMMITTEE

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In the matter of the Joint Application) DOCKET NO.
of Nogales Transmission, L.L.C. and) L-00000F-17-
UNS Electric, Inc. ("UNSE"), in) 0246-00176
conformance with the requirements of)
Arizona Revised Statutes §40.360, et) L-00000CCC-17-
seq., for Certificates of Environmental) 0246-00176
Compatibility authorizing construction)
of the Nogales Interconnection Project)
and the UNSE Nogales Tap to Kantor) Case No. 176
Upgrade Project, including an)
approximately 27.5-mile upgrade of)
UNSE's existing 138-kV transmission)
line from a point near the existing)
Western Area Power Administration)
("WAPA") Nogales Tap in Pima County)
and the existing UNSE Kantor Substation))
in Santa Cruz County, a new)
approximately three-mile 138-kV double)
circuit transmission line in Santa Cruz))
County from a point near the existing)
UNSE Valencia Substation to the)
proposed Gateway Substation and)
associated facilities, and a new)
approximately two-mile 230-kV)
transmission line and associated)
facilities in Santa Cruz County to)
interconnect the proposed Gateway)
Substation to the Mexican National)
Electric System.) VOLUME II
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REPORTER'S TRANSCRIPT OF PROCEEDINGS

22 COASH & COASH, INC.
23 Court Reporting, Video & Videoconferencing
24 1802 N. 7th Street, Phoenix, AZ 85006
602-258-1440 staff@coashandcoash.com
25 By: Colette E. Ross, CR
Certified Reporter
Certificate No. 50658

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1 BE IT REMEMBERED that the above-entitled and
2 numbered matter came on regularly to be heard before the
3 Arizona Power Plant and Transmission Line Siting
4 Committee, at the Quality Hotel Americana Nogales, 639
5 North Grand Avenue, Nogales, Arizona, commencing at
6 9:14 a.m. on the 6th of September, 2017.

7

BEFORE: THOMAS K. CHENAL, Chairman

8

LAURIE WOODALL, Arizona Corporation Commission
9 LEONARD DRAGO, Department of Environmental
Quality

10 JOHN RIGGINS, Arizona Department of Water
Resources

11 JIM PALMER, Agriculture, Appointed Member

MARY HAMWAY, Cities/Towns, Appointed Member

12 JACK HAENICHEN, Public Member

PATRICIA NOLAND, Public Member

13 RUSSELL JONES, Public Member

14

APPEARANCES:

15

For the Applicant Nogales Transmission, L.L.C.:

16

EVERSHEDS SUTHERLAND (US) L.L.P.

17 By Mr. James E. Guy and Ms. Erin Elizabeth Morrissey
One American Center

18 600 Congress Avenue, Suite 2000

Austin, Texas 78701

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21

22

23

24

25

1 APPEARANCES:

2 For the Applicant UNS Electric, Inc.:

3 UNS ENERGY CORP.
4 Legal Department
5 By Ms. Megan DeCorse
6 88 East Broadway Boulevard
7 Tucson, Arizona 85701

8 and

9 SNELL & WILMER, L.L.P.
10 By Mr. J. Matthew Derstine
11 One Arizona Center
12 400 East Van Buren, Suite 1900
13 Phoenix, Arizona 85004

14 For the Arizona State Land Department:

15 OFFICE OF THE ATTORNEY GENERAL
16 By Mr. David F. Jacobs
17 Assistant Attorney General
18 416 West Congress Street, 2nd Floor
19 Tucson, Arizona 85701

20 For the Arizona Corporation Commission Staff:

21 Mr. Charles H. Hains and Ms. Naomi Davis
22 Staff Attorneys
23 1200 West Washington Street
24 Phoenix, Arizona 85007

25

1 (Present for the tour: Applicants, Chairman
2 Chenal, Members Haenichen, Woodall, Jones, Drago,
3 Riggins, Hamway, and Palmer)
4

5 CHMN. CHENAL: Good morning, everyone. This is
6 the time set for the continuation of the hearing in
7 Nogales. And we are going to convene and then
8 immediately go on our tour.

9 So just a reminder that we will keep questions
10 to a minimum to make it easy on the court reporter. And
11 with the group, the Committee will not be discussing any
12 substantive matters when we are en route and the only
13 substantive discussion will occur on the record. And
14 when we come back from the tour, we will resume the
15 hearing until our lunch break.

16 Then we will probably take an hour and 15 minute
17 lunch break just because most of us have to check out of
18 the room and it will give us all time and have a bite.
19 And we will resume, say, 1:15 and go to 5:00, or play it
20 by ear, but 5:00, and then we will break, and most of us
21 will be going up to the Tucson for the next venue.

22 So let's adjourn, not adjourn, but let's just go
23 to the buses and we will start the tour.

24 (TIME NOTED: 9:15 a.m.)

25 (The tour proceeded to Stop 1.)

1 STOP 1

2 (TIME NOTED: 9:26 a.m.)

3 CHMN. CHENAL: Let's go on the record.

4 Mr. Beck, why don't you tell us where we are at
5 the first stop here. Speak loudly because we are
6 staying on the bus. The road is blocked.

7 MR. BECK: Okay. So we just passed the Valencia
8 substation, which, as we turn the corner, the existing
9 line comes up to this corner pole right here directly to
10 our north. That existing line will be utilized as part
11 of our project. At that structure right there is where
12 we break that line, which currently heads up towards
13 Tucson. And this is where the double circuit will start
14 to head over to Gateway. And so we will basically go in
15 and out to Gateway from this turning structure right
16 here.

17 Now, we had originally planned to be a little
18 bit further west of here but they put barricades and
19 blocked the roadway. So we can't quite see the
20 interstate crossing from here so we will see it from the
21 other side.

22 But basically the routes, there is a slight
23 alternative right here, which is for Alternate 1, where
24 the line would head south and angle over. And it is
25 also on the placemat. So it is between segment 2 and

1 segment 3. It is just a small alternative so we are not
2 dividing the property line.

3 So we will go, from here we will head to the
4 other side of the freeway and we will be able to kind of
5 look back and see where the crossing is.

6 CHMN. CHENAL: Okay. Thank you.

7 (TIME NOTED: 9:28 a.m.)

8 (The tour proceeded to Stop 2.)

9

10 STOP 2

11 (TIME NOTED: 9:40 a.m.)

12 MR. BECK: Okay. We are basically standing on
13 the alignment for all the routes, or all three of the
14 routes, Alternatives 1, 3, and 4. And Alternative 2
15 would head up just a little bit to the east of us,
16 crossing up that way. But the other three come along
17 the edge of this wash right here. So this is right
18 along in here, segment 5 basically.

19 MEMBER HAMWAY: Okay.

20 MR. BECK: And this is City of Nogales property
21 for the most part along here, that we would be working
22 with them on the property crossing.

23 MEMBER JONES: Any issues with flood control
24 with this wash or during times of heavy rain?

25 MR. BECK: We will design the structures to

1 accommodate any flows, put deep foundations.

2 MEMBER WOODALL: I had a question, Mr. Beck.
3 What do you anticipate the elevation of the structures
4 are going to be as it relates to the level ground? Are
5 they going to be up higher on higher elevations or are
6 they going to be right abutting the wash?

7 MR. BECK: They will be adjacent to the wash up
8 on the -- there is a bit of a, kind of a trail along
9 here. That's up above the bottom of the flow level. We
10 will be up on that bench. And then we will probably
11 have foundations that come up out of the ground a few
12 feet.

13 MEMBER WOODALL: I am seeing some hills here.
14 So you are not anticipating, and I understand the
15 engineering hasn't been done, but they are not going on
16 the top of the hills or even midlevel on the hills?

17 MR. BECK: We won't be on the hills on the
18 opposite side. So we are going to stay down along the
19 wash. So they will be largely hidden by all the
20 industrial, the warehouses in this area.

21 MEMBER WOODALL: Thank you.

22 MR. BECK: Any other questions before we get
23 attacked?

24 MEMBER RIGGINS: Somebody check his papers.

25 MR. BECK: I think that's it for this.

1 (TIME NOTED: 9:42 a.m.)

2 (The tour proceeded to Stop 3.)

3

4 STOP 3

5 (TIME NOTED: 9:50 a.m.)

6 MR. BECK: This is our, the proposed Gateway
7 site. So this is a site TEP had purchased back in 2000
8 when we were proposing the other project. We graded
9 this site, fenced it. So it is ready for substation,
10 for a substation, the idea being this corner, this
11 narrower portion of the property would be the 138kV UNSE
12 substation. The balance of this property would be the
13 DC converter station, as you can see much bigger
14 footprint than the 138.

15 The alternative routes: so Alternative No. 2
16 comes in generally from the east over here.
17 Alternative 4 comes in to the southeast from this point.
18 And then Alternative No. 3, which is our preferred,
19 comes out of the west end of the station, that corner,
20 goes over a little ways and turns south. And then
21 Alternative No. 1 pretty much has a portion that heads
22 west from here to the forest boundary and south. So the
23 forest is, I don't know, about half a mile west of here
24 is the forest boundary.

25 Any questions?

1 CHMN. CHENAL: How many acres for the
2 substation?

3 MR. BECK: I think we have a total that we own
4 of 30 acres, but I think the graded is -- 11? 12? --
5 12 acres.

6 MR. GUY: Yeah, 1.8.

7 MR. BECK: And 1.8 for the UNSE substation.

8 So we purchased a piece of property, the hills
9 and the washes in here. We own the property out way
10 beyond the fence line, but usable is about 12 acres.

11 MEMBER HAMWAY: And how many acres for the
12 converter, from converting from AC to DC?

13 MR. BECK: We have got about 12 acres.
14 Approximately two is the 138 and the balance is DC.

15 MEMBER HAMWAY: That's a huge piece of
16 equipment.

17 MR. BECK: It is a pretty big installation but
18 it is planned for phase one and phase two. So phase one
19 will take approximately half of the site. And then we
20 will have the rest that will still be open for a future
21 phase two, if we go there.

22 CHMN. CHENAL: Okay. Any other questions?

23 (No response.)

24 CHMN. CHENAL: Okay.

25 MR. BECK: Good. Thank you.

1 (TIME NOTED: 9:53 a.m.)

2 (The tour proceeded to Stop 4.)

3

4 STOP 4

5 (TIME NOTED: 9:58 a.m.)

6 MR. BECK: Okay. So we are on the southwest
7 corner of the border patrol property, which we have
8 heard some comment about. They mentioned the climbing
9 tower. That's their climbing tower there, that
10 rectangular metal structure. Their microwave structure
11 is over there that they had some questions about
12 communications. And the horses and the corrals are over
13 there.

14 MEMBER JONES: Where is the helicopter pad? Up
15 by the main building?

16 MR. BECK: Off to the east side of the property
17 there.

18 Right along this boundary line, just to the west
19 of the border patrol property, is our segment 10. And
20 we are standing pretty close to where 9, 10, 11, the
21 segments, come together at this point. The other, the
22 Alternative No. 1 portion for the 230 comes out of
23 Gateway and goes straight across. So we can't quite see
24 it from here.

25 MEMBER JONES: That's the one that State Land

1 Department has an issue?

2 MR. BECK: The property owner themselves --

3 MEMBER JONES: The property owner.

4 MR. BECK: -- had an issue, yeah, because they
5 would basically be surrounded by lines, is their
6 concern.

7 MEMBER JONES: Gotcha.

8 MR. BECK: So we are approximately right here.
9 So we would head with segment 12 generally in a
10 southwesterly direction, more west than south.

11 MEMBER WOODALL: There is reference in the EA,
12 which is an exhibit that has been introduced into
13 evidence, that there was consultation by the Department
14 of Energy with Customs and Border Patrol. I looked
15 through the EA and I did not see a specific reference to
16 the concerns that were expressed yesterday evening by
17 the border patrol representative.

18 Did they file comments? Because I know that
19 comments are not always included.

20 MR. BECK: They filed comments in the DOE
21 process. We will be entering some testimony later today
22 to address the issues.

23 MEMBER WOODALL: Do you have the comments?

24 MR. BECK: Yes, we have that letter.

25 MEMBER WOODALL: Okay. All right.

1 MR. BECK: We are trying to get that produced
2 for one of our exhibits.

3 MEMBER WOODALL: Yes. And border patrol was not
4 a cooperating agency in this EA process? Does anyone
5 know?

6 MR. BECK: Not directly, no.

7 MEMBER WOODALL: They were just consulted in --

8 MR. BECK: Consultant.

9 MEMBER WOODALL: Thank you.

10 CHMN. CHENAL: Where does the alternative that,
11 your preferred alternative, where does the line come in
12 from Gateway with respect to where we are standing?

13 MR. BECK: So it would be coming up this side to
14 the Gateway property. So it is this segment 10. And we
15 would be coming across just a little bit south of here.

16 CHMN. CHENAL: Okay. Where would the, where is
17 Gateway in relation to here?

18 MR. BECK: North of us, so directly along this
19 boundary line here --

20 CHMN. CHENAL: Okay.

21 MR. BECK: -- and then just a little bit to the
22 right.

23 MR. GUY: We are at Stop 4.

24 CHMN. CHENAL: Got it.

25 MR. BECK: Right.

1 MEMBER WOODALL: And, Mr. Beck, I know you said
2 you are going to have some testimony regarding the
3 concerns expressed by the border patrol representative
4 last night, you are going to put the letter that they
5 filed as comments to the EA into the record. It would
6 be extremely helpful to me to have as specific a
7 response to the concerns expressed in the comment letter
8 by the border patrol as possible. And it would also be
9 helpful for me to know if the border patrol
10 representative, or representatives, are in accord with
11 your recommendations with respect to their concerns.

12 MR. BECK: Right.

13 MEMBER WOODALL: In other words, I want to know
14 if they are happy.

15 MR. BECK: Yes. I have had conversations with
16 Mr. Hecht, and he was satisfied. But what we plan to do
17 is put together the, what we put for responses, send it
18 back to him, just so he can validate that it does meet
19 all of his concerns.

20 MEMBER WOODALL: Now, are these the type of, I
21 am going to call them mitigation measures, because I am
22 not sure if they are but I will use that term, is this
23 something that the applicant is going to be willing to
24 commit to in terms of any form of conditions to a CEC,
25 should one issue?

1 MR. BECK: If we have to go there, we will
2 accept it. We would prefer not to add conditions to the
3 extent possible, but we do commit to meeting all of the
4 concerns of the border patrol.

5 MEMBER WOODALL: It is always helpful to have it
6 in the CEC itself because there is no question about it,
7 and then there is a way to find out what the commitments
8 and undertakings were. So that would be my, my take.
9 But of course I haven't heard what you are going to say
10 yet. So thank you.

11 MR. BECK: Yeah.

12 CHMN. CHENAL: Any more questions?

13 MEMBER RIGGINS: I have one. So the poles would
14 be along this fence line essentially?

15 MR. BECK: Correct.

16 MEMBER RIGGINS: Have there been any issues with
17 the right-of-way with these property owners or any --

18 MR. BECK: We haven't really had any concerns
19 raised by the property owners.

20 MS. DARLING: They are aware.

21 MEMBER RIGGINS: Okay.

22 MS. CANALES: If I can add, we have contacted
23 them for purposes of right of entry. And so they are
24 aware of the project. We have given them updates. And
25 they were happy to give us the right of entry.

1 MEMBER RIGGINS: Okay. How close to this fence
2 would the poles actually be located? Would the
3 right-of-way --

4 MR. BECK: So we would have a 100-foot
5 right-of-way from the fence line to the west. And we
6 intend to center within that right-of-way, so 50 feet
7 over.

8 MEMBER RIGGINS: Okay.

9 MEMBER JONES: But because the people have -- it
10 is a right-of-way, so would that tank or any of the
11 other structures that are within that right-of-way have
12 to be removed?

13 MR. BECK: Yeah. I mean, the actual alignment,
14 we are a little bit north of where the alignment is so
15 the alignment is a little bit further south from here.

16 MEMBER JONES: So --

17 MR. BECK: We will have to look at all the
18 specifics of what is along the route. We will try to
19 avoid to the extent possible. And we will work with the
20 landowners. If something needs to be moved, we will get
21 that moved.

22 CHMN. CHENAL: I am confused now. I mean the
23 line is coming, if your proposed route would come along
24 the western fence here of the border patrol property, it
25 would go between basically the border patrol property

1 and the house up on the hill to the left of us about 300
2 feet away.

3 MR. BECK: Correct.

4 CHMN. CHENAL: And it would go somewhere between
5 the house and border patrol facilities. So it is going
6 to go right through where the horses and all these
7 structures are right now.

8 I mean that's okay, but I mean when you said the
9 alignment is a little south, I mean the line is going to
10 go right through it.

11 MR. BECK: Yes, it will.

12 CHMN. CHENAL: Okay.

13 MR. BECK: To the extent there are corrals, if
14 there are issues with corrals, we will work with that
15 property owner to move them. If the --

16 MEMBER WOODALL: What do you anticipate a
17 typical pole spacing is going to be?

18 MR. BECK: 650 to 750 foot.

19 MEMBER WOODALL: So you are going to be able to
20 span.

21 MR. BECK: We will, a lot of the issues that you
22 see out here.

23 MEMBER WOODALL: And the structures are how high
24 again?

25 MR. BECK: 100 to 130 feet depending. And, you

1 know, we will make sure we have plenty of clearance for
2 whatever might be under the line. So if we are going
3 over some structure like a corral, there will be extra
4 ground clearance.

5 MEMBER WOODALL: Thank you.

6 MR. BECK: Just to be sure, on this segment 10,
7 we are kind of at 10 here. And so we go a little bit
8 south and then we head to the east with our preferred
9 alignment. And then segment 12 --

10 CHMN. CHENAL: Don't you head west?

11 MR. BECK: And we also head west. So we have
12 got to have a line coming in and going on down to the
13 border. So the 230 would be on 12 and heading south,
14 yeah, exactly.

15 CHMN. CHENAL: Any more questions?

16 (No response.)

17 CHMN. CHENAL: All right. Thank you.

18 (TIME NOTED: 10:09 a.m.)

19 (The tour proceeded to Stop 5.)

20

21 STOP 5

22 (TIME NOTED: 10:21 a.m.)

23 CHMN. CHENAL: Let's go back on the record.

24 MR. BECK: All right. So this impromptu stop,
25 an alternate Stop 5 because we missed the turn up here,

1 we are going to be a little north here, but this is
2 where the border crossing would be. And it is basically
3 at the end of these corrals. It is coming right up in
4 the cross on basically that high hill. That would be
5 the border crossing itself.

6 This is just an interesting point of interest.
7 This is where the cattle cross the border. So at
8 certain times, the border patrol will show up, open --
9 there is a gate up here on the fence. The cattle will
10 come through down into the pens. And that's how they
11 get transferred across the border.

12 MEMBER JONES: Those are called the clean pens
13 over there.

14 MR. BECK: So, again, we are basically looking
15 at segment 15 just to the west of us here.

16 CHMN. CHENAL: And all of the alternatives come
17 through at this point, is that correct?

18 MR. BECK: This is the 230 alternative. I mean
19 this is the only option for taking the line to the
20 border on this segment.

21 CHMN. CHENAL: So all of the alternative routes
22 that are proposed, they all --

23 MR. BECK: They all end up going here.

24 MEMBER JONES: It makes sense to have it up
25 there because, given the height of the fencing, to make

1 sure it is sufficiently over that fencing. If you are
2 putting it on the ground here, you would have to have a
3 pretty tall pole to get the clearance that they would
4 require.

5 MR. BECK: Exactly, yeah.

6 CHMN. CHENAL: Okay. Any further questions?

7 MR. GUY: Ed, while we are here, the Roosevelt
8 Easement.

9 MR. BECK: Okay. So there is a Roosevelt
10 Easement. It is a set-aside 60 feet from the
11 U.S.-Mexico border. There can be no, doesn't look like
12 here, but supposed to be no obstacles or construction
13 within that 60-foot easement. The only thing that's
14 allowed in there are highways or roadways.

15 And so we committed that we will be 300 foot
16 back, so we will be well away from that 60-foot
17 Roosevelt Easement.

18 CHMN. CHENAL: The monopole, or the pole.

19 MR. BECK: Yes.

20 MEMBER JONES: This area here is considered a
21 customs facility. So it is counted as a customs
22 facility. So they don't include it in the private
23 sector even though it is operated by a private sector.
24 They have a concession to operate this and for purposes
25 of strictly for crossing the cattle.

1 CHMN. CHENAL: All right. Any further
2 questions?

3 (No response.)

4 CHMN. CHENAL: All right. Thanks.

5 MR. BECK: This is the extent of our tour,
6 unless there is something you specifically wanted to
7 stop at.

8 (TIME NOTED: 10:23 a.m.)

9 (The tour proceeded to the hearing room.)

10 (A recess ensued from 10:30 a.m. to 11:12 a.m.)

11 CHMN. CHENAL: All right. This is the time to
12 resume the hearing.

13 I see the parties are present with counsel. We
14 just came back from the tour that was, I think we all
15 felt, very interesting. Well done. And my
16 understanding is that the applicant may want to replay
17 the virtual tour, or a portion of it, just to put things
18 back in perspective.

19 But Mr. Guy, please proceed.

20 MR. GUY: Thank you, Mr. Chairman.

21 And that's correct. We thought it would be
22 helpful to look at UNS-7, Exhibit UNS-7, which is the
23 virtual tour of the Nogales interconnection project.
24 And that was an exhibit that was primarily sponsored by
25 Ms. Canales, but we think Mr. Beck and Ms. Canales may

1 tag team to explain. Mr. Beck gave testimony while on
2 the physical tour so he will kind of connect what is on
3 the virtual tour with what we saw on the physical tour.

4
5 EDMOND BECK, MATT VIRANT, and GABRIELA CANALES,
6 called as witnesses on behalf of the Applicants, having
7 been previously duly sworn by the Chairman to speak the
8 truth and nothing but the truth, were examined and
9 testified as follows:

10

11 DIRECT EXAMINATION CONTINUED

12 BY MR. GUY:

13 Q. So with that, Mr. Beck, I hand you the reins.

14 A. (BY MR. BECK) Okay. So in the field there was
15 some discussion about existing facilities underneath the
16 line. So I thought looking at the Google would probably
17 help the Committee members relative to that discussion.
18 And so here we are looking at --

19 CHMN. CHENAL: Mr. Beck, could you just help
20 orient us on the map with your pointer on the right --

21 MR. BECK: Yep.

22 CHMN. CHENAL: -- screen, what we are looking at
23 on the photograph on the left screen.

24 MR. BECK: We are basically right at this point,
25 just a little bit south of segment 12, looking to the

1 north on the Google flyover.

2 So this structure that you are seeing in the
3 Google flyover is a turning structure where 10 turns to
4 12. So the 230 is on the left-hand side of this
5 diagram, the double circuit 138 is on the right-hand
6 heading up along segment 10.

7 CHMN. CHENAL: And the Border Patrol facility is
8 where?

9 MR. BECK: It is up in the upper right
10 quadrant -- Patrick, could you move up just a little bit
11 on the north. Here is the Border Patrol facilities in
12 here.

13 CHMN. CHENAL: All right. Thank you.

14 MR. BECK: So we were basically parked
15 approximately where the pointer is here out in the field
16 right near the corner of the Border Patrol property.
17 And so here is the water tank we saw out there and here
18 are the corrals.

19 So the question was asked, you know, what are we
20 going to do with those facilities that are there. Well,
21 we will work with the individual property owners. If
22 these are the alignments that are approved in the CEC,
23 again, we are requesting a thousand foot wide corner, we
24 are intending to purchase a 100 foot wide -- 150 foot
25 wide right-of-way. But if the property owner says it

1 would be better for them to be slightly east or west, we
2 would accommodate that to avoid as much of these
3 facilities as we can. Not to say that a water tank
4 underneath a line is a problem, as long as it is well
5 grounded and there is a sufficient clearance, that's
6 workable, as well as the corrals and those facilities.

7 The primary issue is to be sure they are well
8 grounded. National Electric Safety Code spells out what
9 we have to do for that. I know we have a condition
10 proposed where we will meet all NESC requirements in
11 addition to others. So those facilities will not
12 present a problem to us from a transmission construction
13 standpoint.

14 And Patrick, if we could just go down and run
15 along 12 a little bit.

16 Here again you are seeing, as we are running
17 along segment 12, it is mostly just semitrailer trailers
18 that are easily relocatable. We will provide sufficient
19 clearance with the line so that they could be parked
20 under there potentially, but we will also have
21 discussion with the landowner if it would be better not
22 to park under the line.

23 And this is the point where we turn south and
24 head south along the forest border. And if you recall
25 from yesterday, there really was nothing to speak of out

1 there relative to facilities existing on the ground. I
2 think one of the most cluttered areas, if you want to
3 call it that, was right near that intersection of 10,
4 12, and 9.

5 CHMN. CHENAL: Member Hamway.

6 MEMBER HAMWAY: Is the Forest Service concerned
7 about the trucks and the construction materials bringing
8 in nonindigenous plants, and is that an issue?

9 MR. BECK: The applicants commit to best
10 practices for making sure weeds and so on don't get
11 transported into the areas. It is also covered within
12 the DOE EA process, and they comment on that.

13 MEMBER HAMWAY: So does that include like
14 washing your tire areas and that sort of thing?

15 MR. BECK: Yes. The requirement is for washing
16 vehicles, making sure they don't track any noxious type
17 substances into different areas.

18 MEMBER HAMWAY: Okay.

19 CHMN. CHENAL: Member Woodall.

20 MEMBER WOODALL: So are those undertakings going
21 to be required as a condition of the issuance of the
22 Presidential Permit?

23 MR. BECK: We will have to comply with the
24 Presidential Permit, which it will reference the EA
25 document as a basis. And I believe we have a condition

1 that touches on the general issue, also.

2 MEMBER WOODALL: Because my understanding of the
3 EA is it is an examination, because it is an assessment,
4 it is not an impact statement, it is an assessment of
5 potential environment concerns. But does the EA itself,
6 which is in draft form as I understand it, does it
7 contain any proposed limitations on the applicant?

8 MR. BECK: There are the identified mitigation
9 measures that the applicant is committed to satisfy the
10 issues that were raised in the EA.

11 MEMBER WOODALL: And are those agreements, is
12 that binding on you?

13 MR. BECK: You know, I do not have an answer for
14 that.

15 MEMBER WOODALL: Okay. That's probably a lawyer
16 question. My apologies, Mr. Beck.

17 And so while I am on the topic, when do we
18 expect the final to come out?

19 MR. BECK: I was going to address the issue.
20 You mentioned this is a draft EA, and that is correct.
21 And very specifically, UNSE, in discussions with DOE,
22 raised our concerns that we have been caught in a
23 situation before where the federal and the state
24 proposals do not match, and we could not construct.

25 And so DOE forced us, as the applicants, to

1 actually select a preferred route. And we tried to
2 refrain from doing that just because we knew we hadn't
3 gone through the CEC process. But the DOE was adamant
4 that they would only study one route, so they asked us
5 to identify our preferred route. So we selected
6 Alternative 3 with the intent that that would be what we
7 would bring into the CEC process. But we made it clear
8 to DOE that we were concerned if they were to issue a
9 final EA prior to the state process.

10 So they basically agreed that they would do the
11 draft EA and hold off on a final EA until such time as
12 we go through this process so that, should the CEC
13 process identify a different approved route, they could
14 then go back and adjust the final EA to accommodate the
15 approved route, because they didn't find any of the
16 routes that could not be -- could not meet the
17 requirements of the DOE process.

18 MEMBER WOODALL: Thank you, Mr. Beck.

19 MR. GUY: Are you finished with the flyover?

20 MR. BECK: I believe so, unless there is other
21 questions. We just wanted to make the point that any of
22 those restrictions out in the field, we can work around
23 them and accommodate.

24 MR. GUY: Mr. Chairman, we need about one minute
25 to switch laptops.

1 CHMN. CHENAL: Sure.

2 (Brief pause.)

3 CHMN. CHENAL: Before we begin, Mr. Guy, I just
4 want to, in terms of your order of witnesses, we talked
5 about getting some more information and discussion and
6 testimony from Mr. Beck on the concerns of Border Patrol
7 and, you know, what the applicant plans to do about
8 that. I just don't know when, you know, you plan to do
9 that, because I know you have another panel, we have got
10 cross-examination.

11 MR. GUY: Right. What I had planned -- and of
12 course, could be changed if you prefer a different
13 order -- we are going to start discussing -- Mr. Beck is
14 going to provide testimony on the technical components
15 of the Nogales interconnection project. As he does
16 that, you will see that he will look at different
17 segments. As part of this presentation, he will get to
18 the segment at the border crossing. At that point I
19 thought we would let Mr. Beck testify about Border
20 Patrol's concerns. So that will fit nicely in here
21 right before lunch.

22 CHMN. CHENAL: Perfect.

23 MR. GUY: I was going to save the Magruder
24 questions toward the end of Mr. Beck's presentation.

25 CHMN. CHENAL: That's good. And will the

1 concerns of the Border Patrol as expressed in their, I
2 guess it was correspondence or comments, that will
3 become an exhibit?

4 MR. GUY: Yes, it will.

5 CHMN. CHENAL: Okay, perfect. Thanks.

6 MR. GUY: Okay. Thank you.

7 BY MR. GUY:

8 Q. Mr. Beck, you heard sort of what I think we are
9 going to do. We are at the part of your presentation
10 where we are -- where you will be testifying about the
11 technical aspects of the different parts of the project.
12 Would you, starting with the Nogales interconnection
13 project, will you please give us an overview.

14 A. (BY MR. BECK) Sure. The Nogales
15 interconnection project consists of the Gateway
16 substation, which you saw the site today, which would be
17 the site of both the DC converter station on the western
18 side of that property, and the Nogales UNSE 138 station
19 on the east end of that property in the narrower
20 portion.

21 Connecting the Gateway substation back to the
22 line that goes between Vail and Valencia would be a
23 three-mile double-circuit 138kV transmission line. As
24 you have seen in our application, we have four
25 alternative routes identified. Alternative 3 is our

1 preferred.

2 We would also have, as part of the project, a
3 two-mile 230kV line that would run from the Gateway
4 substation down to the border. And for the 230 project,
5 effectively there are two potential routes. There is
6 the one going directly west out of Gateway to the forest
7 boundary and heading south. And actually there is more
8 than just two, because each of the alternatives has a
9 230 route that comes down along the 138kV alignments.
10 But ultimately they all end up at segments 13 and 15 on
11 the north-south portion along the forest boundary.

12 We would use tubular steel monopoles for the
13 structures, for all of the transmission structures.
14 They will vary in height depending whether it is the 138
15 or 230. The 230kV structures, of course, would be
16 slightly taller. The span lengths would be similar,
17 anywhere from 600 to a thousand feet between poles. We
18 anticipate five to nine structures per mile, depending
19 on terrain and obstacles we might have to clear. And
20 the right-of-way width we plan to purchase for the
21 actual construction and operation of the lines is 150
22 feet wide.

23 Again, the Gateway substation, kind of talked
24 about it, but two substations. Here we say on the
25 11-acre site. Out in the field I think we called it a

1 12-acre site. It is somewhere between 11 and 12. I
2 believe there is a decimal in there, so it depends
3 whether you round up or down.

4 The Nogales Gateway substation, .9 acres does
5 not look correct on that slide.

6 Q. I think the word approximately.

7 A. (BY MR. BECK) I'm sorry. Yes, I see that it is
8 approximately 9 acres, not .9 acres.

9 The initial construction of what we call
10 phase one for 150 megawatts would take about half of the
11 DC site of that substation, half of that property, with
12 the other half set aside for the future phase two should
13 we find value in that.

14 And the Gateway substation, again, will be the
15 point of origin for the line that will go down to
16 Mexico, the 230kV line, the UNSE Gateway substation,
17 again 1.8 acres on the eastern edge of that property.

18 And the very technical diagram at the bottom,
19 that's just showing the DC converter equipment that
20 would be installed, kind of on the left-hand side of
21 that diagram. And then on the right-hand there is a
22 representation of the UNSE Gateway substation.

23 CHMN. CHENAL: Member Haenichen.

24 MEMBER HAENICHEN: Thank you.

25 Mr. Beck, is that AC/DC conversion project done

1 electromechanically or electronically?

2 MR. BECK: We are planning to do it
3 electronically with the VSC type technology.

4 MEMBER HAENICHEN: Okay. And what are the
5 losses associated with that procedure?

6 MR. BECK: You know, I do not recall offhand. I
7 can look that, the losses up.

8 MEMBER HAENICHEN: That's okay. I was just
9 curious.

10 And how much does that whole conversion process
11 contribute to the cost of the project?

12 MR. BECK: For the Nogales interconnection
13 project, it is the majority of the cost of the project.
14 So the three miles of 138 line and the substation, the
15 UNSE substation, is roughly \$5 million, and the lines
16 were around \$3 million, probably, for the line. And the
17 balance of the cost is the DC conversion equipment and
18 the 230kV.

19 MEMBER HAMWAY: So what was the total again?

20 MR. BECK: About \$80 million for the overall
21 project, for the Nogales interconnection project.

22 MEMBER HAENICHEN: Thank you.

23 MR. BECK: This is just a diagram to show that
24 Hunt Power, Sharyland Utilities have done a similar
25 installation in Texas. They used LCC type technology.

1 It is the older technology. For our project we are
2 planning to use the VSC technology, which has much
3 better support for the UNSE system.

4 But this just shows that Hunt actually installed
5 a DC back-to-back converter station in Texas. They also
6 did that one in a phased process, a phase one and phase
7 two. They put the phase one in. It was so successful
8 that they put in a phase two. And I believe this
9 picture is only phase one. There is a second sister
10 unit to this on the same site.

11 MEMBER HAENICHEN: On the system you plan to
12 use, are there any power quality issues on the AC that
13 you produce at the end of the day?

14 MR. BECK: No. There will be a lot of harmonic
15 filtering and equipment installed as part of the project
16 to make sure there are no issues coming out of the
17 converter station.

18 MEMBER HAENICHEN: Okay, thank you.

19 BY MR. GUY:

20 Q. Mr. Beck, before we go on to the slide, I saw
21 that during your testimony you picked up what we call
22 the placemat. For the record, that's marked Exhibit
23 UNS-16. Could you describe for us what that document is
24 used for, and what information is contained on it?

25 A. (BY MR. BECK) Other than for potentially using

1 a placemat when you have your snacks, our intent was to
2 give an overview of the project, both components.

3 So on the one side, we have the Nogales
4 interconnection project, which shows the 138kV and 230kV
5 lines, as well as the Gateway substation, all of the
6 alternative routes. It also shows what the proposed
7 monopole structures will look like. We talked about
8 land ownership along the routes as well as the segments
9 that make up the various alternative routes, and a
10 little bit of information on the poles.

11 On the flip side of that document we have the
12 Nogales Tap to Kantor upgrade project, similar
13 information, a route map showing the three alternative
14 routes, what the poles will look like and their
15 dimensions, and some information on the alternative
16 route configurations, lengths, and what they will be
17 crossing, typical span lengths, and then again a land
18 ownership table.

19 Q. Thank you.

20 Was the information, or placemat, was that
21 prepared by you or under your supervision?

22 A. (BY MR. BECK) Yes, it was.

23 MR. GUY: Mr. Chairman, we would like to offer
24 UNS-16.

25 CHMN. CHENAL: Any objection?

1 (No response.)

2 CHMN. CHENAL: UNS-16 is admitted.

3 (Exhibit UNS-16 was admitted into evidence.)

4 MR. GUY: Thank you.

5 MR. BECK: So going on to the, again, the
6 technical components of the project, regarding the
7 poles, on the Gateway to the border 230kV line, Slide 24
8 again just represents what those structures will look
9 like, what the layout of the conductors would be,
10 typical structure height ranges, as well as span lengths
11 and number of structures per mile.

12 On the next slide, Slide 25, what we are showing
13 on this is specific to route segment 6 on Alternative 2.
14 Because of the narrowness of that particular roadway, we
15 anticipate the need to build a double-circuit 138
16 with -- underneath the 230kV overbuild. And, you know,
17 it is not our preferred route, that being one of the
18 reasons we are just putting everything on the single
19 pole. It is doable, no major issues with it, but it is
20 a complication for the project. Okay.

21 BY MR. GUY:

22 Q. Yeah, Mr. Beck, so we talked about this a little
23 bit on the site tour, but would you, for those that did
24 not go on the tour, would you describe to us again what
25 the Roosevelt Easement is?

1 A. (BY MR. BECK) Yes. Along the U.S.-Mexico
2 border there was a proclamation in 1907 by President
3 Roosevelt, basically saying that there would be no
4 construction in a 60-foot wide strip along the
5 U.S.-Mexico border. And it was a protection against
6 smuggling of goods between the U.S. and Mexico. And it
7 was identified that it would only be used for public
8 highways, but no other purposes whatsoever, so long as
9 the reservation was continued in force.

10 So that still is in effect today, and as part of
11 our commitments to this project, we will have no
12 structures or no construction, no facilities within that
13 60-foot border easement.

14 Q. Mr. Beck, Ms. Morrissey has handed you what has
15 been marked Exhibit UNS-23 and Exhibit UNS-24. Could
16 you identify those two documents for the record?

17 A. (BY MR. BECK) Yes. Exhibit UNS-23 is a letter
18 from Mr. Kevin Hecht of the Border Patrol who spoke at
19 our public comment session last night. He sent this to
20 the DOE in response to their EA solicitation of
21 comments, and it raises the concerns that the Border
22 Patrol had.

23 Q. Could you go through high level, because we have
24 the document, but go through high level what each of the
25 comments were.

1 A. (BY MR. BECK) Sure. Again, it talks about no
2 facilities within the Border Patrol control zone, or
3 effectively the Roosevelt Easement along the border.
4 And one of the big concerns is border security. So that
5 was raised.

6 He raised issues about the Border Patrol station
7 itself. He raised the issue of the heliport that is
8 located on their site. And then he raised the issue of
9 lightning and safety and danger concerns relative to
10 lightning that might be associated with the transmission
11 lines.

12 Q. And did representatives of Nogales Transmission
13 respond to these comments, or did DOE respond, I guess?
14 Did someone respond to these comments?

15 A. (BY MR. BECK) So I personally reached out to
16 Mr. Hecht and had a discussion with him via phone about
17 our positions on all of the issues. We also followed up
18 as the applicants with comments back to DOE to address
19 his concerns in the DOE EA process. And so we had a
20 response to our project manager at DOE addressing all of
21 his concerns. And our understanding is DOE will, in the
22 final EA, include language addressing his concerns that
23 were raised in his comments.

24 Q. And Mr. Beck, could I turn your attention to
25 Exhibit UNS-24, and describe to us what that document

1 is.

2 A. (BY MR. BECK) These are the excerpts of our
3 response to DOE regarding the issues. Mr. Hecht had
4 raised the issue part of his border security officer
5 concern was people climbing the poles. And it turned
6 out in discussing with him, because we were going to be
7 300 foot away from the border fence, that the climbing
8 concern was no longer a concern to him. His concern was
9 that someone could climb a pole and potentially then
10 jump across the fence. They will be far enough away
11 that's not an issue.

12 He also had a concern that, well, they climb up
13 the pole and reach out and try and shimmy across the
14 conductor to the other side. And the reality is, they
15 reach out and touch the conductor, that will be the last
16 thing they do. And that seemed to satisfy his concern
17 there.

18 MEMBER JONES: They will certainly go on the
19 other side, we are just not sure where.

20 MR. BECK: This is true.

21 CHMN. CHENAL: Yes, Member Noland.

22 MEMBER NOLAND: Thank you.

23 Mr. Beck, I don't see on here and I don't
24 remember hearing last night Mr. Hecht's position with
25 the Border Patrol. Can you clarify that?

1 MR. BECK: His actual position in the Border
2 Patrol?

3 MEMBER NOLAND: Yes. What is his title?

4 MR. BECK: I think he is the range officer. I
5 am not sure that's the exact title, but he is in charge
6 of this Border Patrol station, I believe.

7 MEMBER NOLAND: Okay, thank you.

8 MR. BECK: So he is kind of the lead guy down
9 there.

10 We also addressed his concerns about lightning
11 strikes. Our position is that the poles will be one of
12 the tallest things in the area. We ground our
13 structures very well. We have shield wires on the lines
14 to protect our lines from lightning. So they will tend
15 to attract lightning and dissipate it to the ground,
16 potentially actually protecting some of their
17 structures. We will meet all the NESC requirements for
18 grounding and so on. And they are pretty prescriptive
19 as to what needs to be done for anything around the
20 line. So I think we alleviated his concern regarding
21 lightning, and we provided that to DOE.

22 And DOE specifically reached out on their own to
23 the Border Patrol regarding the helipad issue. They had
24 a response, which I believe is in the current EA, that
25 the Border Patrol had identified they would not be able

1 to take off to the west. There might be a slight change
2 in their cost because it limits their takeoff positions,
3 very slight increase in risk to the pilots because they
4 just have to know that they don't take off to the west.
5 But, otherwise, the Border Patrol would readily
6 accommodate the line in the vicinity of the helipad.

7 And further, the applicants stated that we have
8 not done final design on the project. And when we do,
9 we will be sure and meet all requirements, including
10 FAA, should there be any regarding lightning -- lighting
11 or marking of the lines.

12 CHMN. CHENAL: Member Jones.

13 MEMBER JONES: Thank you, Mr. Chairman.

14 Mr. Beck, did the Border Patrol aviation folks
15 bring up anything about issues dealing with landing and
16 departure in windy conditions with the -- what level of
17 increased risk to the pilots and those conditions, or
18 would they -- would it somehow limit their -- the
19 availability of that in certain wind conditions?

20 MR. BECK: I am not aware of any discussion
21 along those lines. I think their -- what I understood
22 was they just cannot take off and land from the westerly
23 direction. And I think the helipad was far enough that
24 it just restricted travel in that direction, not so much
25 the line is close enough that they would likely be blown

1 in. But I don't know that there was any discussion.

2 MEMBER JONES: Okay. Thank you.

3 CHMN. CHENAL: Member Woodall.

4 MEMBER WOODALL: Mr. Beck, what are typical
5 lighting and other visibility improvements that you make
6 to transmission structures that may be in proximity to
7 air transport facilities? Just typical. I know you
8 can't tell us what you are going to do here because you
9 don't have your design here. But what are typical?

10 MR. BECK: Right. There is an FAA requirement,
11 I believe if it is over 200 feet tall, a structure will
12 be lighted. And there is certain requirements for that.
13 We don't intend to be that tall with these structures,
14 so we probably will not meet that threshold.

15 When we have crossings typically of other
16 utilities, such as a gas line, and if that gas entity
17 patrols their line, their facilities via helicopter or
18 plane, they may request that we put marker balls, the
19 orange marker balls on. And we typically do that case
20 by case as requested by an underlaying property owner.

21 In this case we would be willing to work with
22 the Border Patrol should they ask for something like
23 that. We haven't got into those discussions yet.

24 MEMBER WOODALL: But if they want it you would
25 put one in?

1 MR. BECK: Yeah. They are relatively easy to
2 put on and not extremely costly.

3 MEMBER WOODALL: And again, in any event,
4 whatever structures you are building, you are going to
5 be in strict compliance with FAA regulations, is that
6 correct?

7 MR. BECK: Absolutely, yes.

8 MEMBER WOODALL: Thank you. May I have --

9 CHMN. CHENAL: Sure.

10 MEMBER WOODALL: I know we are not going to
11 control the construction on the other side of the
12 border, but would you anticipate that there would be
13 signs on either side of the border with respect to the
14 poles indicating, you know, danger? I mean, what would
15 we expect? Are you planning on putting something on the
16 poles saying peligroso or danger or something like that,
17 and what would you expect to be done on the other side,
18 if anything?

19 MR. BECK: You know, I can't speak what they
20 might do on the Mexico side. I don't know if they would
21 typically do that.

22 On our side of the border I think it is a legal
23 issue. We have run into issues in the past where maybe
24 you should put up a sign, and then from a legal
25 standpoint maybe you shouldn't put up a sign because you

1 are admitting to something.

2 MEMBER WOODALL: Thank you.

3 MR. BECK: So we haven't had that discussion.

4 MEMBER WOODALL: Lawyers, can't live with them
5 and can't live without them. Thank you, Mr. Beck.

6 CHMN. CHENAL: Member Noland.

7 MEMBER NOLAND: Mr. Chairman, Mr. Beck, have you
8 made a decision on the finish type you are going to use
9 on these poles yet?

10 MR. BECK: Our planned pole is a weathering
11 steel or Corten; to the layman, a rusty looking pole.
12 That is UNSE's standard. It is the best from a
13 maintenance and operational perspective. We don't have
14 to go back and repaint and incur the cost of repainting.
15 And they form a patina so they don't continue rusting,
16 so we don't have issues of long-term maintenance for the
17 poles.

18 MEMBER NOLAND: Thank you.

19 CHMN. CHENAL: I am looking at what has been
20 marked as UNS-23. It is the letter from Border Patrol
21 to Department of Energy. The third to the last
22 paragraph says CBP will be coordinating with the ACC to
23 inform them of the agency's concerns regarding the
24 transmission facility adjacent to the Nogales Border
25 Patrol station.

1 Well, I kind of had hoped that CBP would be
2 communicating their concerns with this Committee so that
3 we could incorporate and address those concerns at this
4 part of the hearing and not directly with the ACC,
5 because I think that's part of our job, is to get that
6 kind of record established here and create conditions
7 that we believe are appropriate to address those
8 concerns.

9 But given that they are taking the approach of
10 dealing with the ACC directly, I guess my question to
11 Staff is: Are you familiar, Mr. Hains, has Border
12 Patrol, you know, contacted ACC and, you know, expressed
13 concerns?

14 MR. BECK: Mr. Chairman, if I may.

15 CHMN. CHENAL: Mr. Beck, sure.

16 MR. BECK: My interpretation is this: They
17 think they have dealt with the ACC through the prefiling
18 hearing and they raised the issues in public comment
19 last night. And I don't think the intent of Mr. Hecht
20 was that he is going to go above to the ACC; I think he
21 assumes this is the ACC.

22 CHMN. CHENAL: I didn't mean it like that, like
23 it is a jurisdiction guffaw. I just, you know, I would
24 like to make sure we have heard from him and I am not
25 sure we really have.

1 MR. BECK: Just one thing further. When I
2 talked to Mr. Hecht, he basically -- his last comment
3 was I am just the messenger, our experts came up with
4 these issues. He has done his duty by bringing it
5 forward to the EA process and to the line siting
6 process. And, you know, whether that meets the criteria
7 is a different question.

8 CHMN. CHENAL: Hold it, Member Woodall, just one
9 second.

10 I want to make sure we address their concerns in
11 the context of this proceeding, number one, and number
12 two, I think I would recommend to our Committee that we
13 create certain conditions that address in some fashion
14 the concerns that are raised.

15 It seems to me that the applicant is more than
16 willing to work with the, you know, Border Patrol to
17 address their concerns. I just think we should have a
18 condition that addresses at least the three items that I
19 see that have been raised: number one, anti-climbing
20 devices installed to power poles adjacent to the border;
21 number two, transmission line design features to reduce
22 and minimize lightning strikes and flashover; and
23 number -- well, those two are the ones I think that
24 stand out. And I am not sure what we do with the
25 heliport and FAA, but maybe something that addresses

1 that.

2 Member Woodall.

3 MEMBER WOODALL: If I may, I think it is not
4 uncommon in the federal processes to refer to the
5 Commission as inclusive of the Line Siting Committee,
6 because the Commission establishes the Line Siting
7 Committee and the final determination is, of course,
8 made by the Commission. So it has been my experience
9 that in reviewing some of these EAs, they are talking,
10 when they are talking about the Commission, it is not in
11 contradistinction of the Line Siting Committee but it is
12 inclusive of. At least that has been my experience on
13 some of these federal processes. So I just wanted to
14 float that out there.

15 MR. BECK: And Mr. Chairman, just regarding the
16 anti-climb issue, we struggle with what we put on a pole
17 to make it nonclimbable. Our poles typically, because
18 of the diameter of the poles, they are very difficult
19 for someone to just go and climb. And to the extent we
20 don't put the ladder clips on so nobody can hook a
21 ladder onto a pole, it is very difficult. So beyond
22 that, I am not sure what we would put in as a condition.
23 I mean we are open to working with the Committee to try
24 and identify something, but we struggle with that one.

25 MEMBER WOODALL: May I ask --

1 CHMN. CHENAL: Let's let Mr. Beck finish.

2 Are you going to address the other issue as --

3 MR. BECK: Regarding the lightning issue, we
4 already committed there is a condition. We had a
5 condition proposed, and I know Staff, I think, maybe
6 slightly reworded it, but between those two attempts at
7 a condition, we will meet all NESC, WECC, NERC criteria.
8 And NESC codes are very clear how things get grounded
9 and what we are protecting. From our position that
10 should be sufficient to address the lightning concerns.
11 And again, I mean if there is other wording to put in
12 there, we are open to that, but at least from my
13 position, I think it meets the requirement.

14 MEMBER WOODALL: So -- I'm sorry.

15 CHMN. CHENAL: So -- I'm sorry, Member Woodall,
16 let me just finish my line of questioning here.

17 Where is that draft condition, Mr. Beck, with
18 regard to the NERC and FERC lightning?

19 MR. BECK: I think it is pretty early in the
20 conditions. I don't remember what condition it is. But
21 in the draft CEC that we are proposing or will be
22 proposing we have it in our language.

23 CHMN. CHENAL: All right. That's in there.

24 MR. BECK: And then I know Staff has got at
25 least two conditions that they are proposing, and one is

1 regarding code requirements.

2 CHMN. CHENAL: Okay. All right.

3 MEMBER WOODALL: I just -- may I ask one
4 question?

5 CHMN. CHENAL: Okay, sure.

6 MEMBER WOODALL: Does the national safety code,
7 does it have provisions in there which would basically
8 impede any climbing?

9 MR. BECK: I am not aware of something specific
10 to climbing on transmission poles.

11 MEMBER WOODALL: Okay. I just wondered. Thank
12 you.

13 CHMN. CHENAL: Back to the transmission on the
14 electric, so the condition that is in the draft CEC as
15 well as the condition that Staff, ACC Staff is proposing
16 will, in your opinion, cover the, address the concerns
17 of Border Patrol as far as the lightning strike issue,
18 is that correct?

19 MR. BECK: That's correct.

20 CHMN. CHENAL: Okay. With respect to the
21 anti-climbing feature, your testimony is that that's
22 difficult to balance how that can be put into effect at
23 this time?

24 MR. BECK: Correct. I mean I have seen where
25 people have attempted to deter climbing by basically

1 putting effectively chain link fence wrapped around the
2 structure, kind of hanging out from the structure. Very
3 ugly, puts some other issues, debris as well as, you
4 know, will attract animal life and stuff to that. We
5 could potentially go down that path, but it is a very
6 ugly solution to a nonproblem.

7 MEMBER WOODALL: I thought you said that the
8 Border Patrol was no longer concerned about climbing
9 once they realized that they could not be climbing from
10 onto the fence or towards the fence. Did I
11 misunderstand you?

12 MR. BECK: No, you are correct, that was the
13 position. When he heard that we would be more than 60
14 feet away, in fact 300 feet away, he said well, climbing
15 is really not an issue anymore.

16 MEMBER WOODALL: Okay. Thank you.

17 MR. BECK: We could potentially have him
18 readdress that if that would help the Committee see it,
19 if he would commit to that somehow.

20 CHMN. CHENAL: Okay. So anti-climbing, from
21 your understanding in communications with Border Patrol,
22 that's not an issue since the poles are going to be so
23 far from the fence, the borderline.

24 MR. BECK: That is correct.

25 CHMN. CHENAL: The lightning we already

1 discussed.

2 MR. BECK: Yes.

3 CHMN. CHENAL: The third issue I can see that's
4 raised in the Border Patrol concerns still deals with
5 the heliport and the, I guess, FAA regulations
6 concerning the transmission lines in proximity to a
7 heliport.

8 MR. BECK: Correct.

9 CHMN. CHENAL: I don't remember that there is a
10 draft condition that addresses that. I am not saying we
11 have to have one because it is probably FAA regulations
12 that govern that, but is there anything that the Border
13 Patrol is requesting on that issue other than the
14 applicant comply with FAA regulations regarding
15 transmission lines in proximity to heliports?

16 MR. BECK: That is my understanding, that they
17 have addressed with DOE directly the issue that they
18 would be limited on their takeoff and their flight
19 pattern, but beyond that, just be sure we meet FAA
20 requirements. And it might be as simple as adding the
21 condition that we provide FAA as one of the other
22 categories that we agree to meet the requirements of.

23 CHMN. CHENAL: Yeah, I think that would be a
24 good idea. And I see the applicant's attorney is okay
25 with that.

1 Are there any other issues that have been raised
2 by Border Patrol that we have not already addressed here
3 today, namely the climbing, the lightning, and the
4 heliport issue?

5 MR. BECK: The other issue that they did raise
6 through the DOE process was the effect on their horses.

7 CHMN. CHENAL: The horses.

8 MR. BECK: And I believe we heard last night
9 that he didn't come up with any conclusive research to
10 show that there is any impact.

11 CHMN. CHENAL: Okay, okay. Member Noland.
12 Ladies before gentlemen.

13 Member Haenichen, you will have to wait.

14 MEMBER NOLAND: I think he was ahead of me,
15 Mr. Chairman. But if in fact Staff does have proposed
16 amendments to the CEC, I would like to have those by
17 tomorrow, and any others. Again, I think we need to
18 review those. I think the applicant needs to have them
19 if they don't. But I would at least like to have those
20 to be able to review them before we get into the
21 discussion of the CEC.

22 And I think that probably it would be good if we
23 asked that the Border Patrol submit an amended letter to
24 the ACC with regard to their nonproblem with the poles
25 being situated so far away from the borderline and the

1 fence, and the helipad and lightning strikes.

2 I think -- I don't know that he said that last
3 night, Mr. Hecht said that last night with everything,
4 but it would make it a lot clearer and it would, I
5 think, help the ACC if those were clarified before their
6 hearing.

7 CHMN. CHENAL: We can ask the applicant to
8 communicate that to Mr. Hecht. I am short of --

9 MR. BECK: My suggestion for doing that would be
10 to send a letter to him identifying all the things that
11 we think we have agreed to, and just asking him to sign
12 off on that.

13 CHMN. CHENAL: Yeah.

14 MEMBER WOODALL: Then you can file with the
15 docket.

16 CHMN. CHENAL: That would be good. Okay.

17 Member Haenichen.

18 MEMBER HAENICHEN: Thank you, Mr. Chairman.

19 I think Mr. Beck showed an abundance of caution
20 when he said it would be difficult to climb. I think it
21 would be virtually impossible. And I think we should
22 just say that this is not going to happen.

23 And as far as the lightning issue, the only
24 thing they really can't do is put that guard line on
25 top. And if you wanted to put any condition in, I would

1 just say applicant shall be certain that they, at each
2 structure, they are properly grounded. And I don't
3 think they would object to that. And that's the best
4 that can be done, as far as I am concerned.

5 CHMN. CHENAL: Could I ask the applicant's
6 attorney to insert that language in the appropriate --
7 draft that language in the appropriate condition if it
8 already exists, or add that condition?

9 MR. GUY: We will do that, yes.

10 CHMN. CHENAL: Any further questions from the
11 Committee?

12 (No response.)

13 CHMN. CHENAL: Okay. Mr. Guy.

14 MR. GUY: Let me, I guess we want to offer
15 Exhibit UNS-23 and 24 into evidence.

16 CHMN. CHENAL: Any objection?

17 (No response.)

18 CHMN. CHENAL: There being no objection, UNS-23
19 and UNS-24 are admitted.

20 (Exhibits UNS-23 and UNS-24 were admitted into
21 evidence.)

22 MR. GUY: Let me ask one -- thank you. Let me
23 ask one follow-up question of Mr. Beck that may be
24 inconsistent with the commitment I just made, but I just
25 want to make sure. So I think, as a practical matter, I

1 think the applicants are agreeable to add the condition
2 about making sure the structures are properly grounded,
3 but I wanted to ask Mr. Beck.

4 We currently have proposed a condition which is
5 nearly identical to one of the two conditions Staff has
6 proposed. It is in Exhibit UNS-19; it is Condition
7 No. 16. And that condition is short. I will read it
8 just because he may not have it in front of him. This
9 condition particularly applies to Nogales Transmission,
10 that's the exhibit I am looking at, but: Nogales
11 Transmission shall follow the most current Western
12 Electricity Coordinating Council and North American
13 Electricity Reliability Corporation planning standards
14 as approved by the Federal Energy Regulatory Commission
15 and National Electric Safety Code construction
16 standards. So my question to Mr. Beck is:

17 BY MR GUY:

18 Q. Is it duplicative, if you will, to commit to
19 properly ground the structures if we also have a
20 condition to comply with the NESC construction
21 standards?

22 A. (BY MR. BECK) Yes. It is my position that if
23 we commit to meet the NESC standards, we are going to
24 meet all the grounding requirements that they dictate.
25 If we need to put it in a condition, we can accept that,

1 but as I have had the discussion with previous siting
2 committees in the past, we continually add conditions
3 because something pops up, and a lot of the conditions
4 are buried within the standards and regulations that we
5 are already meeting.

6 And so one off, we can put a lot of conditions
7 in and, you know, as an applicant we can accept because
8 we are going to do it, it is not a issue, it really
9 comes to the issue of trying to streamline a CEC
10 document. And I know it is a balance, so...

11 CHMN. CHENAL: Member Haenichen.

12 MEMBER HAENICHEN: I am in complete agreement
13 with that. I just was throwing it out to satisfy
14 perhaps some naive people who don't know anything about
15 the code. But you are completely correct. The code
16 assures that you will do that.

17 CHMN. CHENAL: Well, as one of those naive
18 people, I accept Member Haenichen's clarification and
19 Mr. Beck's testimony that it is already included in
20 there.

21 Member Woodall.

22 MEMBER WOODALL: I agree, too. And I believe
23 less is more when it comes to crafting these things.
24 There is no need to decorate them like a Christmas tree.

25 MR. BECK: That has been my argument in the

1 past, so...

2 MR. GUY: With that, are we relieved from our
3 commitment?

4 CHMN. CHENAL: Yes. It is already in there.
5 But I do think there was the suggestion of Mr. Beck to
6 include the FAA in the litany of agencies that the
7 applicant will comply with the regulations of those
8 agencies. So I think FAA should be added in there on
9 the heliport issue.

10 So it seems to me from the conversation we have
11 had and the testimony we have had, we really will cover
12 the concerns of the lightning. We will cover the
13 concerns of the FAA regulations and heliport. And the
14 anti-climbing feature is really a nonissue at this
15 point. So to my mind, with simply adding FAA in the
16 condition as an additional agency, we have addressed the
17 concerns of Border Patrol.

18 Member Woodall.

19 MEMBER WOODALL: Well, I just point out there is
20 a Condition No. 1 which specifically commits the
21 applicant to comply with all existing applicable
22 statutes, ordinances, master plans, and regulations of
23 any governmental entity having jurisdiction, including
24 the United States of America, the State of Arizona,
25 Santa Cruz County, and the City of Nogales. So I think,

1 again, I think this is incorporated within an existing
2 condition. But I don't have any vehement objections to
3 its inclusion.

4 CHMN. CHENAL: Member Noland.

5 MEMBER NOLAND: Mr. Chairman, I know one of your
6 conditions adds some other agencies and so on. But
7 again, I agree. We used to have like 12 conditions, and
8 now there are 80. You know, let's get to the
9 nitty-gritty.

10 But I think it should say including but not
11 limited to the United States, the State of Arizona, so
12 on and so forth, so then any governmental agency, both
13 federal, state, or local, is covered in that language
14 and we are not Christmas tree-ing this thing with any
15 agency we can think of. Because I worry that then we
16 forget and it looks like those are the only agencies.

17 CHMN. CHENAL: Okay. That's a good suggestion.
18 And I think when we get to that, when we deliberate, we
19 will make that addition.

20 Any other comments from the Committee members?

21 (No response.)

22 CHMN. CHENAL: Okay. Mr. Guy, I see it is
23 12:03. Are you finished with Mr. Beck, or do you have
24 any more questions of Mr. Beck?

25 MR. GUY: We are not finished, but this is as

1 good a place as any to break, if you want, or we can
2 keep going.

3 CHMN. CHENAL: I am happy to keep going. I
4 don't know how much longer you want. Of course you have
5 more testimony; I should have looked at the slide up
6 there, 26. I know there is more slides.

7 MR. GUY: Yeah. Mr. Beck has about 45 slides in
8 this deck, and then he has an additional six or eight
9 slides for Mr. Magruder's questions. So he will be
10 testifying for probably another hour or so.

11 CHMN. CHENAL: We have a checkout issue and
12 lunch. I mean we can go for a few more minutes, but it
13 sounds like we are getting into some new areas anyway.

14 I mean, what is the view of the Committee?

15 MEMBER HAENICHEN: Lunch.

16 MEMBER NOLAND: Lunch.

17 CHMN. CHENAL: I am hearing universal cries for
18 lunch. Let's -- we have checkout and we have lunch. So
19 is an hour sufficient time?

20 Okay. So let's start back up at 1:00 here. I
21 think that's a good time to take a break.

22 (A recess ensued from 12:03 p.m. to 1:06 p.m.)

23 CHMN. CHENAL: All right. Good afternoon,
24 everybody. This is the time set for the continuation of
25 the hearing. I think when we left off, we left off with

1 the testimony of Mr. Beck. And I understand we will
2 continue with his testimony.

3 Mr. Guy, please proceed.

4 MR. GUY: Thank you, Mr. Chairman.

5 BY MR. GUY:

6 Q. Mr. Beck, we were in the middle of discussing
7 the technical components of the various parts of the
8 Nogales interconnection project. I think we still have
9 a couple of topics to cover. You may have covered
10 everything on this slide, but can you tell us again
11 whether you have to make any special arrangements near
12 the border?

13 A. (BY MR. BECK) Well, I guess this slide was just
14 intended to clarify on the Roosevelt Easement that we
15 would have no structures, facilities, or anything
16 occupying that reservation. It is covered through the
17 Presidential Permit process for the crossing.

18 And the height of the structures are 90 to 100
19 feet. And we will work with CENACE on the other side of
20 the border to make sure their structure is similarly
21 situated south of the border crossing.

22 Okay. Continuing on with the technical
23 components on the project, on the Vail to Gateway and
24 Gateway to Valencia 138kV lines, again, that is intended
25 to be, for the most part, double-circuit construction

1 depending on the alternative chosen. So our preferred
2 route does include double-circuit 138kV construction
3 like that middle structure. And that's what we would
4 intend to build. It again would be tubular monopoles 75
5 to 110 feet tall, spaced 600 to a thousand feet apart in
6 a right-of-way that's 150 foot.

7 Again, going on specifically Alternative
8 Route 3, segment 10, the right-of-way configuration, we
9 will have the 230kV structure on the left-hand side of
10 segment 10, and the 138kV structure on the right-hand
11 portion of that right-of-way. And the 138 would be
12 double-circuit.

13 As you can see from the diagram, the 138kV
14 structures are, of course, a little bit shorter than the
15 230. Our 230 design does utilize a strut insulator with
16 a support above, whereas the 138 are strictly strut
17 insulators.

18 Q. I think we are moving on now to how we would
19 expect to access the line during construction, and I
20 guess operation as well. Could you give us an overview
21 of the various ways you would access the project?

22 A. (BY MR. BECK) Yes. So as part of our process,
23 we identified five different types of access road
24 construction/improvements that would be required, and we
25 designate them by a type A, B, C, D, E, where type A is

1 using existing private dirt roads with no improvements;
2 type B would be existing public paved roads requiring no
3 improvements; type C, existing dirt roads with
4 improvements; type D, new dirt bladed access roads; and
5 type E, new dirt spur roads.

6 And at the bottom of Slide 30 you will see for
7 the four alternative routes we identified the various
8 lengths of each type of access road. And just as a
9 point of information, for new road construction, the
10 least amount of new roads is Alternative 3, which we
11 don't have the total on there, but it is 2.26 miles, as
12 compared to 2.34, 2.38, and 2.76 for the various
13 alternatives.

14 Next slides show in detail the access roads. I
15 don't think it is worth trying to go through those in
16 detail. They are in my slide set. The color coding and
17 the types are in the legend on the right-hand side. You
18 can see the various types of access road designated for
19 each of the segments in the lines, alignments.

20 That was just an artistic slide that probably
21 doesn't provide a lot of value. The intent was to show
22 one next to the other, but we didn't get quite there,
23 so...

24 Q. Looks like now we are transitioning to -- I know
25 we skipped over a slide inadvertently, but looks like we

1 are transitioning to the Nogales Tap to Kantor upgrade
2 project.

3 A. (BY MR. BECK) Yes. On the north edge of the
4 project, the upgrade portion, the 27 and a half miles,
5 we will be replacing the existing monopole structures
6 with similar monopole structures, except they will be
7 double-circuit capable. The existing ones are
8 single-circuit structures in a delta configuration,
9 which means two of the circuit wires, phases, are on one
10 side of the pole and one on the other in kind of a
11 triangular shape. We will stack each circuit on one
12 side of the pole.

13 So specifically to this CEC in this case, we
14 will be installing a double-circuit capable pole with
15 only one circuit installed, similar to what is shown on
16 the left-hand side of that drawing. In the future,
17 should we go to a phase two and we come back and get a
18 new CEC for the second circuit, it would then look like
19 the pole in the middle, where you have got two circuits
20 installed, again, the range of height 75 to 110 feet
21 with spans, again, 600 to a thousand foot apart.

22 This slide here was intended to just touch on
23 the safety zone, safety concern issues as we are
24 building the project. So as I mentioned, the pole on
25 the right-hand side is the existing, and it is in the

1 delta configuration.

2 You can see two-phase wires on the right-hand
3 side, one on the left-hand side. When we build the new
4 line adjacent to that, we need to maintain a 25-foot
5 separation between the conductor positions of the
6 existing to the new structures. And that's for
7 construction purposes. And so that dictates how far
8 away we need to be from the existing line as far as an
9 offset.

10 Similarly, this is just another version of that
11 where we are showing the new structures on the left-hand
12 side, the existing on the right-hand side, that 25-foot
13 clearance. We have existing right-of-way of 100 foot on
14 portions of state land, and we are up and adjacent --
15 this was kind of covered in the slides yesterday -- we
16 are adjacent to the 150-foot Wilmot Road right-of-way.

17 So this is where we have to sneak the poles in
18 next to Wilmot Road. Ultimately we intend to, once
19 constructed, if this is the selected route, we would
20 adjust the right-of-way for our line to try and center
21 it on the new construction.

22 We also have taken a look at communication
23 signal issues as part of the project. We find no
24 impacts on radio, television, or communication signals
25 on either project, the Nogales interconnection or the

1 Nogales Tap to Kantor.

2 Our transmission hardware is all designed to
3 minimize gap and corona discharges, which is typically
4 what causes a lot of our communication signal issues or
5 noise relative to communication signals. And we find
6 that any radio frequency noise would be nearly
7 nonexistent with the proposed projects.

8 For mitigation, if TV/radio interference in
9 areas where good reception was available prior to the
10 project, we will go out and work with individual
11 customers to inspect and repair loose or damaged
12 hardware in the transmission line once it has been
13 identified.

14 If corona discharge from -- that's causing
15 issues with an AM station that in its primary coverage
16 area prior to our line had good coverage, we would work
17 to modify the receiving antenna systems, work with
18 customers to help them do that.

19 The one interference point with transmission
20 lines can be relative to where a radio, mobile radio
21 sits relative to the steel pole. So if you happen to be
22 in the shadow of the steel pole, if you move 50 feet to
23 one side or the other, you are going to get the signal
24 back. So typically for mobile radio use it is not a
25 problem; you don't stay stationary and it shouldn't be

1 much of an issue. And then we will also work with tower
2 operators to resolve any issues actually related to the
3 project before and during project construction.

4 Relative to the CEC facilities that we are
5 requesting and the technical feasibility of the project
6 itself, UNSE did perform a system impact study. What we
7 found in the study is that the project will create a
8 more robust electric grid.

9 One of the things that the project brings to the
10 UNSE system, utilizing the VSC technology, it actually
11 helps to support the voltage within Nogales. Whether or
12 not the cross-border tie is energized, just having this
13 new equipment installed on the end of the line brings a
14 lot of advantage to the system. And so we will be much
15 better able to control voltage down in Nogales as a
16 result.

17 The tie across the border provides emergency
18 assistance to both sides of the border should there be a
19 problem on either side.

20 And during our engineering analysis for the
21 project, we identified a way to save 11 million in costs
22 for the project by reconfiguring how it was connected to
23 our system. And we have arranged for that. And we have
24 identified the upgrades that are needed for both UNSE
25 and TEP systems.

1 So the UNSE system is pretty straightforward.
2 It is the system that the project is interconnecting to.
3 And there are the obvious need to upgrade the 27 miles
4 of line right to the forefront at the beginning of the
5 project, but also, as we looked at flows through the TEP
6 system associated with use of the project, there were
7 some lines identified that needed to be upgraded. Those
8 upgrades were in our long-term plans to do. This
9 project accelerated those projects in some cases by a
10 year or two. So it is not projects that we didn't
11 intend to do, it is just brought sooner in our budgeting
12 process.

13 CHMN. CHENAL: Member Woodall.

14 MEMBER WOODALL: Mr. Beck, what kind of outages
15 has the Nogales area suffered or experienced recently?
16 And, I mean, is it within acceptable limits? And I
17 guess that depends on who defines acceptable, but I
18 think you have the gist of what I am asking.

19 MR. BECK: I believe so. Relative to any
20 individual, I am not sure there is anything acceptable
21 from an outage perspective, but we have had very
22 reliable operation once we converted from 115 to 138.

23 But we did have an issue approximately a year
24 ago where switchgear in our Valencia station failed.
25 And there was a relay issue associated with that failure

1 that caused some major damage at Valencia substation.
2 So we had a multi-hour outage of a large part of Nogales
3 when that occurred. We put a mobile transformer down
4 there while we did repairs. And then we incurred a, I
5 think it was an eight-hour outage overnight
6 approximately a month ago to put that station back into
7 service, that repaired equipment.

8 MEMBER WOODALL: Mr. Beck, if the equipment that
9 we are talking about, the interconnection project, was
10 in place at that time, would that have alleviated the
11 outages to which you refer?

12 MR. BECK: Actually, it would not have, because
13 the facilities that failed would have still been between
14 the resource and customers. So even having a new
15 resource from Mexico would not have alleviated that
16 issue.

17 MEMBER WOODALL: Thank you, sir.

18 BY MR. GUY:

19 Q. Mr. Beck, you referred to this system impact
20 study. Do you recall if that study has been provided to
21 the Committee?

22 A. (BY MR. BECK) Yes. It was provided in the
23 application.

24 Q. And for the record, I think it is Exhibit J-4 to
25 the application.

1 A. (BY MR. BECK) That sounds right, yes.

2 Q. Go ahead.

3 A. (BY MR. BECK) I have talked a little bit about
4 experience with equipment on the DC tie component. Hunt
5 Power definitely has that experience with their tie in
6 McAllen, Texas. It is a different technology but same
7 concept, that it is a back-to-back DC tie interconnected
8 with Mexico.

9 They did a phase one. The value of that turned
10 out to be very high. In that case I think CFE used,
11 down in Mexico, used that interconnection quite a bit,
12 which actually drove them to put a phase two in place.
13 So we don't see any reason the project here would not be
14 similar.

15 Regarding UNS Electric and Hunt, we both have
16 extensive experience in transmission line development,
17 and we both regularly develop transmission lines on
18 monopoles similar to what we are proposing in this case.

19 CHMN. CHENAL: While we have a break for just a
20 second, Mr. Beck, can you explain to me again in --
21 Member Woodall's question was, had this project been
22 approved and in place, there still would have been the
23 outage you referred to. Why, again, would that be the
24 case? We have a separate line coming down now with --
25 just explain, if you would.

1 MR. BECK: In the case of Nogales proper, a
2 large part of the city is served through the Valencia
3 substation. And the Valencia substation today is the
4 end of the line coming from Tucson. And under this
5 project, Valencia would again be the end of the line
6 coming from either Tucson and/or Mexico.

7 CHMN. CHENAL: Even though there is a line from
8 Vail to Gateway, Gateway still connects to Valencia. So
9 if Valencia is out, the problem still exists.

10 MR. BECK: Correct. Longer term there are plans
11 at UNSE, if this project gets developed, that we would,
12 over time, build out distribution facilities at Gateway
13 to help split some of the load up.

14 CHMN. CHENAL: Thank you.

15 MR. BECK: Let's see. I guess next we are going
16 to talk about what we are requesting for certificated
17 corridors.

18 BY MR. GUY:

19 Q. Actually, let me skip this slide and let's go to
20 the next topic and we will come back, because we are
21 loading the maps that would be helpful to discuss with
22 this topic. Instead let's give an overview of the
23 right-of-way acquisition process and what goes into
24 that.

25 A. (BY MR. BECK) Sure. So the applicants would,

1 first of all, once we have a project approved and we are
2 moving forward with it, we would look at where we need
3 right-of-way, what the alignment is, and who the
4 property owners are. For that we would do a title
5 examination process, work with a title company to take a
6 look at those titles. We would contact the landowners,
7 reach out to them.

8 Specific environmental and nonenvironmental
9 surveys that might need to be done that we haven't been
10 able to do up to date at this time because we didn't
11 have permission from landowners, we would undertake
12 those. Then we would prepare the documents to make the
13 land transaction. And then post-acquisition we would
14 coordinate with the landowner as we go through
15 construction and any future maintenance we might have to
16 do on the line.

17 CHMN. CHENAL: Let me ask a question. But to be
18 clear, I know it seems that it is not discussed in the
19 line siting hearings because it is probably not the
20 preferred route to go, but if you do not have success
21 negotiating with a landowner over the route that you
22 need to build the project, there is condemnation power,
23 is that correct?

24 MR. BECK: UNS Electric definitely has
25 condemnation powers, and to the extent if we had to, we

1 would utilize those for our portion of the project.

2 For the Nogales interconnection project, the tie
3 to Mexico specifically and the 230kV line, we don't feel
4 that there will be any issues with the landowners that
5 are involved in the identified corridors that we have.
6 We have had discussions with them. That being part of a
7 merchant project, a merchant project has a little bit
8 more flexibility in their negotiating process, and
9 ultimately isn't held to the same standard of prudence
10 on what they pay for land. And we expect to be able to
11 make or negotiate deals with those landowners without
12 having to even consider condemnation.

13 CHMN. CHENAL: Now, given the structure, the
14 entity structure of the project, and the way you have
15 bifurcated duties, maybe this is Mr. -- for Mr. Virant,
16 but what does -- on the Nogales interconnect portion,
17 were you to meet a recalcitrant landowner who just under
18 all circumstances refused to deal, what kind of
19 condemnation options would exist, if any?

20 MR. BECK: Ultimately I think that's a legal
21 question. And we haven't really looked into that
22 question because we don't anticipate having that
23 problem.

24 MR. VIRANT: No, I wasn't going to add anything
25 different than that.

1 MEMBER NOLAND: Mr. Chairman.

2 CHMN. CHENAL: Yes, Member Noland.

3 MEMBER NOLAND: Thank you, Mr. Chairman.

4 I believe in previous hearings when there was a
5 lot of private land involved, many times there would be
6 a much larger corridor so, if they ran into that
7 problem, it could be moved over off of that particular
8 land. And I had a case like that in Tucson where we
9 were trying to do a right-of-way due to some utilities
10 and we had one particular landowner that would not
11 cooperate. And so we moved it over to another
12 cooperating landowner and didn't have to deal with it.
13 And I think in previous cases, sometimes where they have
14 asked for a 2500-foot corridor, that was to have that
15 flexibility in case you ran into that.

16 I thought that Tucson Electric has always been
17 very good about the corridor widths that they ask for.
18 And I have commented on this before. Some people just
19 ask for 2500 feet or 3,000 just because. And I think
20 they looked enough at how many private landowners there
21 were and already talked to many of them so that a
22 thousand foot seemed to be a good amount.

23 And again, Mr. Beck, I have commented on this
24 before. And I thank you for that, because I don't like
25 the corridors. I feel they cloud the title on the land

1 until it is cleared up and the right-of-way is actually
2 purchased. Some people have a different opinion on
3 that, but having worked in that area a lot of years on
4 both sides, from a city standpoint and from a private
5 standpoint, it makes me uncomfortable.

6 So I am really good with the thousand feet, and
7 I think, from what we saw of the flyover, those
8 properties, where they are impacting the few private
9 places, they probably have enough corridor to get around
10 that.

11 CHMN. CHENAL: Good comments, Member Noland.
12 Member Woodall.

13 MEMBER WOODALL: So is the upgrade, the Kantor
14 Tap, is that project, is the right-of-way going to be
15 paralleling an existing transmission line?

16 MR. BECK: Yes, it is. And based on the State
17 Land preference, we would be on the north end adjacent
18 to the existing right-of-way there.

19 MEMBER WOODALL: So just for clarity's sake, you
20 can't condemn state land?

21 MR. BECK: That is a legal question.

22 MEMBER WOODALL: Okay. Well, let me ask you
23 this. There is private lands that you will need to
24 acquire right-of-way from?

25 MR. BECK: Correct. And that was one of the

1 reasons that we identified the preferred route that we
2 did. We have 30 plus landowners, individual landowners
3 to deal with east of Wilmot Road. West of Wilmot Road
4 it would be one, State Land.

5 MEMBER WOODALL: If you do need to exercise the
6 power of eminent domain, my understanding is that only
7 government entities can get the right to immediate
8 possession of the lands, is that correct?

9 MR. BECK: Unless you are Salt River Project, as
10 far as utilities go that's true.

11 MEMBER WOODALL: So basically, before you could
12 actually have possession of the land that you needed for
13 your right-of-way, you would have had to go through the
14 full eminent domain proceedings?

15 MR. BECK: I think that's very specific case by
16 case. You could find individuals who might allow you to
17 get on the land and build the facilities still going
18 through condemnation because they feel they would have
19 more leverage in a condemnation case when they can show
20 pictures of a line.

21 MEMBER WOODALL: Right, I understand what you
22 are saying. But basically it is -- you could have
23 owners that would do that, but you could also have
24 owners that would say nope, not until a jury has
25 determined what my damages are. And then you would have

1 to wait until that was accomplished?

2 MR. BECK: Correct.

3 MEMBER WOODALL: Thank you.

4 MR. BECK: It could delay the project.

5 MEMBER WOODALL: It could, okay. Thank you.

6 MEMBER RIGGINS: For the right-of-way
7 acquisition process, does that include new access roads?

8 MR. BECK: Yes, Member Riggins, it would include
9 any access roads that we need.

10 MEMBER RIGGINS: That follows the same process?

11 MR. BECK: We negotiate with those landowners.

12 MEMBER RIGGINS: Okay. And as far as, like what
13 factors would warrant those new access roads? I don't
14 know if that's more of a site specific question, but
15 just in general.

16 MR. BECK: It is very specific to the
17 engineering involved, but, you know, typically we would
18 try and drive down our alignment for access.

19 MEMBER RIGGINS: Okay.

20 MR. BECK: If we are in rough terrain -- you are
21 going to see in the Google flyover that the Kantor to
22 Nogales Tap is pretty flat terrain, so we don't have the
23 issues of the ins and outs we would have to do if we
24 were trying to get to ridge tops. But generally we try
25 to go right down the right-of-way. But if there is

1 existing access we can use, existing roads, trails, we
2 will utilize those versus going and blading new trails.

3 MEMBER RIGGINS: Okay. Because I was just
4 noting, too, along the portion with the Coronado
5 National Forest, so 13 and 15, would that kind of have a
6 lot more new bladed roads as far as access to the area?

7 MR. BECK: There would be some additional
8 roadwork there, and I think we have got that in one of
9 our exhibits.

10 MEMBER RIGGINS: Okay. Thank you.

11 CHMN. CHENAL: One follow-up question for
12 Mr. Guy.

13 Mr. Guy, given there is kind of a relationship
14 between Nogales Transmission, LLC and UNSE that has
15 condemnation authority, just out of curiosity, have you
16 done research to show whether or not you could piggyback
17 your Nogales Transmission, LLC, or one of the related
18 entities, could piggyback on the condemnation authority
19 of UNSE, if necessary?

20 MR. GUY: We have not. We started looking at
21 it, but we have not fully, you know, exhausted that
22 research.

23 And to be clear, I think the Nogales
24 Transmission entity, the investors in Nogales
25 Transmission will actually be Hunt Power and MEH, which

1 I forgot now, Mr. Beck can tell me what it stands for,
2 but that is an affiliate of the utilities UNSE and TEP.
3 So you are even one step removed from the utility as an
4 investor.

5 So there may be things that we could do given
6 the relationship and the pendency of the projects, but
7 we have not fully thought through them.

8 CHMN. CHENAL: Okay. Thank you.

9 MR. GUY: The last topic that we had prepared
10 for Mr. Beck's direct presentation, and then we can
11 cover the responses to Mr. Magruder as part of his
12 direct or after cross-examination -- I defer to
13 Mr. Chair for that -- but the last topic we want to
14 cover in light of Member Noland's comments, but what I
15 have shown on the screen, and Mr. Beck --

16 BY MR. GUY:

17 Q. Well, Mr. Beck, would you describe what is shown
18 on the screen on the left-hand side and on the
19 right-hand screen?

20 And Ms. Morrissey is distributing copies of
21 these now.

22 MEMBER WOODALL: I am sorry. Do these have
23 exhibit numbers?

24 MR. GUY: They do not. They have not yet been
25 numbered, but they will be numbered. The Nogales

1 interconnection project, which is the one that is made
2 up of three pages, will be Exhibit UNS-25. And the CEC
3 route map for the Nogales Tap to Kantor project, which
4 is comprised of six pages, will be Exhibit UNS-26.

5 And for the record, both of these -- and
6 Mr. Beck can walk us through any of the other details,
7 but for the record, both of these show only -- well, the
8 Nogales interconnection project shows the alternative
9 route only. There are maps for the other routes but
10 just so that we could put a map on the screen, we put
11 the alternative route. And on the left-hand side I
12 believe what we have up there is actually Alternative 2,
13 not the preferred route, but there is Alternative 2.
14 And then both show a thousand-foot corridor.

15 BY MR. GUY:

16 Q. And with that, Mr. Beck, if you can add any
17 other details to what we are requesting.

18 A. (BY MR. BECK) Okay. So these, I believe, are
19 intended to be the one form of exhibit to describe the
20 CEC that's being approved by the Committee. And these
21 both have coordinates listed on them, GIS coordinates.
22 And for the Nogales Tap to Kantor line, this is centered
23 on the existing alignment, and a thousand-foot corridor
24 is identified, 500 to either side, and then similarly
25 for the Nogales interconnection project, coordinates

1 associated with the alignment for the Alternative 3
2 route with a thousand-foot corridor depicted.

3 And I think the intent was this is one way that
4 the Committee could approve a CEC for the project. We
5 are working on a centerline legal description for each
6 of these projects also, which will be my personal
7 preference, but we are presenting these to the Committee
8 for your consideration.

9 Q. Mr. Beck, near the Nogales interconnection
10 project map near the national forest to the left, can
11 you tell, are we also requesting a thousand-foot
12 corridor as well?

13 A. (BY MR. BECK) No. I think that's a nuance that
14 came up when Member Noland was speaking about the
15 thousand-foot corridor. We, I think throughout the
16 application and the documents, have said that except
17 for -- I am not sure of the wording, but except for kind
18 of known restriction, yeah, basically it is along the
19 U.S. Forest Service border, and so we are saying on
20 that, those particular segments, that we would ask for
21 500 foot -- well, we would stop the corridor at the
22 forest boundary. Need to get the language right.

23 And so it wouldn't be a full thousand foot
24 throughout the entire project, some areas would be less
25 because we know we are not going to encroach upon forest

1 land.

2 Q. And Mr. Beck, or even Mr. Virant, either of you,
3 in light of the Committee's discussion of the potential
4 advantages of a corridor wider than a thousand feet,
5 have you discussed or thought about whether that's
6 something that would make sense on the Nogales
7 interconnection project?

8 A. (BY MR. BECK) We haven't discussed that or
9 considered that. I think we both felt that a thousand
10 foot was a reasonable request for purposes of this,
11 always with the caveat that, should we find the
12 recalcitrant landowner who we just cannot deal with, it
13 could require us coming back for a change in the CEC
14 language.

15 MR. GUY: I have no further questions for
16 Mr. Beck, unless you want to move into the information
17 responsive to Mr. Magruder.

18 CHMN. CHENAL: Just a follow-up question. So
19 what exhibit are we looking up at the right-hand screen?

20 MR. GUY: So the right-hand screen is
21 actually -- it is not -- what we distributed to you as
22 Exhibit UNS-25 is a three-page version of what is shown
23 on the right-hand screen.

24 CHMN. CHENAL: Okay.

25 MR. GUY: It is otherwise the same information.

1 CHMN. CHENAL: Okay. And this is like an
2 example of what a GPS coordinate description of the
3 route would look like?

4 MR. GUY: That's correct.

5 CHMN. CHENAL: Okay. And your preference,
6 though, was to create a legal description, I think,
7 Mr. Beck?

8 MR. BECK: That was my preference.

9 CHMN. CHENAL: And it sounds like it is Member
10 Noland's preference.

11 Just out of curiosity, how -- I mean GPS
12 coordinates, that seems relatively easy to come up with.
13 But the legal coordinates, is there time before the end
14 of this hearing to come up with a legal coordinates, I
15 mean legal description?

16 MR. GUY: And Mr. Beck, he is supervising that
17 effort.

18 MR. BECK: Yes, Mr. Chairman, we have a surveyor
19 who is working on that now, and he expects to have it
20 completed at the latest tomorrow, but we may see it
21 today for both projects, portions.

22 CHMN. CHENAL: Okay. Good. Thank you very
23 much.

24 Member Hamway.

25 MEMBER HAMWAY: Yes, just to follow up on

1 yesterday, we had two ratepayers came and spoke in
2 public comment. And they both said that they didn't
3 feel they should have to pay for the upgrades because
4 they already paid for the upgrades. So my one question
5 to you is: Do you agree with that statement? And my
6 second question is: Is there -- how much of the
7 \$80 million would be subject to potentially going into
8 the rate case, if that's something you can say publicly?
9 And when is -- do you have a rate case scheduled?

10 MR. BECK: The \$80 million project cost for the
11 Nogales interconnection project, the majority of that is
12 part of the merchant project and has no applicability to
13 any customer, utility customers today. That will be
14 borne by the users of the cross-border connection.

15 MEMBER HAMWAY: So you said most of it. So
16 greater than 60 percent, greater than 70 percent?

17 MR. BECK: Probably 70 million of the 80 million
18 goes to that project.

19 MEMBER HAMWAY: So there is around \$10 million
20 that might be subject to rate, to be in a rate case?

21 MR. BECK: Well, to be very clear, approximately
22 \$10 million of the Nogales interconnection project
23 piece, plus the \$30 million cost of the north -- Nogales
24 Tap to Kantor upgrades are considered network upgrades
25 and go into the transmission plant in service for UNS

1 Electric. So they would go to our customers' bottom
2 line.

3 But the project, we do not plan to go forward
4 with the project absent the actual intertie across the
5 border being in place. For that to go forward, there
6 will be a certain level of commitment for use of that
7 system.

8 MEMBER HAMWAY: And you said you would make
9 money from that, or potentially offset.

10 MR. BECK: It will offset the cost so that the
11 transmission cost to the customers will go down as a
12 result of that.

13 MEMBER HAMWAY: Okay. So you do kind of agree
14 with their comments, that they have already paid --
15 well, I guess was not an agreement, but I just -- so you
16 are comfortable with the math?

17 MR. BECK: Yes. And they have paid for upgrades
18 south of Kantor.

19 MEMBER HAMWAY: Okay.

20 MR. BECK: Those were put in and they are in
21 their rates and they are paying for those today. So
22 they do not pay for any upgrades from Kantor to Nogales
23 Tap, because we didn't have to upgrade that previously.

24 MEMBER HAMWAY: Okay.

25 MR. BECK: So they would get the benefit of that

1 upgrade and the attendant reliability just of the line
2 upgrade itself. And as long as there is the
3 flow-through offsetting the cost, it would effectively
4 be at no cost to the customers.

5 MEMBER HAMWAY: Okay.

6 CHMN. CHENAL: Member Woodall, and then Member
7 Noland.

8 MEMBER WOODALL: This is a question for Staff.
9 Hopefully Staff could provide a brief explanation of its
10 role in evaluating plant during a utility rate case and
11 how they determine whether or not something should be
12 included in rate base. I am not expecting anything
13 extensive, but if you could just explain what Staff does
14 when they have a rate case and they have plant.

15 MR. HAINS: If I could give an initial response
16 right now, just to clarify, it is my understanding that
17 being transmission facilities, most of these rate base
18 investments are actually incorporated and recognized
19 through a FERC rate proceeding because of their OATT
20 transaction.

21 There may be some small portion, I know for APS
22 for a long period about 10 percent was allocated to
23 retail, so there may be some small percentage that does
24 get recovered through the stateside rate-setting
25 process.

1 But the majority of the investment would be
2 recovered through a FERC formula rate which I believe --
3 and I see Mr. Beck nod his head -- UNS has a formula
4 rate at the FERC, which would be the mechanism by which
5 that's flowed through to ratepayers.

6 And to be clear, when we are talking about the
7 ratepayers, it is the wholesale ratepayers, not just
8 retail customers, but also other users of the
9 transmission system.

10 MEMBER WOODALL: I appreciate that explanation.
11 Thank you very much.

12 CHMN. CHENAL: Member Noland.

13 MEMBER NOLAND: Thank you, Mr. Chairman.

14 Mr. Beck, I just want to be clear. The people
15 that are adjacent to the upgrades and this whole project
16 are not the only ones that would pay for any upgrade.
17 Isn't it the entirety of the ratepayers within the TEP
18 UNS system?

19 MR. BECK: It would be the entirety for the
20 upgrades on the UNSE system, it would be the entirety of
21 the UNSE customers, yes.

22 MEMBER NOLAND: Okay.

23 MR. BECK: And then for the upgrades in the TEP
24 system, those would be borne by the TEP customers.

25 MEMBER NOLAND: Okay.

1 MR. BECK: And I think the point that Charles
2 made is a very good one regarding wholesale versus
3 retail. Because a wholesale piece of this, that is what
4 is going to offset the cost for the retail side, is the
5 large, large increase in wholesale use of transmission
6 system in UNSE that is offsetting the cost of the
7 upgrades.

8 MEMBER NOLAND: Thank you.

9 MEMBER WOODALL: Thank you.

10 CHMN. CHENAL: The total cost of both projects
11 is how much?

12 MR. BECK: Approximately 110 million.

13 CHMN. CHENAL: Okay. That's what I thought.
14 Okay.

15 MR. BECK: Just to be clear, that doesn't
16 include the land cost, because those are to be
17 determined.

18 CHMN. CHENAL: Right. Okay. Thank you.

19 Any further questions, Mr. Guy, of the panel,
20 Mr. Beck, or the other members of the panel?

21 MR. GUY: No questions, but I think we probably
22 do need to offer into evidence Exhibit UNSE-25 and 26.

23 CHMN. CHENAL: Okay. I have -- Ms. Morrissey
24 handed out UNS-25. I am not sure that we have received
25 UNS-26.

1 MEMBER HAMWAY: Yeah, we did.

2 CHMN. CHENAL: Did we?

3 MEMBER JONES: That's the one on the right
4 there, that's 26.

5 MEMBER HAMWAY: This is 26 right here. Oh,
6 that's 25, sorry. 26 is the thicker one.

7 CHMN. CHENAL: All right. If I could get -- I
8 don't have a copy of it. That's the problem. No
9 problem.

10 Any objection to UNS-25 or UNS-26 being
11 admitted?

12 (No response.)

13 CHMN. CHENAL: Hearing no objections, UNS-25 and
14 UNS-26 are admitted.

15 (Exhibits UNS-25 and UNS-26 were admitted into
16 evidence.)

17 MR. GUY: Mr. Chairman, we pass the panel for
18 cross-examination.

19 CHMN. CHENAL: Mr. Jacobs, do you have any
20 questions to ask of the panel, sir?

21 MR. JACOBS: I just have a few questions,
22 please.

23 Could you put this map back up, please. Thank
24 you. I just have a few questions, I imagine, for
25 Mr. Beck.

1 CROSS-EXAMINATION

2 BY MR. JACOBS:

3 Q. Just to clarify, I understand that the preferred
4 route in the application was Alternative Route 1 for the
5 Nogales to Kantor Tap route.

6 A. (BY MR. BECK) That is correct.

7 Q. Is it UNS's position that its currently
8 preferred route is Alternative Route 2?

9 A. (BY MR. BECK) I believe as this hearing has
10 progressed that our preferred has changed to
11 Alternative 2 in the case.

12 Q. Okay. So that would be the CEC that you would
13 submit to the Commission for approval?

14 A. (BY MR. BECK) Just to be very clear, the intent
15 at this point would be that we would still continue to
16 request a thousand-foot corridor centered on our
17 existing alignment with the intent to build
18 Alternative 2, unless we find for some portion it is
19 just absolutely not possible, in which case we would
20 then attempt to reach out to State Land to see if we
21 could accommodate to the extent needed on the west side
22 of Wilmot for specific structures. At this point we
23 don't anticipate the need to do that, but that is the
24 intent of what we would request for a CEC.

25 Q. Okay. Thank you.

1 So just to clarify one issue, so yesterday you
2 mentioned -- and this came -- and I am sorry I don't
3 have this electronically, but I don't think it is
4 necessary to pull it up. But in UNS-10.2, which was
5 your additional cross-section exhibit where you are
6 showing how it would -- the new line would relate to the
7 Wilmot Road and the existing line --

8 A. (BY MR. BECK) Correct.

9 Q. -- there was an area to the north where you
10 anticipated -- and I understand this is subject to
11 engineering -- you anticipate the line if the line would
12 have to be to the east of the existing line, is that
13 correct?

14 A. (BY MR. BECK) For approximately the half --
15 well, from Andrada Road north it would be on the eastern
16 side of the existing alignment.

17 Q. Okay. So just to clarify -- I hope this one
18 works.

19 A. (BY MR. BECK) That portion right there from
20 Andrada north to where we cross to the west to Wilmot,
21 we would be on the east side of the existing alignment.

22 Q. Okay. So that is all on state trust land except
23 for about a quarter mile, is that correct?

24 A. (BY MR. BECK) That sounds right, yes.

25 Q. There is just a, I believe it is a sand and

1 gravel operation just under where it says Nogales Tap on
2 the map. There is a small segment of private land that
3 you can see if you look closely.

4 And to the south of Andrada Road, everything
5 would be to the west of the existing line, is that
6 correct?

7 A. (BY MR. BECK) Correct. There was enough room
8 between the Wilmot Road right-of-way and our existing
9 alignment to allow us to go to the west side of the
10 existing line from Andrada Road down to where we
11 diagonal across the experimental range.

12 Q. That's because there is a jag in the road, it
13 kind of veers?

14 A. (BY MR. BECK) Either a jag in the road or line,
15 I am not sure which.

16 Q. In any event, for the existing residents to the
17 east side of the road, the line will move presumably
18 further from their residences on those properties either
19 way, is that correct?

20 A. (BY MR. BECK) That's generally correct. I
21 think we will see when we do the Google flyover, but
22 yeah.

23 Q. And then on a different tack, and I just ask, do
24 you know, in UNS's discussions with the State Land
25 Department, has the Land Department expressed to UNS its

1 position that that state trust land may not be
2 condemned?

3 A. (BY MR. BECK) I know that it is State Land's
4 position, yes, and it has been communicated to us.

5 Q. And I guess just one thing that wasn't clear
6 from your testimony, I believe that the Wilmot Road
7 construction is completed now. Is that your
8 understanding as well?

9 A. (BY MR. BECK) I understand the majority of it
10 is completed. I am not sure if it is 100 percent, but
11 it is very close.

12 Q. So the existing pavement that you will see
13 tomorrow is essentially the pavement that will be there,
14 more or less?

15 A. (BY MR. BECK) Until they decide to do a
16 future -- yes.

17 Q. Okay.

18 A. (BY MR. BECK) Yes.

19 MR. JACOBS: That is all I have.

20 CHMN. CHENAL: Thanks, Mr. Jacobs.

21 Member Woodall.

22 MEMBER WOODALL: This is addressed to the panel.
23 Is the State Land Department a participating agency in
24 the EA? Does anyone know?

25 MS. CANALES: I am not -- this is Gabriela

1 Canales. I am not 100 percent sure whether there was a
2 cooperating agency. I don't believe they were and so --

3 MEMBER WOODALL: My next question: Did the Land
4 Department file any comments or express any concerns as
5 a part of the EA process?

6 MR. BECK: Member Woodall, just to be very
7 clear, the Nogales Tap to Kantor project was not part --

8 MEMBER WOODALL: That's right.

9 MR. BECK: -- of the EA process.

10 MEMBER WOODALL: My apologies. I withdraw my
11 stupid questions; although, it is too late. Thank you
12 to allow me to embarrass myself in the middle of the
13 afternoon. Always a thrill.

14 CHMN. CHENAL: Any further questions?

15 (No response.)

16 CHMN. CHENAL: I have a question, Mr. Guy, when
17 he is finished.

18 MR. GUY: Oh, I am sorry.

19 CHMN. CHENAL: That's no problem. I didn't want
20 to interrupt you.

21 We did not have Mr. Beck review the comments and
22 respond to Mr. Magruder's questions, so I guess we will
23 do that during the rebuttal.

24 MR. GUY: Yes, I am sorry. I was deferring to
25 you whether you wanted to do that before

1 cross-examination or after cross-examination. He is
2 available to do that.

3 CHMN. CHENAL: We will do it that way, but if
4 there is any follow-up questions, we will allow
5 additional cross.

6 So Mr. Hains.

7 MR. HAINS: Yes, thank you, Chairman, members of
8 the Committee. Before I begin, and actually I was going
9 to hand the mike over to Ms. Davis here, we had as a
10 sort of way to break up the workload here, Ms. Davis was
11 going to at least attempt to address questions that were
12 more directed to Mr. Virant and Ms. Canales, and I was
13 going to take Mr. Beck, if you will allow that.

14 CHMN. CHENAL: Absolutely.

15 MR. HAINS: Okay.

16

17 CROSS-EXAMINATION

18 BY MS. DAVIS:

19 Q. Hello, Ms. Canales. My first question was for
20 you, really to the Nogales interconnection project.

21 With respect to Alternative No. 2, I believe you
22 mentioned yesterday that there was an option for a third
23 circuit component. Could you expound a little bit on
24 that?

25 A. (BY MS. CANALES) Yes. Route Alternative No. 2

1 has a route segment variation No. 6, as you can see on
2 the placemats. And that route segment variation goes
3 around an area that is very densely developed with some
4 industrial development around it. And because of that,
5 we were not able to fit in the 150-foot right-of-way two
6 sets of poles, like we do on route segment variation 7
7 and 10 as we could see yesterday in our flyover.

8 So instead, what we proposed was a triple
9 circuit tower. And I believe it is somewhere we have a
10 diagram of what that tower would look like. But it
11 would be, obviously, a taller tower that would allow for
12 the three circuits, the two 138kV circuits and the one
13 230 circuit in the same structure.

14 Q. And the reason that the three circuits is not an
15 option in Alternative, I think it is the purple one on
16 the placemat, No. 4, and Alternative No. 3, what is the
17 reason for that?

18 A. (BY MS. CANALES) So on Alternative 2 and 3,
19 which in the segment variation for those are 7 and 10,
20 we proposed to have paralleling structures instead of a
21 single structure. And the one side would have the
22 double-circuit 138kV and the other side would have the
23 230kV instead.

24 Q. Okay. Thank you.

25 The remainder of my questions are for

1 Mr. Virant. The first set of questions that Staff had
2 related to the open solicitation process. The first
3 question was really a point of clarification.

4 It is your testimony that the open solicitation
5 window is scheduled to close on August 31st. Is the
6 process closed? Is it still ongoing? What is the
7 status of that.

8 A. (BY MR. VIRANT) Yes, ma'am. The open
9 solicitation was launched for the project on July 17th.
10 And it had a 45-day window where it was open. That
11 window closed on August 31st with expressions of
12 interest being submitted to the independent solicitation
13 manager. And the bilateral negotiations are expected to
14 begin this month in September.

15 Q. And could you discuss the level of interest you
16 received in more detail for power going both ways, as
17 you indicated yesterday?

18 A. (BY MR. VIRANT) Yes. So the expressions of
19 interest that were submitted through the process are
20 confidential and, obviously, commercially sensitive. I
21 think yesterday what we walked through was the folks
22 that submitted expressions of interest, there were
23 different types of entities. There was interest in both
24 directions, north and south. And this happened
25 yesterday, I lost my train of thought on the third

1 topic. And the amount of expressions of interest was
2 well in excess of the project's capacity.

3 Q. Okay. So I was going to ask what the minimum
4 level of commitment you would need to receive for the
5 project would be to move forward.

6 A. (BY MR. VIRANT) Sure. It is less of a minimum
7 level of commitment as a percentage of the project's
8 capacity. It is more a level of commitment that will
9 satisfy the debt investors of the project and the equity
10 investors of the project. So there is not a hard and
11 fast rule of X number of megawatts on the merchant
12 project would need to be subscribed to.

13 Q. Okay. But you are at that capacity level, was
14 your testimony?

15 A. (BY MR. VIRANT) The expressions of interest
16 that were submitted are multiples of the project's
17 capacity. And those entities that submitted those
18 expressions of interest would engage in bilateral
19 negotiations for that transmission capacity. And
20 ultimately that would lead to precedent agreements with
21 those customers and transmission service agreements with
22 those customers.

23 Q. And notwithstanding the level of interest you
24 have in fact received for that project, what happens to
25 the upgrade portion of the project in the substation

1 component of the project if sufficient commitments
2 weren't in fact received for the merchant portion? Are
3 they dependent on each other?

4 A. (BY MR. VIRANT) Yes. And I think Mr. Beck's
5 testimony covered that yesterday as well.

6 Q. I can direct it to him as well.

7 A. (BY MR. VIRANT) No, that's okay. The merchant
8 transmission component has every incentive to subscribe
9 the project as fully as possible. And with the level of
10 expressions of interest or the amount of expressions of
11 interest that were submitted through that process being
12 well in excess of the project's capacity, it would
13 clearly be the goal.

14 Q. If those -- would the upgrades in the substation
15 project still be able to move forward without the
16 merchant project moving forward, is my question.

17 A. (BY MR. VIRANT) I would defer that to Mr. Beck,
18 but my understanding is, if the merchant project is not
19 built, that the upgrades proposed here would not be
20 constructed.

21 Q. Mr. Beck, same question.

22 A. (BY MR. BECK) Yes, that is true. UNSE does not
23 plan to build the upgrades unless the project is going
24 forward. We are building it to accommodate the project.

25 And just to add on to what Matt had indicated

1 about the expressions of interest, there are two
2 components to that. And you heard the capacity. There
3 is multiple of the capacity. But it also goes to the
4 price. And until the price is looked at relative to
5 capacity, I mean that's why that, you know, his point
6 about the economics of the project today do make sense.
7 So it is not just we have a thousand megawatts
8 requested. A thousand megawatts at 50 cents isn't going
9 to make the project go, so...

10 Q. Understood. I believe this is to Mr. Virant,
11 but I am not sure. As stated in your petition to the
12 Federal Energy Regulatory Commission, FERC permits the
13 allocation of 100 percent of the project's initial
14 capacity rights to one or more anchor transmission
15 customers, provided compliance with certain criteria
16 related to solicitation selection and negotiation are
17 met. Could UNSE be selected as one of those customers?

18 A. (BY MR. VIRANT) The open solicitation process
19 in general is an open process that is designed to allow
20 any interested party to participate. So all types of
21 entities could participate, or a wide variety of
22 entities can participate in an open solicitation
23 process.

24 Q. Understood. Last question is related to the
25 open solicitation process. You mentioned that a quorum

1 hasn't been present for about a month, or until a month
2 ago, I am sorry, and that they are working through a
3 backlog. We were wondering if you have any updates from
4 FERC on the status of their review and just any
5 projected timing indication.

6 A. (BY MR. VIRANT) Yes, generally, and may be able
7 to get a better answer tomorrow. My understanding is
8 that a filing was made yesterday or this morning
9 requesting expedited action on the pending matter,
10 citing that the petition for declaratory order had been
11 filed in December of last year, and it was needed for
12 certainty on the commercial negotiations.

13 I believe the requested date is the end of
14 September, but I would need to confirm that. I haven't
15 studied the filing, but I believe there was a filing
16 made yesterday with FERC.

17 A. (BY MR. BECK) And just to add to that,
18 approximately three weeks ago, TEP personnel were at
19 FERC on a different matter. FERC reached out to our
20 person and asked is there a need to kind of expedite
21 this, what is the urgency, and our people did indicate
22 yes, we would like to get this order handled at FERC.
23 They suggested a filing be made and, therefore, as Matt
24 indicated, a filing has been made by the applicants to
25 FERC requesting trying to meet a certain date.

1 Q. Okay. Thank you.

2 My next set of questions goes really to pricing.
3 How does Mexico's utility peak profile correspond to
4 UNSE's territory, if you know? Do they have the same
5 peak rates? Are they opposite? And can you expound on
6 how differences between the two, if any, would affect
7 the company's pricing, Mr. Virant?

8 A. (BY MR. VIRANT) I don't think I am the proper
9 person to answer that question, so I would defer it to
10 others. As a merchant project all of the capacity
11 that -- capacity rates in that merchant project were
12 subject to the open solicitation, and really placed out
13 to the market to those potential customers for them to
14 independently decide if the project provides value to
15 them.

16 And I think, without answering your question, an
17 indication of an answer is similar to the expressions of
18 interest that were received. So there are parties that
19 submitted expressions of interest that do see the value
20 and understand those peak patterns, pricing, far better
21 than I do. But I don't have the detailed answer to your
22 question regarding peak pricing and the coincident peaks
23 amongst two systems.

24 A. (BY MR. BECK) Just to kind of -- a little bit,
25 there is a variation between our system peaks. And what

1 we have seen and we have attributed it to, kind of the
2 siesta that people kind of joke about, but in Mexico
3 they truly take a long lunch break, and they work late
4 into the evening. And so they typically have a double
5 peak that somewhat surrounds our peak. So their
6 shoulders are a little bit more on our peak, and our
7 peak is kind of during their shoulders.

8 So there is some advantages on an hour-to-hour
9 transaction, but what you have to keep in mind is the
10 entities that are going through the solicitation process
11 and locking up capacity aren't locking it up for
12 specific hours; it is not an hourly market type
13 transaction. Our intent is, if they will buy long-term
14 50, 60, 100 megawatts of capacity on the line to go to
15 Mexico, and then they can play the market with that, but
16 the transmission piece is going to be a longer term
17 commitment that's probably at a fixed value for some
18 period.

19 So while there is some difference in the peak
20 patterns between Arizona and Mexico, this project isn't
21 intended to really take advantage of that, per se.
22 Although, those who take and lock up a capacity right in
23 the line have that ability to play that market
24 variation.

25 Q. Thank you, Mr. Beck.

1 My last question goes to the alternative routes
2 that have been presented on both projects. And that's
3 whether the company is prepared and willing to move
4 forward on any one of the four proposed alternative
5 routes, notwithstanding their preference for Alternative
6 Route 1 on the Nogales Tap to Kantor project and
7 Alternative 3 on the Nogales interconnection project.

8 A. (BY MS. CANALES) I will answer for the Nogales
9 interconnection project.

10 All four alternatives are determined to be
11 feasible and environmentally compatible. So we would be
12 open. But our preferred route alternative is No. 3, for
13 the reasons stated yesterday.

14 A. (BY MR. BECK) For the Nogales Tap to Kantor
15 piece, while we have reasons to have Alternative 1 as
16 identified as our preferred, based on the State Land
17 input, we have no problem building Alternative 2 on the
18 northern half of that, or northern third of that project
19 up to where it diagonals down. And then we would --
20 basically 1 and 2 are the same south of there anyway, so
21 it doesn't really matter.

22 And I think we heard from State Land that, to
23 the extent we build along the existing alignment, and
24 either Alternative 2 or 3 would accommodate that, that
25 State Land is okay with working with us to get the

1 transfer of right-of-ways and so on needed to center our
2 line in that new right-of-way.

3 So again, we could build 1 through 3 but
4 definitely would prefer 2 because of the construction
5 problems and the additional, extremely increased
6 additional costs of Alternative 3 on the north end.

7 MS. DAVIS: Thank you. That's all I have.

8 CHMN. CHENAL: Thank you, Ms. Davis.

9 Mr. Hains.

10 MR. HAINS: Thank you, Chairman, members of the
11 Comm -- Committee. I was going to call you
12 Commissioners here. Sorry, habit.

13

14 CROSS-EXAMINATION

15 BY MR. HAINS:

16 Q. Mr. Beck, good afternoon.

17 A. (BY MR. BECK) Good afternoon.

18 Q. I have a medley of questions for you. And I did
19 have some semblance of organization to them to begin
20 with, but in light of various kinds of homework type
21 questions I posed out here, and wanting to make sure I
22 got those resolved, I wanted to ask you starting out
23 with some of these to begin with.

24 There was, you may recall yesterday, some
25 questions with regard to one of the routes leading into,

1 I believe it was, the Gateway substation where there was
2 going to be the facilities, there was going to be a
3 close proximity of the siting of the line going in as
4 well as the line exiting from the substation. Do you
5 recall that?

6 A. Yes, I do.

7 Q. And there was a query from Member Woodall
8 referring back to an old Staff frequently made
9 recommendation with regard to line separation. And
10 correct me if I am wrong, I think it was couched in
11 terms of a safety issue. But there are actually two
12 aspects to it I will address first.

13 There is the safety. Would you agree that the
14 safety concern with respect to the proximity of
15 transmission facilities has to do with the potential for
16 a conductor that could be energized to sway and possibly
17 come into the vicinity of somebody who may be working on
18 a parallel facility or something like that?

19 A. (BY MR. BECK) There is that issue. And as I
20 had indicated in one of my slides, we looked to have
21 25-foot clearance, which is for that safety reason, for
22 the workers that are working on line.

23 Q. And so for that segment that was being
24 discussed, there is sufficient separation between the
25 two lines to accommodate for that 25 feet of separation?

1 A. (BY MR. BECK) Yes, there is.

2 Q. Okay. Now, with regard to the reliability
3 concern, which probably was the more significant driver
4 of why Staff was making this historic recommendation
5 that we used to make in the day, correct me if I am
6 wrong, but you were in some of those proceedings where
7 Staff was making that recommendation. And I will pose
8 my understanding what that recommendation was, and you
9 can respond if that corresponds with your understanding.

10 But the reliability concern was to the extent
11 that you could have two parallel running transmission
12 facilities that, in the event that an event occurred
13 knocking down one of the facilities, that you could have
14 the potential of a tower from one facility falling into
15 the lines of the parallel running facility. Does that
16 correspond with your understanding?

17 A. (BY MR. BECK) That is correct. And I think it
18 typically was in the context of generator lead lines
19 coming out of a generating site.

20 Q. To that point, they are coming from a common
21 source, or they are leading to a common destination and
22 ultimately serving a common purpose?

23 A. (BY MR. BECK) Yes.

24 Q. To that extent, one event taking out potentially
25 multiple facilities could exacerbate an issue that

1 may already be present, but it is effectively putting
2 multiple eggs in one basket when you have them
3 concentrated like that?

4 A. (BY MR. BECK) That is correct.

5 Q. Okay. In this instance here where the issue is
6 noted, is that an issue being presented here? Is this
7 in fact just one, one entity, one transmission facility
8 serving one common purpose; it is not multiple
9 transmission facilities here?

10 A. (BY MR. BECK) I think effectively that's what
11 it comes down to, because you lose one part of it does
12 matter, you have lost the system basically.

13 Q. So you break the line at one point, or as it is
14 entering the substation, or break it again as it is
15 coming out of the substation, it is the same line?

16 A. (BY MR. BECK) Correct.

17 MR. HAINS: I hope that revolves the inquiry
18 from Member Woodall.

19 MEMBER WOODALL: I never felt so old in my whole
20 life, Mr. Hains.

21 But thank you for your explanation. Thank you
22 very much, Mr. Beck.

23 CHMN. CHENAL: Well, the thing I think I notice
24 was yesterday it was ancient, today it was historic.

25 MEMBER WOODALL: He is going to have to

1 encounter me in the halls.

2 MR. HAINS: It was a living history so it can be
3 refreshed. But in any event...

4 BY MR. HAINS:

5 Q. Okay. In regard to -- let's see. I believe in
6 one of your slides with regard to Alternative No. 1 for
7 the rebuild component of the facilities, there was an
8 indication as to part of the reason why it is preferred
9 by UNS, that there was a reliability and a safety
10 benefit to that. And in the past, Staff has sometimes
11 chimed in with regard to routing preference, especially
12 if there was a reliability concern.

13 So I wanted to pose to you, because I don't know
14 that Staff was aware that there was a reliability aspect
15 to the selection of those preferred alternatives, could
16 you elaborate on what those concerns are?

17 A. (BY MR. BECK) Yeah. The indication regarding
18 reliability was with the actual construction activity
19 that would take place. So you have an existing line.
20 We are doing construction adjacent to that line.
21 Someone makes a mistake. They take the line out of
22 service. If we are across the road, across Wilmot, they
23 could drop a pole, it wouldn't matter; it is not going
24 to affect the existing line. So there is that
25 reliability aspect. It is not long-term reliability for

1 the project.

2 And then the safety is similar. It is just you
3 are further away from an energized line while you are
4 constructing.

5 Q. Thank you for that clarification.

6 And I guess while we are still on this topic of
7 consolidation of facilities, the one question that was
8 posed to Ms. Canales with regards to the
9 triple-circuiting of one component of one of the
10 alternatives, I believe for the Nogales portion of the
11 project, I take it so the third circuit, that's going to
12 go on this existing facility that happens to be in that
13 corridor and you would consolidate if you adopted that
14 route?

15 A. (BY MR. BECK) No. The idea was that, because
16 it is a very narrow corridor and constricted, we have to
17 put 138 as well as a 230 if we choose that alternative.
18 So the two 138s go into Gateway, the 230 is coming back,
19 they are all on that one common alignment, and there is
20 just no room to put two structures on that particular
21 alignment.

22 Q. With regard to consolidating that many
23 facilities on one set of towers, again, are they serving
24 a common purpose here? I assume the answer is yes.

25 A. (BY MR. BECK) Yes, they are.

1 Q. Is that exacerbating the loss if you lose that
2 one path?

3 A. (BY MR. BECK) I think from a reliability
4 perspective, it is similar. But our preference is to
5 limit it to two circuits per structure. We had
6 experience with multi circuits on a structure, and our
7 preference now is to go with no more than two to the
8 extent possible.

9 Q. And I apologize for almost interrupting you
10 there.

11 So to that extent, and you would agree, that is
12 not the preferred alternative?

13 A. (BY MR. BECK) Correct, for a number of reasons,
14 but that is one of the reasons.

15 Q. And there was another comment with regard to, I
16 think it was from Member Noland, with regard to
17 expanding the corridors. And the possibility of doing
18 it at this juncture is one thing, and I haven't
19 evaluated the potentiality for doing it at this point,
20 but I wanted to check with you, if you were aware or any
21 of the members of the panel are aware, was the size of
22 the corridor noticed as part of the application?

23 A. (BY MR. BECK) I am not aware that it was. But
24 I don't know that any of the -- on the applicant's side,
25 that we have any interest at this time of trying to

1 expand the corridors. I mean it is an interesting
2 concept, but I think we are satisfied that the corridors
3 we have identified will work for us.

4 Q. Okay. And I just wanted to make sure in case,
5 you know, you did, whether the application did drill
6 down with specificity as to the size of the corridors to
7 the extent there may be possibility of having to
8 consider whether there was a substantial change from
9 what was noticed as part of the application at that
10 point.

11 A. (BY MR. BECK) If we were to find that is the
12 case. And we absolutely have no interest in widening
13 the corridors.

14 Q. And I am not saying that is where it will end,
15 but I just wanted to put that on radar, so...

16 And I had some pinpoint questions with regard to
17 the OATT, but it occurs to me that, Mr. Beck, you and I
18 seem to understand it and we understand it pretty well,
19 and we are possibly having a little bit of simpatico as
20 part of our discussion here, and we may be leaving out
21 parts.

22 For the sake of the Committee members, since I
23 have you here and I am able to engage you in
24 conversation, perhaps a better explanation how the OATT
25 works, would you agree that, I want to say, more than

1 ten years ago FERC, in its capacity regulating wholesale
2 transaction interstate, issued an order, I believe it
3 was Order 888, that required open access to
4 transmission?

5 A. (BY MR. BECK) I believe, yeah, in 1996.

6 Q. More than 20 years ago. Thank you for that.

7 A. (BY MR. BECK) Yes.

8 Q. And one of the aspects of that was that
9 basically you have to operate your transmission system
10 as sort of like a toll freeway. Anybody that is willing
11 to pay the price and makes an interconnection request
12 and for which you have capacity to serve, you have to
13 entertain that?

14 A. (BY MR. BECK) That is correct, open and equal
15 access to anyone requesting it.

16 Q. And to that extent, UNS, weirdly enough, is
17 actually a customer of its own transmission system, is
18 that correct?

19 A. (BY MR. BECK) Correct. From the load-serving
20 side of the business, the retail takes service through
21 the OATT.

22 Q. When UNS engages in wheeling power for other
23 entities, so, for instance, in this transaction or in
24 this project, one of the potential permutations of a
25 potential merchant transaction could be, say, APS or SRP

1 wanting to move power one way or the other from, say for
2 an example, the PV hub down to Mexico or bringing up
3 power, vice versa, they would have to carry power over
4 your facilities, and in that circumstance they would be
5 a customer of UNS's transmission, correct?

6 A. (BY MR. BECK) That is correct. Anybody that
7 would try to transact from Palo Verde down to Mexico
8 would not only be a customer of UNS but would be a
9 customer likely of another utility upstream, whether it
10 be TEP or Western Area Power, and so a future developer.

11 Q. And everyone who pays into those various OATTs
12 along the way, they are contributing to the rate base
13 that is being recognized through the FERC OATT for those
14 transmission facilities that are facilitating those
15 movements of power?

16 A. (BY MR. BECK) Correct.

17 Q. Okay. Do you happen to know, and I understand
18 you are not necessarily on the rate side of TEP, UNS's
19 business, but do you happen to know if there is a
20 partition of UNS's rates for transmission that are
21 allocated to retail and are not recovered through the
22 OATT?

23 A. (BY MR. BECK) I know we have a transmission
24 cost adjuster for adjustments when our formulary
25 changes. And then I believe there may be a base

1 component that's in the retail rate to cover the
2 transmission. But it is based upon the FERC approved
3 rates.

4 Q. Right. So you may have some component built
5 into the base rates for retail?

6 A. (BY MR. BECK) Potentially, yeah.

7 Q. And in your response to one of the questions I
8 think that was originally directed to Mr. Virant, but I
9 think you picked up part of it with regard to peaks and
10 whatnot and the coincident peaks and opportunities for
11 that, I seem to recall there was a question yesterday,
12 or at least a statement yesterday, with regard to the
13 expressions of interest, and that there was noticeable
14 preference for short-term transactions heading from
15 north to south. And then to that extent, do you know
16 if -- well, actually, I will retract that. I don't know
17 where I was going with that question here. I apologize.

18 All right. I will go back to my script, such as
19 it remains.

20 So one of the things I was asked to follow up
21 was with regard to the converter station, the VSC
22 component. I believe you indicated that it would
23 provide voltage support. Do you recall that?

24 A. (BY MR. BECK) Yes, I do.

25 Q. Does that anticipate or does that presuppose

1 that power is moving from south to north, or is that a
2 necessary component to reaching the conclusion that it
3 is providing voltage support?

4 A. (BY MR. BECK) Just the concept of having the
5 VSC attached to the UNSE system, whether or not there
6 are transactions taking place across the DC tie, it
7 provides some voltage support to the UNSE system. So it
8 is absent any transaction taking place, any activity
9 across the tie.

10 Q. So with no activity it is improving the
11 operation of the system just by existing?

12 A. (BY MR. BECK) Correct.

13 Q. With regard -- and this is also probably a
14 Mr. Magruder type question, but with regard to the use
15 of new towers with the upgrade component, why actually
16 is TEP requesting -- or, sorry, UNS requesting new
17 towers for the rebuild of the existing if, for instance,
18 you were able to reuse the existing corridor?

19 A. (BY MR. BECK) If we were able to reuse the
20 existing, we would. The engineering analysis of the
21 poles -- just again, a little bit of history. Citizens
22 Utilities used to own the facilities, upgraded the
23 segment from Nogales Tap to Kantor in, I believe, 1988
24 as part of a Commission obligation.

25 When they did that, they built it 138kV standard

1 as far as spacing goes, but they built it with a wire
2 that is smaller than what UNSE has subsequently put
3 downstream. That wire doesn't have the capacity we
4 need, so we need to put larger wire.

5 When our engineers looked at the poles with that
6 larger wire, the additional wind loading on the poles
7 exceeded their capacity. And so the engineering
8 recommendation was to replace the poles. The other
9 option would have been to go and inter-set a bunch of
10 poles in between the existing and, you know, in our
11 eyes, get more like a picket fence. We replace the
12 poles, we can span them out even from what they are, and
13 it is the better long-term solution.

14 Q. All right. And with regard to long-term
15 solutions, I will segue into the larger interest and
16 benefit that Staff is perceiving. I believe you
17 understand that to be the radial nature of service to
18 Nogales, and I wanted to address the next set of
19 questions to that issue.

20 First off, you would agree that this has been a
21 matter of interest to the Commission at least as far
22 back as Case No. 111?

23 A. (BY MR. BECK) And prior to that, yes.

24 Q. And prior to that.

25 And you have done some upgrades, but I take it

1 the fundamental reliability issue, being a radial
2 system, is still present?

3 A. (BY MR. BECK) The system is still a radial
4 system. We have greatly improved the reliability of
5 what is out there. But ultimately any problem on that
6 one circuit does cause an outage at the end of the line.

7 Q. Okay. In the event -- so Nogales does have some
8 generation that's within the load pocket, correct?

9 A. (BY MR. BECK) Correct.

10 Q. In the event that there is an outage or a break
11 in the one radial line serving Nogales, what is the
12 deficit between the ability -- the power that's
13 generated within the load pocket versus what is being
14 imported in to support the entire load?

15 A. (BY MR. BECK) We have approximately 60
16 megawatts of generation at Valencia at the south end of
17 the project, and we have a 14 megawatt interconnection
18 at Kantor that can be operated as an emergency tie to
19 TEP. Because of financing restrictions at TEP we cannot
20 have that 14 -- or 46kV circuit in service absent an
21 emergency. So only in the case of an outage causing
22 problems in Nogales can we energize that. So we can
23 serve roughly 74 megawatts of load, and our peak is in
24 the range of 85.

25 Q. So one thing you said there was a little odd to

1 me. So you said for financial reasons you can't operate
2 it. Is it because you are overloading it to provide
3 that service?

4 A. (BY MR. BECK) Financing reasons. So TEP is
5 served, is operated as a two-county system, where a lot
6 of our financing is based on the fact that we only serve
7 two counties. And our two counties are Pima and
8 Cochise. So we can't serve into Santa Cruz County. We
9 would violate the terms of the financing.

10 Q. All right. I think I understand what you are
11 saying. So worst case, so you have about 74 megawatts
12 ability within the load pocket?

13 A. (BY MR. BECK) Approximately 74 megawatts of
14 capability with a peak of around 85.

15 Q. Okay. So there is about a 10, 11 megawatt
16 deficit?

17 A. (BY MR. BECK) Correct.

18 Q. And when you said at peak, so that's peak day of
19 the year or --

20 A. (BY MR. BECK) Peak hour of the year.

21 Q. Peak hour, okay. There are times of the year
22 where you would be below that, and you could conceivably
23 support the load within the pocket?

24 A. (BY MR. BECK) Many hours of the year we would
25 be below that number.

1 Q. Okay. And with regard to resolving the radial
2 issue here with the construction of these upgrade
3 facilities, you would agree you have to construct all
4 the facilities, both the Gateway and the connection to
5 CFE, thereby connecting to an alternative source for
6 generation in order to completely create a new path
7 going into Valencia and creating a no longer radial
8 situation, correct?

9 A. (BY MR. BECK) Correct. To make the project
10 work at all it needs to be completed.

11 Q. And I guess to the point that Member Woodall was
12 taking up with you with regard to the one outage you
13 experienced recently where these facilities would not
14 have resolved that, so I guess a way of understanding
15 that, it is still a radial system from Valencia to
16 Nogales proper. Would that be one way to think about
17 that?

18 A. (BY MR. BECK) Yeah. The distribution is radial
19 from that point.

20 Q. Do you anticipate that at some point there will
21 be another substation or something like that to create
22 another way to route power around?

23 A. (BY MR. BECK) We have actually laid out the
24 Gateway substation to incorporate future distribution
25 circuits and transformation at Gateway to help offload

1 the Valencia substation.

2 Q. And before moving on from this, so when there is
3 an outage, and if it was on a day, a peak hour, are you
4 going to lose portions of Nogales, are you going to lose
5 all of Nogales, or how is that going to work? Is the
6 whole town going to black out?

7 A. (BY MR. BECK) It all depends how it occurs. If
8 we for some reason lost the transmission line, the 115
9 going to Nogales, likely the city would go down for a
10 period, relatively short, while we brought generation
11 back up. We would start bringing people back on line.
12 And then at the very peak hour, we wouldn't be able to
13 restore power to 100 percent of the load.

14 Q. Okay. And you anticipate there would be
15 economic losses to the community because they wouldn't
16 be able to operate normally, correct?

17 A. (BY MR. BECK) Yes.

18 Q. And in any event, construction of these
19 facilities would be an improvement to the reliability
20 situation for Nogales?

21 A. (BY MR. BECK) Yes. It basically gives us an
22 alternative feed from the south.

23 Q. This is another -- I am going to transition into
24 another subject here, and eventually it will segue into
25 something that I think Mr. Magruder also brought up as

1 well.

2 But with regard to control of the facilities, so
3 correct me if I am wrong, I believe in conversations
4 between Staff and yourself, you have indicated that UNS,
5 or TEP rather, is the balancing authority within TEP's
6 service area and UNS's service area.

7 A. (BY MR. BECK) Yes, UNS is a part of the TEP
8 balancing authority.

9 Q. Okay. And that will give UNS the authority, or
10 at least the actual ability, to direct flows in the
11 event that there is some sort of emergency event at
12 Nogales?

13 A. (BY MR. BECK) It will give us the ability to
14 coordinate with the facility manager or the facility
15 lessor on issues. So there will be a set of protocols
16 put together that will include UNSE, the entity called
17 Frontier Operations, which we haven't talked a whole lot
18 about, and CENACE on the Mexican side.

19 Q. By virtue of the interconnection, will either
20 UNSE, UNSE/TEP's balancing authority extend over into
21 CFE's territory or vice versa? Will CFE get some
22 measure of control into UNSE's territory?

23 A. (BY MR. BECK) No. The dividing line will be
24 the border, will be the DC tie itself, the facility.

25 Q. And to that, there was some reliability concerns

1 that seemed to lend themselves to just the nature of the
2 connection with Mexico. Do you recall back in, I think
3 it was, in September of 2011 there was an event at -- it
4 was an APS facility serving in Yuma that gradually led
5 to a series of events that cascaded and caused outages
6 in San Diego, where San Diego was down for a day. But
7 then they cascaded down into Baja, and Baja was down
8 for, I think, like seven days, which, you know, from
9 Staff's perspective, did not improve the perspective
10 with regard to the reliability of the system on the
11 Mexico side of the border.

12 One, are you familiar with that event?

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

14 Q. Okay.

15 A. (BY MR. BECK) The difference there is the Baja
16 Peninsula is part of the WECC system, so they are
17 considered to be part of the U.S. grid effectively.
18 They are the only part of Mexico that is. They are
19 connected synchronously to the WECC grid. So there is
20 no DC back to back, no fuse or circuit breaker that we
21 consider the DC component to be.

22 So yes, that outage did lead to outage in Baja.
23 And because of that synchronous connection, beyond that
24 I don't know what their issues were, but that is why it
25 could cascade across the border.

1 Q. And you briefly touched on this, but with regard
2 to you said the circuit breaker function, so you would
3 agree that is one reliability benefit as well, maybe not
4 an intentional benefit, but a benefit of having the AC
5 to DC back to AC, it creates an interrupt in the flow of
6 power between Mexico and UNSE's system here such that a
7 disruption, something going on on the Mexico side would
8 not cascade its way into UNSE's system and thereby
9 jeopardize UNSE's provision of service, correct?

10 A. (BY MR. BECK) Exactly. It works both
11 directions. It will protect either side from the other.
12 And it is not -- I mean it is a known byproduct of the
13 DC converter technology that it did provide that
14 functionality. And that's why you do DC ties between
15 the western interconnection and the eastern
16 interconnection, because those two systems cannot
17 operate synchronously. They are too different. And so
18 all those connections are DC and they also provide that
19 protection between the two systems.

20 Q. And one other thing that gets something in mind
21 with regard to the San Diego outage was there was some
22 requirements handed down from various federal regulators
23 with regard to pushing for greater visibility between
24 utilities into each others' service territories.

25 And one thing that occurred to Staff was, you

1 know, how much visibility will UNSE have looking into
2 CFE's territory, and vice versa, so as to anticipate
3 problems on each respective party's side of the grid
4 will you have a comparable degree of visibility into
5 their operations?

6 A. (BY MR. BECK) I am not sure we will have
7 exactly comparable, but we will have some view and
8 interaction with what is happening on their side, and
9 vice versa. Those are some of the protocol issues we
10 need to work out between UNS Electric, Frontier, and
11 CENACE. In fact, we had discussions with CENACE within
12 the past month about that being the next step in the
13 process, is to develop those protocols.

14 And just a little bit further, all of Mexico is
15 at least considering and looking at at least adopting
16 NERC standards, and potentially even joining up with
17 NERC, similar to how the Baja is with WECC. And so to
18 the extent that happens, there will be a lot more
19 interplay between the two countries. But that's
20 something in the future.

21 Q. And thank you for that.

22 Moving on, do you recall Staff has, at least
23 inside its prefiled presentation for Mr. Bob Gray, the
24 standard cathodic study condition that has been
25 requested in various CECs with regard to that? Would

1 you agree there are some natural gas pipeline crossings
2 or facilities that will run in parallel to project
3 facilities here?

4 A. (BY MR. BECK) There are, I think, three of the
5 alternatives cross the gas line that serves Nogales. So
6 depending on which alternative is picked, there will be
7 a crossing if it is one of those that has those three
8 segments. But it probably will only be one crossing.

9 And relative to the language, it may -- to some
10 of us it is a reminder that that developed in our
11 Case 111, and that was the first instance of that gas --
12 that study requirement. And that language, I think, is
13 more since then. And at the time it was the gas side of
14 the ACC that came in and gave the proposals on what that
15 language should be, and I am not sure who has had input
16 in the morphing of language over time.

17 Q. Something lost to history as part of coming full
18 circle on Case 111?

19 A. (BY MR. BECK) My only concern, telephone tag,
20 it just changes the message slightly and...

21 Q. And now I am on my last subject for you, which
22 is really a catchall. Actually no, one other one.

23 With regard to State Land just very briefly,
24 with regard to route 1 for the rebuild phase, and
25 bearing in mind there is apparently some conversation

1 that still is yet to be resolved between State Land and
2 UNSE, is there a concern that if route 1 is adopted that
3 this could wind up in the same Case 111 type scenario?

4 A. (BY MR. BECK) It definitely wouldn't be the
5 Case 111 scenario, because it would be internal to the
6 state. And this isn't part of the DOE process. So we
7 are not going to get into Presidential Permit approval
8 of something different.

9 I guess I have a little different take on it. I
10 think we are in agreement with State Land. We
11 understand State Land's position. We intend to go with
12 Alternative 2, but if for some unforeseen reason we
13 cannot make it work, in which case we would reach out to
14 State Land to say, hey, this particular one, two, or
15 five structures, whatever it may be, we cannot reach
16 agreement with those property owners here, and try and
17 work something out for specific locations only. And we
18 don't expect that to happen, but that's the reason for
19 the thousand foot wide corridor, to allow that potential
20 discussion.

21 Q. All right.

22 A. (BY MR. BECK) I don't know that there is
23 outstanding discussions to take place other than we need
24 to make the new application to State Land that shows
25 Alternative 2 is what we are planning.

1 Q. And I appreciate that. Thank you. And we are
2 on the home stretch here now, so last few set of
3 questions.

4 With regard to, and I think I already know the
5 answer to this, but will there be any of the
6 transmission line crossings under the alternative paths
7 that are being presented?

8 A. (BY MR. BECK) You are talking about the project
9 overall?

10 Q. Yes.

11 A. (BY MR. BECK) On the Nogales Tap to Kantor I
12 know there is probably at least one or two crossings.

13 Q. And you can build around those?

14 A. (BY MR. BECK) Yeah, we will, the higher voltage
15 will go up over the other voltages.

16 Q. All right. And to the extent there are ravines
17 that can't be avoided, you will reinforce those towers
18 to resist erosion effects and keep them standing?

19 A. (BY MR. BECK) Yes. We do a very good job of
20 engineering, yeah.

21 Q. Do any of the routes have a greater placement of
22 towers within flood channels or floodplains, more so
23 than any of the other?

24 A. (BY MR. BECK) I think they are approximately
25 equal. The floodway areas I think are common to all of

1 our routes, so the numbers are probably very similar.

2 Q. And then I think Mr. Eberhart, back when he was
3 on the Committee, used to ask this all the time. But
4 with regard to crossings of freeways and such and making
5 sure there is conductor clearance for trucking, have you
6 considered that as part of your design, or are you at
7 that stage yet?

8 A. (BY MR. BECK) Well, when we do the detail
9 design we absolutely will consider it.

10 Q. Okay. And as part of those you will anticipate
11 if there is heat sag going on on the conductor
12 components and whether that will bring it down even
13 lower?

14 A. (BY MR. BECK) Yes.

15 Q. Last set of business I have got here is with
16 regard to the various data requests that Staff sent to
17 the joint applicants.

18 Do you have up there what has been marked for
19 identification as Exhibit ACC-3? I think I sat them on
20 your chair during the break.

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

22 Q. Okay. And can you identify that, please?

23 A. (BY MR. BECK) So that was this first Staff data
24 request to the company regarding our system impact
25 study.

1 Q. Okay. And bearing in mind that there are
2 multiple actual data responses in here -- and I think at
3 least in this one you are the respondent to all of them,
4 is that correct?

5 A. (BY MR. BECK) Yes, that's correct.

6 Q. Okay. And to the extent that Staff may have
7 relied upon this for purposes of its evaluation of the
8 application, you stand by your responses that you
9 provided in this?

10 A. (BY MR. BECK) I do.

11 Q. Okay. And you don't -- you would not contend it
12 was inappropriate of Staff to rely upon this information
13 that was being provided?

14 A. (BY MR. BECK) Absolutely not.

15 Q. Do you think it speaks to any the reliability
16 issues that Mr. Magruder has addressed?

17 A. (BY MR. BECK) Yes, I believe it does.

18 Q. I will ask that of all of these, actually, so...

19 With regard to the exhibit that has been marked
20 for identification as Exhibit ACC-4, do you have that?

21 A. (BY MR. BECK) I do.

22 Q. And can you identify that, please?

23 A. (BY MR. BECK) It looks like the second set of
24 Staff data requests.

25 Q. Okay. And that was prepared by you or under

1 your direction?

2 A. (BY MR. BECK) Yes, it was.

3 Q. Okay. And likewise, with regard to the extent
4 Staff may have relied upon this as part of its
5 evaluation, you would not contend that this was
6 inappropriate of Staff?

7 A. (BY MR. BECK) Correct.

8 Q. And this also speaks to reliability issues with
9 regard to the interconnection with Mexico?

10 A. (BY MR. BECK) Yes, it does.

11 Q. And do you think -- sorry.

12 And you would agree that this is also responsive
13 to some of the questions that have been posed by
14 Mr. Magruder?

15 A. (BY MR. BECK) Yes, I believe so.

16 Q. And finally, do you have up there the exhibit
17 that has been marked for identification as Exhibit
18 ACC-5?

19 A. (BY MR. BECK) Yes. That is the third set of
20 data requests.

21 Q. Okay. And can you identify that exhibit,
22 please. Oh, you just did. I was on a roll here and you
23 got ahead of me. And this is the third set of data
24 requests, correct?

25 A. (BY MR. BECK) Correct.

1 Q. And likewise, this one has a mix in addition to
2 various technical questions, but also questions with
3 regard to the operation of the OATT and various other
4 economic type questions. Would you agree with that?

5 A. (BY MR. BECK) Yes, I agree.

6 Q. And bearing in mind that you did not respond to
7 all of these, there may have been some contribution from
8 Mr. Virant, nonetheless you would agree that
9 substantially most of these questions were responded to
10 by you or at least at your direction?

11 A. (BY MR. BECK) Yes, they were.

12 Q. Okay. And likewise, you would agree that it
13 would be appropriate for Staff to have relied upon these
14 responses in its evaluation?

15 A. (BY MR. BECK) Yes.

16 MR. HAINS: Okay. All right. With that,
17 Chairman, I would move the admission of Exhibits ACC-3,
18 4, and 5.

19 CHMN. CHENAL: Any objection to Exhibits ACC-3,
20 4, or 5?

21 MR. GUY: No objection.

22 CHMN. CHENAL: Okay. ACC-3, ACC-4, and ACC-5
23 are admitted.

24 (Exhibits ACC-3, ACC-4, and ACC-5 were admitted
25 into evidence.)

1 MR. HAINS: And thank you. That's all the
2 questions I had for Mr. Beck.

3 CHMN. CHENAL: Okay, Mr. Guy. The next phase of
4 the testimony we would go back to Mr. Beck to review the
5 Magruder questions, is that correct, or what did you
6 have in mind?

7 MR. GUY: I have some brief redirect, if you
8 would allow me, but then yes, we have two things for
9 members of this panel if it is beneficial. One, we had
10 prepared slides that essentially just list
11 Mr. Magruder's questions that were contained in his
12 comments. And Mr. Beck is prepared to orally testify to
13 answers to each of those questions.

14 CHMN. CHENAL: Okay.

15 MR. GUY: The second thing is we had a shift in
16 which witness was going to sponsor something that I
17 missed earlier. And we have the Google flyover for the
18 Nogales Tap to Kantor upgrade section that Mr. Beck is
19 actually prepared to go through. And so if that's
20 something the Committee would like to see, he should
21 probably present that as well.

22 CHMN. CHENAL: Okay. That sounds good. Why
23 don't you do your redirect, Mr. Guy.

24 MR. GUY: Okay.

25

1 REDIRECT EXAMINATION

2 BY MR. GUY:

3 Q. And I guess my first set of questions are for
4 you, Mr. Virant. Mr. Virant, sorry.

5 Do you recall Ms. Davis asked you about the
6 status of the open solicitation process?

7 A. (BY MR. VIRANT) Yes, I do.

8 Q. And I believe you testified that the actual open
9 solicitation period ended on August 31st, is that
10 correct?

11 A. (BY MR. VIRANT) Yes.

12 Q. What is the next step in that process?

13 A. (BY MR. VIRANT) The open solicitation window
14 closed August 31st. The next step in general were those
15 expressions of interest to be negotiated and translated
16 into precedent agreements or transmission service
17 agreements needed for financing of the project.

18 Q. And I think you testified yesterday that it is
19 hard to predict how long it takes to go through that
20 process. I mean, do you have any -- I mean, is that an
21 accurate characterization of your testimony, or how
22 would you answer that question?

23 A. (BY MR. VIRANT) Yeah, I recall.

24 Q. While these precedent agreements are being
25 negotiated -- and you think you said they would end in

1 transmission service agreements, is that right?

2 A. (BY MR. VIRANT) That's correct.

3 Q. What is happening in the other project
4 development? What is happening elsewhere in the
5 project?

6 A. (BY MR. VIRANT) The project as a whole, as it
7 is now, will continue to move forward. And so during
8 the period when transmission service agreements and
9 those bilateral negotiations are taking place, the
10 project would advance in other aspects, such as the
11 state permitting process, the federal NEPA Presidential
12 Permit application process, all of these items which are
13 precedence to a customer of the project actually signing
14 a binding commitment.

15 So, you know, in general, a merchant
16 transmission project suffers the chicken and the egg
17 issue. And so without resolution of other developing
18 milestones, the CEC process, the Presidential Permit
19 application process, those commitments from a customer
20 won't happen because there is still other work to be
21 done in the development.

22 So in general, the project will continue to move
23 forward and complete other milestones that will be
24 required for construction, obtaining customers and the
25 like.

1 CHMN. CHENAL: Excuse me.

2 Member Woodall.

3 MEMBER WOODALL: So what I understand you to be
4 saying, Mr. Virant, is you won't be able to enter into a
5 binding agreement unless you get your CEC and your
6 Presidential Permit. What else will you need? You
7 alluded to some others, but are these the biggies?

8 MR. VIRANT: Those certainly are the big ones
9 that come to mind. There will also be -- well, yeah.
10 There will also be a conditional use permit with the
11 City of Nogales. There would need to be the
12 interconnection agreement with UNSE. There would need
13 to be a facilities agreement with UNSE. A compliance
14 filing with FERC following the completion of these
15 negotiations would need to be filed. And there are
16 likely some other items, but these are the biggest
17 items, the permitting items.

18 MEMBER WOODALL: I am assuming that for both
19 parties, like an evaluation of financial condition, both
20 sides would be a component of due diligence that would
21 be done before this. Is that --

22 MR. VIRANT: Yes, ma'am. That's a very large
23 component of it. And the petition for declaratory order
24 spelled out a lot of the screening and ranking criteria
25 that would be observed by -- through the process. And

1 the majority of those criteria screening and ranking are
2 focused on the financial quality of the potential
3 offtaker.

4 BY MR. GUY:

5 Q. And so we are talking chicken and egg, and we
6 are kind of talking about the chicken and now the egg,
7 so I want to flip to the other side now. While these
8 development activities are going on and while the
9 negotiations are going on, will any construction of the
10 project be happening?

11 A. (BY MR. VIRANT) No. That isn't the
12 expectation.

13 Q. And at what point would construction begin?

14 A. (BY MR. VIRANT) It would certainly be after a
15 binding commitment is received.

16 Q. So to follow up on a question that I think
17 Ms. Davis may have asked, and maybe Member Hamway as
18 well, so the relationship with what happens with the
19 network upgrades, if the interconnection project does
20 not go forward, if the interconnection project does not
21 go forward, do any network upgrades exist? In other
22 words, have they been constructed?

23 A. (BY MR. VIRANT) No, they would not have been.

24 Q. I am going to ask you a couple questions that
25 you should be familiar with, but you may or may not be

1 because it wasn't something you talked about. But
2 following up on I think it was someone's question to
3 Mr. Beck, actually, but I want to direct it to
4 Mr. Virant because you were the notice witness, I have a
5 copy of the notice of hearing, which is technically not
6 an exhibit. It is a pleading, or an order I guess I
7 should say.

8 Would you take a minute or two and see if you
9 see any reference to a thousand-foot corridor in the
10 notice of hearing?

11 A. (BY MR. VIRANT) I will.

12 Q. And I, subject to check, I mean I wasn't able to
13 find it in there, so it is not a trick question, but...

14 A. (BY MR. VIRANT) I was hoping you would say
15 something so I could ask you if you had a page in mind.
16 But I did scan the document and I did not see a
17 reference to a corridor.

18 Q. And I think based on your notice testimony, the
19 notice, that notice of hearing was the document that was
20 published in the newspapers for the hearing and the
21 application, is that correct?

22 A. (BY MR. VIRANT) Yes.

23 Q. And do you recall what buffer or corridor the
24 applicants used when they issued notice for the open
25 house public meetings prior to the filing of the

1 application?

2 A. (BY MR. VIRANT) I believe it was half a mile.

3 Q. Mr. Beck, I want to go to some questions that I
4 think Ms. Davis addressed to you. She was asking you
5 about the variance in peaks, peaks in Mexico and
6 southern Arizona. Do you recall that?

7 A. (BY MR. BECK) Yes, I do.

8 Q. And everyone may understand this, but tell me
9 what you mean by a variance in peak.

10 A. (BY MR. BECK) So the time, the hour, the minute
11 of the peak in the UNSE system is different than the
12 peak in the CENACE/CFE system, the Mexico system. And
13 their peak tends to be two peaks, one prior to the
14 lunchtime period and one after their lunchtime period,
15 separated by an hour or two. And our peak typically is
16 one peak at a given hour of the day.

17 Q. And, again, I don't want to be insulting anyone,
18 but when we say peak, that means the utility or the
19 system in the area is using the maximum amount of power
20 it is going to use?

21 A. (BY MR. BECK) Maximum load delivery, yes.

22 Q. So if one grid has a certain peak, it is using
23 maximum amount, maximum load at whatever time you are
24 measuring the peak; if the other grid is at a different
25 peak, it is not using its maximum amount of power, is

1 that fair?

2 A. (BY MR. BECK) If they don't coincide, correct,
3 yes.

4 Q. And I believe you were asked questions about
5 whether that impacts sort of the market or the trading
6 of power, is that correct?

7 A. (BY MR. BECK) Right.

8 Q. What I want to go to is the reliability piece of
9 that. Would the variance in peaks in the DC tie provide
10 any reliability benefits in the event there is a
11 transmission line outage or other problems on the grid?

12 A. (BY MR. BECK) There is probably a relatively
13 minor reliability benefit due to the fact that the peaks
14 are a little bit different. The real value to that is
15 the transactional capability. Energy is going to be
16 slightly lower -- well, it is going to be highest cost
17 at peak. If the other system is not at peak at the same
18 time, their energy cost is likely a little bit lower.

19 Now, given the differences between the two
20 systems on how much more expensive the Mexico energy is,
21 there may be or may not be a lot of value in that, but
22 at given times there could be. And in the future, as
23 they go to more renewables, which is the plan in Mexico,
24 there may be more opportunities to make trades across.

25 Q. Thank you.

1 And just one other line of questions briefly.
2 And this is really just to draw it to the attention of
3 the Committee members. Could you find ACC-5, Exhibit
4 ACC-5.

5 A. (BY MR. BECK) I have it.

6 Q. And these are applicants' responses to Staff's
7 third set of data requests, is that correct?

8 A. (BY MR. BECK) That is correct.

9 Q. Would you turn to BG 3.15.

10 A. (BY MR. BECK) Yep.

11 Q. And this question, just for the record, the
12 applicants resolved all concerns raised by, and it lists
13 several people. And one of the agencies it lists is
14 Border Patrol. Do you see that?

15 A. (BY MR. BECK) Yes.

16 Q. And so in this response it appears to me that
17 you are describing comments made by Border Patrol and
18 then providing the status of those discussions, is that
19 correct?

20 A. (BY MR. BECK) That is correct.

21 Q. Is there anything in this question or response
22 that is in addition to or different than what we talked
23 about earlier today on Border Patrol's concerns?

24 A. (BY MR. BECK) I think they were basically all
25 discussed earlier today. There is their horse, mustang

1 issue, interference of radio or microwave, the lightning
2 strike issue, the heliport. I think they are all
3 basically the same things that have been discussed.

4 MR. GUY: That's all I have for redirect.

5 CHMN. CHENAL: All right. Thank you very much,
6 Mr. Guy.

7 Any questions from the Committee at this point?

8 (No response.)

9 CHMN. CHENAL: Okay. Why don't we take our
10 afternoon break, take a 15-minute break, come back here
11 at 3:15, and we will continue with Mr. Beck and Magruder
12 and flyover. All right, thanks.

13 (A recess ensued from 2:58 p.m. to 3:25 p.m.)

14 CHMN. CHENAL: All right, folks, let's resume
15 the afternoon session.

16 Let's talk housekeeping before we go on.

17 Mr. Guy, how much time do you think you are going to
18 need for the rest of your witnesses? You have got this
19 panel with time, and then you have got your
20 environmental panel.

21 MR. GUY: So thinking sequentially, I think this
22 panel probably has 30 to 40 minutes, because the flyover
23 is probably by itself 20 minutes.

24 CHMN. CHENAL: Okay.

25 MR. GUY: Then we have questions. And then the

1 environmental panel, obviously depending on the amount
2 of questions, I think we have two witnesses that are
3 going to give live testimony. And probably, you know,
4 an hour, hour and a half for Ms. Darling, and then maybe
5 a little bit more for Ms. Bissonnette. So you are
6 looking at maybe, what, three hours between the two of
7 them. So we would get started with them today, and then
8 subject to questions they would have about two hours'
9 worth of testimony tomorrow.

10 I have not talked to Mr. Hains since our
11 original discussion, but at one point I believe his
12 estimate was around 40 minutes to an hour, perhaps, for
13 his witnesses. We have spoken to Mr. Jacobs and with
14 State Land, and I think in light of the testimony that
15 Mr. Beck gave that the applicants would be seeking to
16 build an Alternative 2, not Alternative 1, although we
17 would continue to request a thousand-foot corridor so we
18 would have the flexibility if we needed to to go back to
19 State Land or any other owner within that thousand-foot
20 corridor to build a different line, we are comfortable
21 in asking for explicit approval of Alternative 2 instead
22 of Alternative 1 for the upgrade section.

23 And my understanding from Mr. Jacobs -- he can
24 add to this if that's the case -- he may not need to
25 bring his witness tomorrow. So we would get that time

1 back unless the Committee would want to hear from him.

2 CHMN. CHENAL: Was that correct, Mr. Jacobs?

3 MR. JACOBS: That is correct. That's what I
4 would propose. And that would put this hearing the same
5 as any other hearing, which is the Land Department and
6 the applicant reach agreement on a route, the Land
7 Department supports the applicant and does not
8 participate in the hearing.

9 CHMN. CHENAL: And that would be fine, and we
10 could do two things. We can stipulate and have that
11 record and we can also still admit your witnesses'
12 testimony as an exhibit.

13 MR. GUY: Okay.

14 CHMN. CHENAL: So we have a complete record.
15 Member Noland.

16 MEMBER NOLAND: Mr. Chairman, go ahead and
17 finish your housekeeping if you want.

18 CHMN. CHENAL: Okay. So if that were the case,
19 we wouldn't need -- Mr. Jacobs wouldn't have witnesses.
20 So since we will finish today at -- we may go a little
21 past 5:00, depending on the time and how we get through
22 this, because tomorrow morning we have got the tour, and
23 that's about, well, 1:00 to 5:00, four hours let's say.
24 And then Friday morning we don't want to have too much
25 time with testimony because we want to begin

1 deliberations.

2 And let me remind everybody that there are two
3 CECs. I think they will go through pretty quickly
4 because they are very much duplicative of each other,
5 but still. So I just, you know, if we are -- we don't
6 want to be at the last minute on Friday rushing through
7 everything to get it done. I would rather, you know, be
8 efficient now, stay later, you know, as we have to, and
9 have enough time to get this done so we are not pressed
10 on Friday. That's just my hope, because we will get
11 this done this week.

12 Member Noland.

13 MEMBER NOLAND: Thank you. Mr. Chairman, I have
14 got a couple questions of Mr. Hains, and a question for
15 Mr. Beck on their testimony and questioning.

16 CHMN. CHENAL: Sure, please proceed. And then
17 we will finish up any questions or -- and then we will
18 get into what, you know, Mr. Beck's planned testimony is
19 this afternoon. Please proceed with your questions.

20 MEMBER NOLAND: Okay. Mr. Hains, you were
21 questioning the applicant about whether they had
22 included the thousand-foot corridor in the notice. And
23 first of all, I would like to clarify whether you are
24 talking about the hearing notice and/or the notice that
25 was sent to everyone within a half mile of the planned

1 route. Can you clarify that for me?

2 MR. HAINS: Yes, certainly, Chairman, Member
3 Noland. I was actually referring to the application.
4 So if the application specified a corridor in there and
5 a corridor width, that would be what has been proclaimed
6 to the public so that, you know, this is what you can
7 anticipate you are possibly on the hook for. And
8 potentially people who looked at the application may
9 have seen it: okay, I am outside that, so they may have
10 sat on their rights to intervene if they didn't realize
11 it could have been expanded beyond that. That's the
12 concern.

13 MEMBER NOLAND: Okay. And I think that when I
14 looked at what had been referred to, they were looking
15 at the hearing notice for this hearing. So that was
16 maybe a misunderstanding there.

17 Mr. Hains, do you know of any legal requirement
18 to include the width of the corridor?

19 MR. HAINS: Member Noland, I don't know that it
20 is a requirement. I do think, though, that in various
21 siting proceedings where there has been a substantial
22 change in analysis performed, the concern is that, when
23 you proclaim a certain way that you know an application
24 is going to proceed, people who may be interested in
25 observing the progress of an application, as I said,

1 they have to evaluate the extent they want to
2 participate to vindicate whatever rights they may have.
3 If they see this is what is being asked for, they may
4 anticipate I don't have to do anything because it looks
5 like you are not asking for anything that harms me. But
6 then if it changes after the application was made, and
7 now it is too late for them to intervene, there is a
8 concern then that they may, you know, be precluded from
9 vindicating their, protecting their interests that they
10 did not know were in jeopardy.

11 MEMBER NOLAND: Thank you.

12 Mr. Hains, wouldn't you agree, though, that it
13 is hard to absolutely determine how much, how wide a
14 corridor you may need until you determine which route
15 you are going to have, or alternates, based on terrain
16 and other considerations?

17 MR. HAINS: I do not disagree that it is a
18 challenging analysis that has to be performed.

19 MEMBER NOLAND: I think that one of the reasons
20 I was asking that is because I have never heard that
21 question asked before. And I don't know that I have
22 really seen that in any application of the 40, 50 cases
23 I have been involved in here on this panel. So I just
24 wanted to clarify that. Thank you.

25 MR. HAINS: And if I may just respond to that,

1 just out of clarification, I am not actually aware that
2 there is an issue with that here. I threw that out
3 because I was ignorant whether there was a corridor
4 width specified in the application. That's why I asked
5 the question in the first place.

6 MEMBER NOLAND: Thank you.

7 Mr. Beck, I noticed on -- and I can't give you
8 the exact page or exhibit number on this, but I noticed
9 that by going to Alternate Route 2 that will involve
10 less private land than Alternate Route 1, is that
11 correct?

12 MR. BECK: No. Are you speaking of the Kantor
13 to Nogales Tap portion?

14 MEMBER NOLAND: I am not sure. I was reading
15 through your hearing preparation. And it just kind of
16 stuck out to me that the alternate, what it says on
17 Alternate 1, the private land was more.

18 MR. BECK: And I think I see where you are
19 referring. It is actually on the placemat.

20 MEMBER NOLAND: No. Oh, yes.

21 MR. BECK: We have got land ownership there.

22 MEMBER NOLAND: And that's the Nogales Tap to
23 Kantor. Well, Mr. Beck, on both the Nogales
24 interconnection, it still looks to me like Alternate 2
25 involves less private land than Alternate 1, as does the

1 Nogales Tap to Kantor, according to your chart, unless I
2 am reading it wrong.

3 MR. BECK: No, you are reading the chart
4 correctly. That is what it states.

5 MEMBER NOLAND: Is that strong?

6 MR. BECK: I am struggling to understand. Is it
7 on the Kantor upgrade portion how the private land is
8 greater for Alternative 2?

9 MEMBER NOLAND: No, it is less. The private
10 land is less for Alternate 2 than Alternate 1.

11 MR. BECK: Right. That's what I meant to say.

12 MR. GUY: That would be correct. I thought it
13 was originally stated the opposite. And I think the way
14 that makes sense is Alternative 1, the preferred route,
15 is moving on state land. So if you move to
16 Alternative 2, you are going to impact more private
17 landowners because you are impacting less state land. I
18 think that's what the chart shows.

19 MEMBER NOLAND: Well, I am still not reading it
20 right then. Something is not jiving here. If you could
21 clarify that and let me know later, I would appreciate
22 it.

23 MR. BECK: Yes. And that probably is a good
24 question to ask Renee Darling.

25 CHMN. CHENAL: We are going to ask Renee Darling

1 that question.

2 MR. BECK: Who is on the panel.

3 CHMN. CHENAL: She is nervous in the back.

4 MR. BECK: She is already doing the research.

5 That seems backwards.

6 MEMBER NOLAND: Thank you, Mr. Chairman.

7 CHMN. CHENAL: Yes, it does seem backwards.

8 Okay. Any -- Member Woodall, did you have a
9 question?

10 MEMBER WOODALL: I did.

11 Mr. Beck, when did you apply to the Land
12 Department for right-of-way? What date?

13 MR. BECK: We are looking that up right now.

14 MEMBER WOODALL: Thank you.

15 And then, Mr. Jacobs, what I am going to ask is
16 depending on what the time frame is, I am going to ask
17 what was the Land Department's process in evaluating the
18 application. Because I believe Mr. Beck very
19 courteously said we have to work on the timing of that.
20 And so I would just like to get an explanation of that
21 once we figure out when it was filed.

22 Mr. Beck.

23 MR. BECK: We are still looking that up.

24 MR. GUY: Mr. Chairman, while they are looking
25 that up, I want to add something just -- it is all in

1 the record, so I am not testifying here, but on the
2 notice issue. So the application, just going back to
3 Member Noland's comment or question that the application
4 itself in the conclusion in the requested relief, the
5 applicants do request a thousand-foot corridor. But the
6 corridor is not mentioned in any subsequent notice. But
7 to Mr. Hains' point, it is in the application.

8 In this case, we have actually -- and we have
9 actually proposed a condition that was approved in the
10 Southline case that may do away with any need for trying
11 to expand the corridor anyway. And it is a condition
12 that says that if the applicant receives consent from
13 all affected landowners, the applicants may deviate from
14 the corridor so long as all affected landowners agree.
15 So that's effectively an enlargement of the corridor
16 upon agreement.

17 CHMN. CHENAL: Okay. Member Noland, were you
18 going to respond?

19 MEMBER NOLAND: I don't like that. I am not
20 real comfortable with that, but I can understand it. I
21 think there has to be at least a ceiling on that. I
22 would hate to have to take back my words about how good
23 TEP and UNS have been on their corridor widths. And I
24 would really hate to take back that compliment.

25 MR. BECK: Well, as I indicated earlier, Member

1 Noland, our position at this time is that we don't
2 intend to change the corridor width at all, or the
3 request. And so while it is an interesting discussion
4 to have, I don't think it is pertinent to this case,
5 because we will stick with the thousand foot that we
6 have identified.

7 MEMBER NOLAND: Thank you. What condition
8 number is that?

9 MR. GUY: It is probably a different number,
10 depending which one we are looking at. The one I was
11 reading was Exhibit UNS-20. So this particular UNS-20
12 is the one that would be applicable to UNSE, which we
13 just heard, you know, we don't want to necessarily agree
14 to that, but just so you can see the language.

15 MEMBER NOLAND: Kind of like me, you know, you
16 saw it, but you are just not sure where.

17 MR. GUY: Yeah. It is Condition 14.

18 MEMBER NOLAND: Thank you.

19 MR. BECK: Mr. Chairman, Member Woodall, to your
20 question, we mailed the application to State Land
21 April 3rd of this year.

22 MEMBER WOODALL: Okay. And was it a complete
23 application?

24 MR. BECK: Yes.

25 MEMBER WOODALL: Okay. So was this typically

1 the time frame which you would make an application, or
2 would you normally apply beforehand knowing when you
3 were going to actually file your CEC application?

4 MR. BECK: That was not the first discussion we
5 had with State Land. We had met with State Land and had
6 some discussion about the project, and then I believe
7 ultimately they said you should file the application,
8 which we did. And then they said that they would not
9 deal with it until they saw the CEC application.

10 MEMBER WOODALL: Was there an explanation of
11 why?

12 MR. BECK: I was not in that meeting so I am not
13 sure if there was an explanation.

14 MEMBER WOODALL: Okay. Mr. Jacobs, is there
15 some regulatory reason for why you would delay making a
16 decision until after the application was filed?

17 MR. GUY: No.

18 MR. JACOBS: No, there isn't. And my
19 understanding -- I don't know this exactly and I could
20 try to include this in a further filing to explain it.
21 My understanding is this is not what the department
22 wants to do. This is unusual, which is indicated by the
23 fact that the department is not before this Committee.
24 Usually this is something that's addressed earlier.

25 I don't know really why the specifics of this

1 turned out the way it was. I don't believe that has
2 ever been the Land Department's intention, and I am sure
3 it is not their intention to do that in the future.

4 MEMBER WOODALL: I am going to use the technical
5 term. So this was a glitch basically?

6 MR. JACOBS: I would agree, yes, it was a one
7 off, that it has not happened.

8 MEMBER WOODALL: Thank you. I was wondering
9 whether there was a new policy or procedure, because
10 obviously it created, you know, some difficulties. But
11 thank you for explaining that. I really appreciate it.

12 And thank you, Mr. Beck.

13 MR. BECK: Mr. Chairman, relative to Member
14 Noland's earlier question, we do have a typo issue on
15 our placemat as far as the land goes. The correct
16 number for private land ownership for Alternative 2 is
17 78.5 acres. And we think the reason that didn't get
18 updated is when we adjusted our maps from the original
19 application to the revised maps that we filed.

20 CHMN. CHENAL: Okay. That makes more sense.

21 MR. BECK: Yep.

22 CHMN. CHENAL: All right. If there are no
23 further questions, let's proceed with Mr. Beck's
24 testimony, maybe the flyover and then the Magruder
25 questions and answers.

1 BY MR. GUY:

2 Q. It is all yours, Mr. Beck.

3 A. (BY MR. BECK) Okay. Again, this is a Google
4 flyover, created in Google Professional platform, on
5 which we then put models representing our structures and
6 place them into the Google flyover so that you get the
7 3-D effect.

8 So if we could go right to the beginning,
9 Patrick.

10 So this is the north end, and the Nogales Tap
11 substation or switchyard that we have talked about is
12 what is shown in the picture right there. There is an
13 existing Western Area Power line that comes through
14 here. Originally this was the origination point for a
15 115 line going down to Nogales. In our previous case,
16 where we converted the line from 115 to 138, we severed
17 that connection and took this line here all the way up
18 to the TEP Vail substation in southeast Tucson.

19 Proceed a little bit, Patrick.

20 So here we are trying to depict what the
21 thousand-foot corridor would look like as defined based
22 on the centerline of the existing line. The pink is
23 depicting the Wilmot Road right-of-way, and then he is
24 turning on our alternative alignments.

25 This is the line that would be west of Wilmot

1 Road. We have got our existing line, which is, I think
2 we will be, an orange line as we start moving. And then
3 our Alternative 2 is the blue.

4 So we progress. And maybe stop right there,
5 Patrick.

6 Again, this is the west of Wilmot alignment.
7 Just point out that we are so far off of the Wilmot Road
8 alignment because of a TRICO line that runs down that
9 right-of-way. And then over on this side you will see
10 both the existing as well as our Alternative 2, which is
11 on the farther side, and then the yellow is depicting a
12 thousand-foot corridor.

13 Continue.

14 In this case we are showing all three
15 alternatives at one time, I think discernable on the
16 right what State Land doesn't want, on the left
17 existing, as well as Alternative 2. You can see the
18 road is actually -- this is during the construction of
19 the Wilmot rebuild. Again, you will see it is all flat
20 land up on the north end of the project, very small
21 washes that we cross, flat terrain, very easy
22 construction.

23 And so what we will be proposing now is our
24 preferred route would be this east of existing
25 alignment. As you can see up on the very northern end

1 of this project, there is no encroachment, no houses,
2 nothing to worry about really here, other than as, you
3 know, we are close to the road right-of-way. But being
4 on the other side of the existing line, that won't be an
5 issue. This is giving you a bit cleaner view of versus
6 what we will have tomorrow when we pass some dust when
7 he get on the dirt part of the road here.

8 MEMBER HAMWAY: So I am confused. Are there
9 lines on the west side currently? Are those imposed by
10 you? Those are your Alternative 1 that you have
11 superimposed on that?

12 MR. BECK: So this is imposed. This is what we
13 have shown as the proposed preferred alignment.

14 MEMBER HAMWAY: So there is none currently on
15 the west side?

16 MR. BECK: There is on the west side. And we
17 didn't model them, and you have to look for the shadows
18 of the structures. So there is a lower voltage line
19 that sits down along the roadway.

20 MEMBER HAENICHEN: TRICO, did you say?

21 MR. BECK: Not in this area.

22 CHMN. CHENAL: Yes, Member Noland.

23 MEMBER NOLAND: Can we stop that for a minute,
24 please? Thank you.

25 Mr. Jacobs, normally the State Land Department

1 doesn't have a huge problem with utility locations as
2 long as they follow like existing road right-of-way or
3 section lines. Can you refresh my memory again the
4 specific reason they are objecting to Alternative 1?

5 MR. JACOBS: Well, it is just basically -- I
6 mean I think it is two parts of it. One, I mean there
7 is still going to be four and a half miles -- I think in
8 terms of miles instead of acres -- of right-of-way on
9 state trust land for this, mostly on the northern part,
10 as opposed to 6.5 miles. So there is an additional two
11 miles on state trust land. And additionally, there is a
12 determination that, just given the locations and the
13 overall impact on state trust land, that Alternative
14 Route 2 would be less detrimental to the state trust
15 land than Alternative Route 1.

16 MEMBER NOLAND: Well, Mr. Jacobs, I think that's
17 probably the first time I have heard that. And usually
18 state trust land, if it is going to be developed at some
19 point or other, of course you want access to good
20 reliable electric power and other utilities. I am just
21 a little -- looking at the land, and knowing the
22 location of this next to the right-of-way, I am not
23 going to, you know, fall on my sword over this, but I
24 think it is a little hard for me to understand the
25 position of State Land on this. Now, you don't have to

1 reply to that. It is just my own feeling. Thank you.

2 MR. BECK: I will just comment that, not that I
3 necessarily agree with the State Land's position, but
4 State Land's position is this is a wide open area with
5 no development today. Their expectation is they could
6 sell that for a higher value than anything they would
7 own over here. And this, already being encumbered with
8 a line, they can support that. So that's the position
9 they are taking.

10 And I will take back what I said, that the TRICO
11 line is not in this portion yet. It is coming up here.
12 So this is the proposed UNSE Alternative 1. This is the
13 existing line that goes on the orange line. And this
14 would be Alternative 2 on the blue line.

15 CHMN. CHENAL: If we have 27 plus miles of this,
16 can we speed the plane up a little?

17 MR. BECK: We are giving you a taste of the tour
18 tomorrow.

19 CHMN. CHENAL: I think we will go faster on a
20 bus than we are right now.

21 MR. BECK: We intended to start skipping stuff
22 further on, so...

23 CHMN. CHENAL: Okay.

24 MR. BECK: So now we are on Andrada Way. And
25 this is where the TRICO line comes in. So you can see

1 there is an offset. So we would be moving further to
2 the west away from Wilmot Road to accommodate the TRICO
3 line, which is in here.

4 And as we start flying over this part, you will
5 see the shadows of those existing structures. And this
6 is also where we are crossing from the east side of, for
7 alignment 1, from the east side of the existing line
8 back over to the west side, closer to Wilmot.

9 CHMN. CHENAL: Excuse me, Mr. Beck.

10 Member Jones.

11 MEMBER JONES: Thank you.

12 Mr. Beck, my question is: Since rather than try
13 and figure out the distance of the existing TRICO and
14 where the alignment is of proposed Alternate 1, how many
15 feet between the two?

16 MR. BECK: Between the TRICO and our proposed?

17 MEMBER JONES: And your proposed route.

18 MR. BECK: Do you know what it is?

19 MS. DARLING: 50.

20 MR. BECK: 50 feet.

21 MEMBER JONES: 50 feet, okay. And so that
22 50 feet, is that detrimental to the state trust?
23 Because it is still part of that, correct?

24 MR. BECK: Well, again, I mean yes, there is a
25 TRICO line there. Ours will be a little bit bigger, but

1 50 feet further into State Land.

2 MEMBER JONES: But wouldn't the objection about
3 having power lines devalue the land? What would be the
4 difference between your power lines and TRICO power
5 lines in 50 feet?

6 MR. BECK: That I do not have an answer for.

7 MEMBER JONES: Okay, thank you.

8 CHMN. CHENAL: Member Haenichen.

9 MEMBER HAENICHEN: To your knowledge, Mr. Beck,
10 is the TRICO line a distribution line? Is it lower
11 voltage?

12 MR. BECK: Yes, I believe it is a distribution
13 style voltage. So it is a smaller, lower line.

14 MEMBER HAENICHEN: Yeah. Well, this is just
15 hypothetical. But couldn't that just become an
16 underbuild to your line on that same track if they were
17 to agree to that?

18 MR. BECK: There is potential for that. The
19 problem that that brings is that if we have transmission
20 structures that have distribution attached to them,
21 under FCC rules, we are now obligated to provide
22 positions for any cable or telephone type operation,
23 which really conflicts with transmission usage. So we
24 try to keep all distribution off our transmission lines.
25 It can be done, yes, we have done it in the past, but it

1 does bring its own set of --

2 MEMBER HAENICHEN: New restrictions, yeah.

3 MR. BECK: Yes.

4 MEMBER HAENICHEN: You are sure, then, that is a
5 distribution line, like a 69kV or something like that?

6 MR. BECK: I believe it is a 69kV or less.

7 MEMBER HAENICHEN: Thank you.

8 MR. BECK: You will see here that the pink is
9 where the Wilmot Road right-of-way narrows down. So
10 this is kind of the extent where they rebuilt this road
11 and this is where it goes back to the original dirt
12 two-track road. And that gives us the ability to put
13 our proposed land to the west of our existing. You will
14 also see we are starting to get some encroachment here,
15 so by moving to the west we are moving away from these
16 structures and houses.

17 This is Sahuarita Road.

18 CHMN. CHENAL: Excuse me.

19 Member Haenichen.

20 MEMBER HAENICHEN: Mr. Beck, I am a little
21 confused on this representation. I notice that the
22 poles alternate between the two different lines, every
23 other one is to the left and the next one to the right.
24 Am I looking at it wrong?

25 MR. BECK: I think to the -- this existing line

1 is what is out in the field, so they put the poles where
2 they are today and they are probably closer than what we
3 typically span to today.

4 So to your point, the pole on this side, I think
5 these are generally lining up. But I think the issue
6 you are having is that we are looking at the existing
7 line, which is not spanned as long as what we will be
8 spanning with the new lines.

9 MEMBER HAENICHEN: Except that the distance
10 between consecutive poles going forward looks about the
11 same to me. So that would belie the fact that they are
12 a different span, unless I am looking at it wrong on the
13 east side.

14 MR. BECK: So you have got one pole here. And
15 the other pole is somewhere off the picture. You have
16 got a pole here on the Alternative 2 and a pole down
17 here.

18 MEMBER HAENICHEN: Okay.

19 MR. BECK: And it may be just partially the
20 viewing angle.

21 MEMBER HAENICHEN: Maybe they were improperly
22 placed in the simulation, I don't know.

23 MR. BECK: That's possible, too.

24 CHMN. CHENAL: Member Hamway.

25 MEMBER HAMWAY: So when you would have your

1 public meetings, did you talk about your preferred
2 alternative? And so now that we are potentially going
3 to issue a CEC for Alternative 2, when you have all
4 along been saying your favorite is Alternative 1, those
5 homes that we just passed, they didn't get involved
6 possibly because they thought it was going to be on the
7 other side of the road, but now it is going to be next
8 to them. How will they know that the alternative has
9 changed?

10 MR. BECK: Actually we had some of the
11 homeowners show up at our public meeting.

12 MEMBER HAMWAY: Okay.

13 MR. BECK: At least a couple of them, their
14 position was moving across the road was beneficial to
15 them. They liked that idea. They supported it.

16 MEMBER HAMWAY: To the west side of Wilmot?

17 MR. BECK: To the west side of Wilmot.

18 One of them in particular said I built my house
19 here knowing there was an existing line, so I have to
20 live with an alignment on my property. So he understood
21 that if we built on Alternative 2 or 3, that that was a
22 fact of life he had to live with. But he did support
23 moving it to the other side of Wilmot, because it did
24 move it away from his house.

25 MEMBER HAMWAY: So that's one or two people. So

1 do you reissue, do you send out a notice that says the
2 CEC has been issued and accepted, or whatever the right
3 terminology is, and now we are using Alternative 2? How
4 do these people know, I guess is my question.

5 MR. BECK: Well, from our notice perspective, we
6 notified the public that we had three alternative
7 routes, one was preferred.

8 MEMBER HAMWAY: Right. So it is up to them to
9 get engaged to understand which one actually gets
10 selected?

11 MR. BECK: Correct, and give their input and
12 participate.

13 MEMBER HAMWAY: Okay.

14 CHMN. CHENAL: Member Jones.

15 MEMBER JONES: Thank you, Mr. Chairman.

16 Mr. Beck, are they all aware of the request for
17 the thousand-foot corridor?

18 MR. BECK: They were notified of the
19 application. Whether they received the application and
20 looked at the thousand-foot corridor, it would be hard
21 to know.

22 MEMBER JONES: But that wasn't discussed at any
23 of the meetings?

24 MR. BECK: I don't recall that we had it in any
25 of our meeting materials, no.

1 MEMBER JONES: Okay.

2 CHMN. CHENAL: Let's put the throttle in on that
3 airplane. It stalled.

4 MR. BECK: Just skim through where the houses
5 are just to get a feel for the development that is along
6 the line. See, for the most part, it is east of the
7 existing alignment on the majority of this part of the
8 project. And State Land's position, west of Wilmot,
9 there is nothing out there today.

10 So this is where we are turning the corner and
11 will be going onto the Santa Rita Experimental Range.
12 So we are down to two alternatives here. There is the
13 existing alignment, and Alternative 1 and 2 are one and
14 the same. It stays on the west side of the existing
15 alignment. And you can see in this stretch no
16 development exists.

17 I think from here we can just probably skip over
18 to where we do the crossover, getting into just a little
19 bit of undulating terrain the further south we go.
20 Washes get a little bit bigger as we cross them. You
21 can see there is a little bit more development down
22 south there.

23 MEMBER JONES: Are there any distribution lines
24 down there, or is this all simulated?

25 MR. BECK: You will see one 46kV line. So right

1 here is Mt. Hopkins Road coming across here. We have a
2 46 that is paralleling our existing line going into the
3 Kantor substation. And that's why we are doing a
4 crossover right here from the west side of the existing
5 to the east side. And then we will continue on into
6 Kantor on the east side of that line. So it is right at
7 this point here on the map.

8 Again, the further south we get, it does get
9 much more hilly and more rugged terrain, more deep
10 washes; typically going peak to peak in these areas.
11 You can see the 46kV line in this picture; we did put
12 that one into the model. And this is Kantor substation,
13 the end point of the rebuild.

14 That's it. Any questions regarding the flyover?

15 CHMN. CHENAL: Well done. I thought it was well
16 done. The plane flew a little slow, but it was well
17 done.

18 MR. BECK: We will get up to --

19 CHMN. CHENAL: Member Woodall.

20 MEMBER WOODALL: I was hopeful that the
21 environmental witness will be able to describe the land
22 use, the zoning, or the potential land uses in this
23 particular area. So I just give a heads-up for that.

24 MR. BECK: Yep. Thank you.

25 MR. GUY: Okay. With that, we need probably a

1 minute to switch laptops, and then we will go into
2 Mr. Magruder's questions.

3 What we have done just for presentation is --
4 Marshall Magruder filed some comments in the proceeding,
5 which I believe the Chairman made a Chairman's exhibit.
6 And within those comments, he listed several questions
7 that he would ask if he were here to ask questions.

8 And so at the Chairman's direction, we have gone
9 through those questions and thought about them, and
10 Mr. Beck will testify providing answers to each of the
11 questions. And we, of course, are available to answer
12 follow-up questions if these lead to additional
13 questions.

14 MR. BECK: So the first question that
15 Mr. Magruder raised is: When is a second 230kV line to
16 be constructed?

17 We will not be building a second 230kV line
18 until we would move to phase two for the DC or Nogales
19 interconnection project, which would be driven by the
20 expansion of the DC converter from the original 150
21 megawatts to go to 300 megawatts. So it is sometime in
22 the future, undetermined at this point.

23 His next question was: Does electricity
24 generated in Mexico for this line meet all the
25 reliability standards established by the National

1 Electricity Reliability Commission -- which is actually
2 Council -- including information security?

3 Electricity generated in Mexico is no different
4 than energy generated in the U.S. The controls for
5 generation of Mexico are evolving towards NERC
6 standards. And, as I mentioned earlier, Mexico is
7 coordinating efforts with NERC to look at possibly even
8 joining NERC, but, at a minimum, using the NERC
9 standards.

10 His third question was: Are UNSE ratepayers
11 expected to pay for all of the first 230kV line, or will
12 UNSE use its own funds or will Nogales Transmission?

13 The 230kV line is funded 100 percent by Nogales
14 Transmission. That is the merchant part of this
15 project. It has no relationship whatsoever to utility
16 customers. And to the extent MEH, one of UNSE
17 affiliates, is involved in that investment, it is at the
18 unregulated level within the organization.

19 His next question: What is the justification
20 for an initial 150 megawatts of power requirements for
21 this line, when the maximum peak power needs for Santa
22 Cruz service area is much less?

23 Well, the project is driven by a request of
24 Nogales Transmission, which is a merchant project
25 developer. It is not driven by UNSE. The capacity of

1 the merchant project is driven by the transmission
2 service customers' interest in acquiring capacity rights
3 to the facilities. As Mr. Virant testified yesterday,
4 Nogales Frontier Operations is conducting an open
5 solicitation process. And expressions of interest have
6 been submitted that far exceed the planned capacity of
7 the project.

8 His next question: Since there is no need for a
9 second 230 for UNSE ratepayers, is the total cost of the
10 second phase 230 line to be borne by UNSE corporate or
11 by Nogales Transmission and not by UNSE ratepayers?

12 Well, again, consistent with the previous
13 response, a second 230 line is only constructed if we go
14 to a phase two. And that, again, would be driven by and
15 paid for by the merchant project doing that.

16 Have all the requisite Mexican authorities
17 approved an interconnection in Mexico, including the
18 right-of-way to interconnect with this segment?

19 As was testified to yesterday by Ms. Canales,
20 extensive planning and coordination efforts have taken
21 place with several Mexican entities involved with the
22 project, including the Red Nacional de Transmisión, or
23 RNT, which is the state owned transmission grid operated
24 by Centro Nacional de Control de Energia, or, as we say,
25 CENACE. The project has been approved by the Mexican

1 Secretary of Energy through their PRODESEN process. The
2 PRODESEN is a development program containing plans for
3 transmission and distribution line projects in Mexico.
4 Both the 2016 and 2017 versions of that, of their plan,
5 have included the facilities necessary to interconnect
6 the Nogales interconnection project with the Nogales
7 Aeropuerto substation in Mexico. The facilities have
8 also received the approval of the secretary of energy,
9 or SENER, in Mexico, which is the equivalent to our FERC
10 entity.

11 His next question: If not presently approved by
12 the appropriate authorities with the resultant CEC --
13 with the resultant CEC require such approval before
14 construction?

15 I go back to the previous response. It is, I
16 think it has been already answered.

17 Who and how will any potential conflicts be
18 resolved between Mexican and U.S. authorities?

19 The applicants, as I said, have been meeting
20 with CENACE, who is the transmission operator in Mexico.
21 And at a meeting last month, one of our next steps was
22 identified as creating the protocols and the operating
23 procedures to deal with operational issues between
24 Nogales Transmission, Frontier Operations, UNSE, and
25 CENACE. And we will be meeting on this issue in the

1 near future to work on those documents.

2 CHMN. CHENAL: Member Woodall.

3 MEMBER WOODALL: Are you aware of any U.S.
4 authorities that would have any control over this, the
5 operation of these facilities? I mean, what is he
6 talking about here, if you know, if you can guess?

7 MR. BECK: That's a very good question. I mean
8 Mexico has similar entities to what we have in the U.S.
9 to control their operations. They are going through a
10 lot of growth issues, because the Mexican grid was
11 totally opened up to competition approximately just a
12 little over a year ago. So they are learning how to do
13 things in a new way. They split what was their single
14 country entity that did all electric transmission and
15 generation into two organizations, one of them being
16 CENACE, which to me is the equivalent of an ISO. So
17 they run a market as well as they run the transmission
18 grid in Mexico.

19 So those entities have a say in how things
20 happen within their grids, and we need to coordinate
21 with them. And we have been having those conversations.

22 MEMBER WOODALL: But there is no -- I mean the
23 only American, U.S. authorities might be like a
24 reliability council? Is that --

25 MR. BECK: Possibly reliability council, or DOE

1 to the extent they approve a Presidential Permit.

2 MEMBER WOODALL: Okay. That's what I thought.
3 Thank you.

4 MR. BECK: Next question: Has the Committee
5 considered and reviewed the proposed changes to the Case
6 111 substation, Gateway substation?

7 As we discussed yesterday, we believe the CEC
8 granted in Case 111 is no longer valid. In addition,
9 the Committee does not independently review siting of
10 substations separate from associated transmission lines.
11 But the applicants have provided considerable
12 information regarding the Gateway substation to the
13 Committee as part of our application. We have responded
14 to discovery requests from Staff and discussed the
15 technical aspects of the project with them, and I am not
16 aware of any issues with our proposed substation design.
17 Granted it is different than the previous case, but it
18 is a totally different project.

19 His next question: Will the CEC granted by the
20 Committee for Case 176 contain a clause that cancels the
21 CEC in Case 111 by making it null and void?

22 Since the CEC remains open, it has some negative
23 impacts on real estate near its right-of-way. Again,
24 our position -- and as put into the record by Mr. Hains
25 of Staff -- Case 111 has been rendered null and void due

1 to passing of time, as well as a request by TEP to ask
2 for abandoned costs in a recent rate case.

3 MEMBER HAMWAY: Abandoning what, Mr. Beck?

4 MR. BECK: We had costs to develop the Gateway
5 project, and we asked to get recovery of abandoned
6 costs.

7 MEMBER HAMWAY: Oh, okay.

8 MR. BECK: Next question: Has the Committee
9 reviewed an approved analysis that demonstrates this
10 substation will prevent cascading outages from crossing
11 the border in either direction?

12 Well, the ACC Staff and Committee was provided
13 the system impact study for review. It is contained in
14 Exhibit J-4 to the application. In addition, DOE, as
15 part of its Presidential Permit process, is charged with
16 evaluating the impact of the project on the reliability
17 of the U.S. Nogales Transmission has provided that, the
18 system impact study, to DOE for validation of the
19 reliability aspects of the project. The DC converter
20 equipment will also stabilize the networks and prevent
21 cascading outages and other disturbances caused by rapid
22 changes in power supply.

23 Next question: Will there be a real-time data
24 and information-sharing network, such as SCADA,
25 providing information to both U.S. and Mexican control

1 centers?

2 Yes, there will be SCADA providing information
3 to entities on both sides. That will be how we operate
4 the system.

5 Next question: When is it expected or planned
6 to upgrade the 230 and 138 lines from single to
7 double-circuit, and will both be upgraded at the same
8 time?

9 If and when the project moves to phase two, both
10 lines would be upgraded. Should the project not move to
11 phase two prior to extensive load growth in Santa Cruz
12 County, the need for a second 138kV line could be
13 triggered prior to the need for a second 230 line as a
14 part of their reliability and service to our existing
15 loads in Santa Cruz County.

16 Next question: What are UNSE's plans and
17 intentions to include at the Gateway substation
18 additional distribution transformers to relieve the
19 overloaded one at Valencia substation's distribution
20 transformer problems and improve reliability?

21 Well, let's start with the Valencia substation
22 is not currently overloaded. UNSE's longer term plans
23 do include the development of a distribution substation
24 at Gateway to accommodate future load growth and also to
25 improve reliability.

1 Next question: When is some of the Valencia
2 distribution transformers and associated feeder lines
3 going to be looped with Gateway transformers to improve
4 reliability for the most critical circuits in the City
5 of Nogales?

6 Basically the same response as the previous
7 question. And a timeline for such development has not
8 been developed by UNSE at this time.

9 Next question: If a second phase 138kV circuit
10 is constructed, there is no need for this line for Santa
11 Cruz UNSE ratepayers, so will all these costs be borne
12 by the utilities?

13 As has been stated in the record in this case,
14 UNSE must respond to an interconnection request per FERC
15 rules. The interconnection study identified the need
16 for upgrade proposed in this application. The need for
17 a second 138kV circuit did not show up until phase two
18 is built. It was studied as part of our study process.
19 We have identified the need for that future circuit if
20 and when a phase two is built. And if a 138kV line is
21 built, the cost of the infrastructure would be borne by
22 UNSE customers without any dilution of the cost of the
23 wholesale users of the DC tie.

24 The point there is we would build the 138kV
25 lines, and since it's a phase two project, all of that

1 cost would go directly to UNSE customers, some of which
2 would include the first 150 megawatts of use by the
3 users of the tie. So their rates would also reflect
4 that increased costs.

5 His next question: Are there any changes
6 required to Kantor prior to installing a second phase
7 line, and if so, will there be any cost for UNSE
8 ratepayers?

9 The conceptual plan for a second 138kV line does
10 not include an interconnection and/or costs at the
11 intermediate substations of Kantor, Cañez, or Sonoita.
12 The concept would be a line directly from Tucson down to
13 Gateway. However, as previously stated, a second 138
14 line is not being proposed as part of this CEC
15 application. It would be a future application.

16 His next question: What changes, if any, will
17 be required to Kantor when a second phase 138 line is
18 constructed?

19 None are contemplated at this time.

20 Who will fund any such changes for this
21 substation?

22 Not applicable.

23 Are there any changes required to the existing
24 138kV line in Pima County prior to installing the second
25 phase 138kV line?

1 Again, same response as before.

2 His next question: Will any changes to this
3 segment prior to a second phase line have any cost to be
4 borne by UNSE ratepayers?

5 So, not quite sure what he meant, but if his
6 question was referring to the cost of the upgrade to the
7 Nogales Tap to Kantor line segment as identified in this
8 application, the Nogales Tap to Kantor upgrade, or as
9 the Nogales Tap to Kantor upgrade project, then yes, the
10 cost of the transmission plant will go into the UNSE
11 transmission plant accounts. However, as I testified
12 yesterday, because the load on the facilities will be
13 nearly three times the current load, the larger
14 denominator used in the rate calculation will cause
15 transmission rates to go down.

16 His next question: As there is no need for a
17 second phase 138kV circuit line for Santa Cruz UNSE
18 ratepayers, will all these costs be borne by the
19 applicants, and if not, what justification might cause
20 these costs to be borne by UNSE ratepayers?

21 First of all, the applicants are not proposing a
22 second 138 line in this application. If the project
23 does move to phase two, a second 138 circuit to Nogales
24 likely will be required. The second circuit would be a
25 network upgrade on the UNSE system, and as such, the

1 costs would go into the transmission plant in service.
2 The move to phase two will require a CEC for the second
3 circuit, and at such time UNSE would be better able to
4 quantify any impact to UNSE rates.

5 Next question: Are any connections to the UNSE
6 Nogales Tap substation in this project?

7 No, we do not have any plans for interconnection
8 to the WAPA Nogales Tap as part of this project.

9 His next question: What is justification --
10 what justification exists for not connecting with the
11 WAPA system at the UNSE owned Nogales Tap substation
12 that will improve reliability with a second source for
13 Santa Cruz County?

14 And the cost implications resulting from a
15 connection to the WAPA Nogales Tap do not justify such a
16 connection. The implications and issues associated with
17 the WAPA connection are well documented in previous
18 reliability dockets at the Commission regarding UNSE, as
19 well as in Siting Case 144, for the upgrade from 115 to
20 138kV and connection to TEP with the removal of the
21 Nogales Tap connection.

22 There is an inference in his document that there
23 was a switch paid for by UNSE customers costing millions
24 of dollars. It was more in the hundreds of thousands of
25 dollars range, not millions, but just a point of

1 information.

2 Next question: What changes to the South
3 substation are required before the installation of a
4 second phase 138kV line?

5 Our present line connects to the Vail
6 substation, not South, and no connection to South is
7 contemplated as part of this project.

8 Next question: If there are any changes to the
9 South station, and if so, which entity will change?

10 Well, it is not applicable because none with
11 this project.

12 Next question: If a second phase 138kV line is
13 connected, as there is no need for UNSE ratepayers, will
14 any of these costs be borne by UNSE ratepayers?

15 I think that is a repeat. Yeah, I think I
16 double printed that one. That's the same question as
17 before. A second circuit is not being proposed as part
18 of this application.

19 Next question -- so he raises the issue that in
20 Case 111 we had a project development agreement that
21 covered all of the cost sharing responsibilities. And
22 he asked: Does such an agreement or equivalent exist
23 for this project so that others than the principals,
24 UNSE and Nogales Transmission, understand
25 responsibilities and tasks?

1 Yes, there is a joint development agreement. It
2 is between Nogales Transmission, Hunt, and MEH, so not
3 directly with UNSE or TEP.

4 Does the Committee and Commission agree and
5 approve the work share agreements planned for this
6 project in such an agreement?

7 Our position is items of the agreement are not
8 subject to Committee or Commission approval.

9 MEMBER HAMWAY: Is the development agreement
10 public?

11 MR. BECK: No.

12 Next question: If not, will the final CEC
13 approve the work share between applicants?

14 The applicants are not requesting any approval
15 or review of their project agreements. We are
16 specifically asking for approval of facilities.

17 And I believe his last question: Since TEP
18 provides the engineering and construction capabilities
19 for UNSE and owns the South substation, why isn't TEP a
20 party in this case?

21 Well, first of all, TEP's South substation is
22 not a part of this application. But employees of TEP do
23 provide support service to UNSE through corporate shared
24 services agreements between the companies. TEP's
25 participation is not required to share these services or

1 these employees.

2 And I think that responds to all the questions
3 Mr. Magruder had raised in his document.

4 MR. GUY: With an errata, if you will, that -- I
5 was following along in the comments as Mr. Beck was
6 testifying. And looks like we skipped over four
7 questions. So I am going to hand the comments to
8 Mr. Beck so he can finish these four.

9 MR. BECK: That's probably where I double
10 counted the one and left four out.

11 Okay. So he asked the question, or actually
12 makes a statement: A single-circuit line is to be
13 constructed between these two substations. That's
14 Gateway and Valencia. A 115kV transmission line and
15 associated right-of-way were approved in the Case 111
16 CEC.

17 So the question was: Why isn't the approved
18 corridor being used for this line, as upgrading from 115
19 to 138 is almost a trivial change?

20 Again, I think that was addressed yesterday. We
21 started with the Case 111 alignment as a starting point
22 for what we took forward to the public in this project.
23 And there is no approved corridor that we could just
24 utilize, but we did use that alignment.

25 Next question: Since the second 138kV is not

1 needed for UNSE ratepayers, is the total cost of the
2 second line borne by UNSE corporate or Nogales
3 Transmission?

4 I think that one I did have. Yeah.

5 CHMN. CHENAL: And the answer is yes.

6 MR. BECK: So two more questions. So this is
7 Valencia substation to Kantor substation, 138kV
8 transmission segment within Santa Cruz:

9 There are four substations, with Valencia being
10 the main in Nogales, Sonoita in southern Rio Rico, Cañez
11 in northern Rio Rico, and Kantor in Amado substations
12 respectively. They are presently interconnected with a
13 single radial 138kV line. Until a second line is
14 installed on the opposite side of existing monopoles,
15 there would be, should be no changes needed in this
16 segment. Thus, in the first project phase, there should
17 be no costs for UNSE ratepayers. Are there any changes
18 required prior to installing a second phase line between
19 these four substations?

20 So the four he mentioned, so between Kantor all
21 the way down to Valencia, there are no changes required
22 to install a second circuit. That line, as built, is
23 capable of holding two circuits. We just need to string
24 the second circuit in in the future.

25 And then his next question: Will any changes to

1 this segment, prior to a second line, have any cost for
2 UNSE ratepayers?

3 Well, there are no changes so there would be no
4 costs.

5 So with that, I think we have answered all the
6 questions.

7 MR. GUY: I think that's right as well.

8 We have not yet offered into evidence Exhibit
9 UNS-8, which is the Google flyover of, you know, Nogales
10 Tap to Kantor upgrade. And Exhibit UNS-22 is just -- it
11 is just Mr. Magruder's questions, but it is the
12 PowerPoint presentation we just went through. So we
13 would offer those two exhibits, 8 and 22.

14 CHMN. CHENAL: Any objection?

15 (No response.)

16 CHMN. CHENAL: Okay. UNS-8 and UNS-22 are
17 admitted.

18 (Exhibits UNS-8 and UNS-22 were admitted into
19 evidence.)

20 MR. GUY: The applicants have no more questions
21 for this panel.

22 CHMN. CHENAL: Okay. Is there any follow-up?
23 Are there any follow-up questions by Mr. Jacobs?

24 MR. GUY: No. Thank you, sir.

25 CHMN. CHENAL: Or by Mr. Hains and his team, and

1 the ACC team Staff?

2 MR. HAINS: No. Thank you, Chairman.

3 CHMN. CHENAL: Okay. Any further questions from
4 the Committee?

5 MEMBER HAMWAY: Just one.

6 CHMN. CHENAL: Member Hamway.

7 MEMBER HAMWAY: So phase two would require a
8 CEC, a separate CEC?

9 MR. BECK: Correct. Our position, when we
10 rebuilt the existing line, it was very clear in that CEC
11 that a second circuit could not be strung until we came
12 back and applied for a new CEC for that. So it would
13 make no sense to apply for a CEC covering the second
14 circuit for only a portion of a line. So yes, we would
15 require a new CEC.

16 CHMN. CHENAL: Any further questions?

17 (No response.)

18 CHMN. CHENAL: Okay. I guess this panel is
19 excused. Thank you for your testimony. It is very
20 helpful.

21 Let's take a five-minute break.

22 (A recess ensued from 4:32 p.m. to 4:43 p.m.)

23 CHMN. CHENAL: All right. Let's resume the
24 hearing with this new panel. And Ms. Morrissey, I
25 understand you are going to be asking the questions of

1 this panel.

2 MS. MORRISSEY: That's correct, Mr. Chairman.

3 CHMN. CHENAL: If you are ready to proceed, I am
4 prepared to swear in the panel. So would the panel
5 prefer oaths or affirmations?

6 MS. DARLING: Either.

7 CHMN. CHENAL: Let's do an oath. And raise your
8 right hand, please.

9 (David Cerasale, Michelle Bissonnette, and Renee
10 Darling were duly sworn.)

11 CHMN. CHENAL: All right. Thank you very much.
12 Ms. Morrissey.

13 MS. MORRISSEY: Mr. Chairman, thank you. We
14 will begin with David Cerasale.

15 CHMN. CHENAL: We can't hear you.

16 MS. MORRISSEY: We will begin with Dr. David
17 Cerasale.

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1 DAVID CERASALE, MICHELLE BISSONNETTE, and RENEE DARLING,
2 called as witnesses on behalf of the Applicants, having
3 been previously duly sworn by the Chairman to speak the
4 truth and nothing but the truth, were examined and
5 testified as follows:

6

7

DIRECT EXAMINATION

8 BY MS. MORRISSEY:

9 Q. Please state your name for the record.

10 A. (BY DR. CERASALE) David Cerasale.

11 Q. And by whom are you employed and in what
12 capacity?

13 A. (BY DR. CERASALE) I am the director of natural
14 resources at WestLand Resources, Inc., a consulting firm
15 based out of Tucson.

16 Q. And what does that position entail as far as job
17 responsibilities?

18 A. (BY DR. CERASALE) I am in charge of training,
19 oversight, and review of biological documents, as well
20 as surveys, in support of projects such as this.

21 Q. Can you share with the Committee your
22 educational background?

23 A. (BY DR. CERASALE) Sure. I have a B.S. in
24 biology, a master of science in wildlife biology, and a
25 doctorate in ecology and evolutionary biology.

1 Q. And did you prepare a summary of the anticipated
2 testimony that you would offer today?

3 A. (BY DR. CERASALE) I did not.

4 Q. Do you have an exhibit before you labeled --

5 A. (BY DR. CERASALE) Oh. You are talking about
6 that little one paragraph thing, aren't you?

7 Q. That's correct.

8 A. (BY DR. CERASALE) Yes, I did.

9 Q. Can you please identify that exhibit?

10 A. (BY DR. CERASALE) There is Exhibit UNS-15,
11 which is my witness summary.

12 MS. MORRISSEY: And with that, we would just
13 like to make Dr. Cerasale available, and move on to the
14 next witness, unless you guys of questions for him now.

15 CHMN. CHENAL: No, please proceed.

16 MS. MORRISSEY: All right. Next we would like
17 to begin with Ms. Renee Darling.

18 BY MS. MORRISSEY:

19 Q. Please state your name for the record.

20 A. (BY MS. DARLING) Renee Darling.

21 Q. And Ms. Darling, by whom are you employed and in
22 what capacity?

23 A. (BY MS. DARLING) I am a senior environmental
24 and land use planner with UNS Electric.

25 Q. And what responsibilities does that position

1 entail?

2 A. (BY MS. DARLING) Oh, I do alternative route
3 analysis, I oversee resource studies, permitting for
4 transmission and transmission line facilities.

5 Q. And could you please tell the Committee a little
6 bit about your educational background.

7 A. (BY MS. DARLING) I have a bachelor of science
8 degree in botany, and extensive after education in
9 project management and transmission siting and public
10 involvement.

11 Q. And what was your role in the Nogales Tap to
12 Kantor upgrade project and Nogales interconnection
13 project?

14 A. (BY MS. DARLING) I supervised the preparation
15 of environmental studies for the Nogales Tap to Kantor
16 upgrade project, and I also prepared as well as
17 supervised the preparation of the joint application.

18 Q. Ms. Darling, would you look at the documents
19 labeled Exhibit UNS-1, UNS-12 and UNS-12.1.

20 A. (BY MS. DARLING) UNS-11?

21 Q. Yes, yes, UNS-11, 12 and 12.1.

22 A. (BY MS. DARLING) Got them.

23 Q. Can you confirm that UNS-11 is your direct
24 testimony that has been filed in this proceeding?

25 A. (BY MS. DARLING) It is.

1 Q. And is UNS-12 a copy of your hearing
2 presentation?

3 A. (BY MS. DARLING) Yes.

4 Q. Were both these documents prepared by you or
5 under your supervision?

6 A. (BY MS. DARLING) Yes.

7 Q. Have you reviewed those two documents since they
8 were filed?

9 A. (BY MS. DARLING) Yes.

10 Q. And have you identified any changes or
11 corrections that you would like to make to these
12 documents?

13 A. (BY MS. DARLING) Yes.

14 Q. Have you prepared a list of these changes?

15 A. (BY MS. DARLING) Yes.

16 Q. And is there an exhibit that details that?

17 A. (BY MS. DARLING) Yes, UNS-12.1.

18 Q. And are the changes shown on UNS-12.1 already
19 reflected in Exhibit UNS-11 and UNS-12?

20 A. (BY MS. DARLING) Yes.

21 Q. Do you have any other changes this morning, or
22 this afternoon?

23 A. (BY MS. DARLING) Yes, I do have a few.

24 Q. Could you please identify those changes and make
25 those changes on a copy before you?

1 A. (BY MS. DARLING) I did make the changes. So on
2 page 7 of my direct testimony, under the last question,
3 line 26, it should be undeveloped, not undisturbed.

4 On page 10, line 7, I would like to strike as
5 well as state listed species of concern -- am I going
6 too fast -- and on page 11, line 21, strike business.

7 And one more, sorry. In my presentation, on
8 Slide 10, the second bullet under semidesert grassland
9 community should be invaded by, not invasive.

10 Q. Okay.

11 A. (BY MS. DARLING) And that's it.

12 Q. And with those corrections, if I were to ask you
13 the same questions that are UNS-11, would your answers
14 be the same?

15 A. (BY MS. DARLING) Yes.

16 MS. MORRISSEY: Mr. Chairman, we would like to
17 offer Exhibits UNS-11, UNS-12, and UNS-12.1.

18 CHMN. CHENAL: And UNS-15?

19 MS. MORRISSEY: And UNS-15, yes.

20 CHMN. CHENAL: Okay. Any objection?

21 (No response.)

22 CHMN. CHENAL: All right. UNS-11, UNS-12,
23 UNS-12.1, and UNS-15 are admitted.

24 (Exhibits UNS-11, UNS-12, UNS-12.1, and UNS-15
25 were admitted into evidence.)

1 MS. MORRISSEY: Thank you.

2 BY MS. MORRISSEY:

3 Q. Ms. Darling, we have loaded your PowerPoint
4 presentation, Exhibit UNS-14 -- or, sorry.

5 CHMN. CHENAL: Yes, Member Noland.

6 MEMBER NOLAND: You need to pull that microphone
7 closer and tip it up, because when you look down I can't
8 hear what you are saying away from the microphone.
9 Thank you.

10 MS. MORRISSEY: Thank you.

11 BY MS. MORRISSEY:

12 Q. We loaded your presentation on our projector for
13 our use. Could you please tell the Committee --
14 actually, if we could skip to the next -- yes. Could
15 you please outline the presentation that you will
16 provide today.

17 A. (BY MS. DARLING) Yes. I will give an overview
18 of the applicant's design philosophy in siting the
19 facilities for the CEC. I will also give an overview of
20 the statutory CEC environmental factors considered by
21 the Committee, an overview of the applicant's
22 environmental conclusions, an overview of the
23 environmental studies in the joint application, as well
24 as more detailed testimony on the studies that were
25 completed for the Nogales Tap to Kantor upgrade project.

1 Q. All right. And if we could also move on to the
2 next slide.

3 Ms. Darling, could you please tell the Committee
4 what the goal was of the applicant's design philosophy
5 when designing the Nogales Tap to Kantor upgrade and the
6 Nogales interconnection project.

7 A. (BY MS. DARLING) Yes. Our goal was to minimize
8 land use and resource impacts, and this was accomplished
9 mainly by siting the alternatives within or next to
10 existing infrastructure and corridors. And also we
11 worked with landowners and stakeholders to avoid and
12 minimize impacts to sensitive areas.

13 Q. And what information did the applicants
14 integrate into their design planning to accomplish this
15 goal?

16 A. (BY MS. DARLING) So we looked at the federal
17 and state land use planning documents, specifically
18 spoke with the Forest Service and Arizona Department of
19 Transportation. And we provided and we were provided
20 input from public, federal, state, and local agencies as
21 well as our industry experience and UNSE and TEP
22 specific experience. And we also, for the Nogales
23 interconnection project, started with the route that had
24 been approved in Case No. 111.

25 Q. And what was the result of this design

1 philosophy?

2 A. (BY MS. DARLING) For the Nogales
3 interconnection project our preferred route parallels
4 80 percent of -- 80 percent of the time parallels
5 existing infrastructure and corridors, and for route 1,
6 46 percent of the time; route 2, 76 percent of the time;
7 route 4, 64 percent of the time. And the Nogales Tap to
8 Kantor project parallels existing infrastructure
9 100 percent of the time for all alternatives.

10 Q. And to clarify the paralleling opportunities,
11 were those only in existing infrastructure, or were
12 there other linear features?

13 A. (BY MS. DARLING) Yes, sorry, other linear
14 features as well, dirt roads, existing utility
15 corridors, paved roads.

16 Q. And if we can move to the next slide, please,
17 you indicated that you would be providing the Committee
18 with an overview of the statutory factors that they
19 consider.

20 A. (BY MS. DARLING) So the factors that are -- I
21 am sure you are familiar with -- are that you consider
22 in your decision biological, which includes the total
23 environment of the area, the fish, wildlife, and plant
24 life that occur in the project area, special
25 consideration to the protection of unique areas due to

1 biological wealth.

2 And then the nonbiological factors are existing
3 state, local government, and private development plans,
4 noise, recreation, and existing scenic areas, historic
5 sites and structures or archeological sites.

6 Q. And what about the technical or nonenvironmental
7 factors that are on the slide?

8 A. (BY MS. DARLING) So these were discussed in
9 Mr. Virant and Mr. Beck's testimony. They are
10 interference with communication signals, technical
11 practicabilities, previous experience with available
12 equipment methods, estimated costs, and other factors
13 under applicable federal or state law.

14 Q. For which project will you be testifying on the
15 environmental factors?

16 A. (BY MS. DARLING) The Nogales Tap to Kantor
17 upgrade project.

18 Q. And who will be testifying on the Nogales
19 interconnection project environmental factors?

20 A. (BY MS. DARLING) Michelle Bissonnette.

21 Q. Could you please provide the Committee an
22 overview of the environmental conclusions that you have
23 come to.

24 A. (BY MS. DARLING) So we came to the conclusion
25 that all of the alternative routes from the Nogales Tap

1 to Kantor upgrade projects are compatible with the
2 environment and ecology of the State of Arizona, and
3 that there are only minimal differences between the
4 alternative routes' impacts to biological resources.

5 There are no significant impacts to common
6 wildlife or further habitat fragmentation expected.
7 There are no fish species in the project area. There
8 are no long-term impacts to vegetation expected due to
9 avoidance and additional mitigation measures that we
10 have developed. And we have also developed special
11 mitigation measures to reduce impacts to special status
12 species, which I will discuss more in detail later.

13 Q. And could you please provide the conclusions
14 that you have also come to on the next slide as well.

15 A. (BY MS. DARLING) Yes. So the project
16 alternatives are also consistent with city, county,
17 state, federal, and private land use plans. They will
18 not result in substantial disruption to scenic views.
19 They will not affect public use of and access to
20 recreation sites. They will not directly or indirectly
21 affect any known historic properties. And construction
22 noise will not be a major impact on soundscape, and
23 long-term noise impacts from operation and maintenance
24 will be minimal.

25 Q. Ms. Darling, what is the basis for these

1 conclusions?

2 A. (BY MS. DARLING) They are based on a number of
3 studies that we did. We did a biological evaluation,
4 which was a desktop study that covered all of the
5 alternatives within two miles, a two-mile buffer around
6 all of the alternatives. And that looked at special
7 status species. We also did a Pima pineapple cactus
8 presence/absence survey within our existing
9 right-of-way, which is Alternative 3.

10 We did a Class I cultural resource assessment,
11 which is a desktop analysis that identified previous
12 cultural resource studies, archeological sites known
13 within one-half mile of the project area, and identified
14 potential historical resources. And then we did a
15 Class III cultural resources survey of our existing
16 right-of-way, which is Alternative 3.

17 We also did a preliminary jurisdictional
18 delineation of waters of the U.S. that delineated the
19 ordinary high water mark at all points where our
20 existing right-of-way crosses waters, potential waters
21 of the U.S.

22 Q. And you mentioned that the Pima pineapple cactus
23 survey and the Class III cultural resources survey were
24 in the existing ROW. Could you explain why you were
25 limited to the existing ROW?

1 A. (BY MS. DARLING) We were not able to obtain a
2 right of entry from State Land to look at the other two
3 alternatives. So whichever alternative is selected, we
4 will conduct those surveys in areas that we were unable
5 to previously survey.

6 Q. Thank you.

7 Did UNSE consult with any agencies or
8 environmental interest groups during this process?

9 A. (BY MS. DARLING) We have spoken with Arizona
10 Game & Fish Department, and we have also met with the
11 Santa Rita Experimental Range.

12 Q. Does UNSE anticipate consulting with other
13 groups prior to the construction of the project?

14 A. (BY MS. DARLING) Yes.

15 I have lost my place. I am sorry.

16 CHMN. CHENAL: Excuse me. Member Woodall has a
17 question, too.

18 MEMBER WOODALL: Yes. Ms. Darling, are you
19 familiar with the letter that Arizona Game & Fish has
20 filed and that has been marked as a Chairman's exhibit?

21 MS. DARLING: Yes, ma'am. We received that
22 letter after we met with them and agreed to the
23 conditions in the letter.

24 MEMBER WOODALL: So you have no objections to
25 anything that they recommend?

1 MS. DARLING: No, we do not.

2 MEMBER WOODALL: Okay. And I am assuming that
3 the applicants -- I understand you are one of the
4 witnesses, but I am assuming that Mr. Guy, who is
5 nodding his head vigorously, also agrees with that?

6 MR. GUY: Yes, that is correct.

7 MEMBER WOODALL: So to the extent that there
8 needs to be something memorializing that, I don't know
9 if you already have a condition in the CEC. And like I
10 said, I don't want to put ornaments on the Christmas
11 tree here, but it would be helpful for us to know that.

12 MR. GUY: I believe that the letter may actually
13 be attached to MS. Darling's testimony, and there may be
14 testimony from Ms. Darling confirming that. But we are
15 going to work on the form of CEC this evening and we
16 will make sure we propose additions that we need.

17 MEMBER WOODALL: Thank you. I have no other
18 questions, Ms. Darling, at this time. Thank you.

19 MS. DARLING: Thank you.

20 MS. MORRISSEY: Yes.

21 BY MS. MORRISSEY:

22 Q. So just to ask the question again, does UNSE
23 anticipate consulting with other groups prior to the
24 construction of project?

25 A. (BY MS. DARLING) Yes, we do. We will be

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1 consulting further with Arizona Game & Fish Department
2 and the Santa Rita Experimental Range, as well as with
3 the Arizona State Land Department, Pima County, and
4 potentially the Fish and Wildlife Service.

5 Q. Now, did UNSE conduct any other analyses besides
6 these studies that are listed on this slide?

7 A. (BY MS. DARLING) We did do in-house desktop
8 studies for the land use section, for the biological
9 wealth section, so for general wildlife and things like
10 that, scenic views, noise, et cetera.

11 Q. And if we could just move to the next slide,
12 please, let's start with the current environmental
13 conditions. Could you please describe for the Committee
14 what your analysis of environmental conditions and
15 biological resources covered.

16 A. (BY MS. DARLING) So the project area is largely
17 undeveloped. That's one of the -- is that where we are
18 at?

19 Q. Yes.

20 A. (BY MS. DARLING) Okay. There are scattered
21 residential areas, as we saw in the Google flyover,
22 along the east side of Wilmot Road after you pass
23 Andrada Way, as well as down near Canoa Ranch area there
24 is a small pocket of residential area just north of
25 Mt. Hopkins Road.

1 And other than that, the disturbances are mainly
2 from linear facilities such as roads and the utility
3 lines that exist in the area.

4 Q. And in your analysis of the existing
5 environmental conditions, did you note whether there is
6 any aquatic habitat or fish life?

7 A. (BY MS. DARLING) There is no aquatic habitat
8 for fish.

9 MEMBER WOODALL: I wonder if I might ask you,
10 Ms. Darling, I know you are describing the land and I am
11 assuming at some point you will get to land use and
12 zoning.

13 MS. DARLING: Yes, ma'am.

14 MEMBER WOODALL: Darn, I wanted to interrupt
15 you. So please proceed, ladies. Thank you.

16 BY MS. MORRISSEY:

17 Q. Could you please describe for the Committee
18 members the general wildlife in the environment of the
19 project.

20 A. (BY MS. DARLING) So this slide lists a lot of
21 the general wildlife that are common to the area. So
22 there is large mammals, like coyotes and javelinas;
23 small mammals, like rabbits, antelope ground squirrels,
24 kangaroo rats; lots of birds common to the Sonoran
25 Desert, roadrunners, doves, hawks, other -- probably

1 raptors as well; and reptiles, lizards, snakes,
2 et cetera.

3 Q. And what are the potential impacts that you have
4 identified to these wildlife species?

5 A. (BY MS. DARLING) So there is probably going to
6 be temporary displacement of some of these animals
7 during construction, you know, just the nature of noise
8 as well as disturbance to the ground.

9 But the project isn't expected to fragment
10 habitat any more than the roads and utility lines
11 already do. And the monopoles being what they are, they
12 have a pretty minimal footprint, so there is not going
13 to be a huge amount of ground disturbance.

14 And we have mitigation measures in place for the
15 areas that are temporarily disturbed. So those are
16 mitigation measures that we brought up with Arizona Game
17 & Fish when we met with them, so by offsetting those
18 impacts with revegetation, invasive noxious weed
19 measures, plant salvage, avian surveys, limited
20 activities during bird breeding season, establishing a
21 15 mile per hour speed limit during construction,
22 providing a full-time environmental monitor during
23 construction, and then we also agreed to report any
24 sightings of species of greatest conservation need, and
25 that's a state designation, back to Arizona Game & Fish

1 so that they are aware of any that might be in the
2 project area.

3 CHMN. CHENAL: Excuse me. Member Hamway.

4 MEMBER HAMWAY: So do you take into
5 consideration bird migration paths? Is that part of
6 your analysis?

7 MS. DARLING: So we actually discussed that with
8 Arizona Game & Fish Department. And they were not aware
9 of that area being, you know, an established -- I mean
10 of course there is birds migrating through there, but
11 not it being a path per se. So they weren't too
12 concerned about it.

13 MEMBER HAMWAY: Okay.

14 MEMBER DRAGO: Ms. Darling, I have a got a
15 question about the environmental monitor. Can you
16 describe what that is.

17 MS. DARLING: Yes. We actually use it on all of
18 our transmission line projects. And we have done the
19 last one. It is Pinal Central Tortolita project.

20 So this is an environmental monitor. First we
21 develop a training program. So we identify all of the
22 mitigation measures that we have agreed to for the
23 project. And then we provide that information to all
24 construction personnel that are going to be on-site. So
25 it could be the speed limit, for example. It would be,

1 if you see this bird species, please let the
2 environmental monitor know. So the environmental
3 monitor is on-site and she ensures that everybody that
4 comes on-site has the training that's required, whatever
5 we have developed.

6 She is also there -- for example, they do a
7 design and they know that this is where they are going
8 to put the poles and these are the access points to that
9 pole. The contractor gets out there and maybe they
10 can't quite make that turn to get from, you know, an
11 identified access road to the pole location that we are
12 going to build the pole, so they have to make a little
13 bit wider turn. She is there to inspect the area, make
14 sure there is no impact, and give the approval or not to
15 make that slight change on the ground. So she is there
16 throughout the life of the project, construction
17 project.

18 MEMBER DRAGO: Thank you.

19 MS. DARLING: Uh-huh.

20 BY MS. MORRISSEY:

21 Q. And continuing with our next slide, can you
22 please describe for the Committee members the plant life
23 in the vicinity of the project?

24 A. (BY MS. DARLING) Sure. So the project is
25 located both in the Sonoran Desert scrub and semidesert

1 grassland biotic communities. And they are actually
2 roughly divided by the county line, which is not -- it
3 is just -- you know what it is.

4 And within that Sonoran Desert scrub community
5 we have saguaro, palo verde, creosote, cholla, mesquite.
6 In the upland areas, the palo verde are more
7 predominant. There is also false mesquite, buckwheat,
8 and ocotillo in those upland areas.

9 And then in the dryer areas you will find that
10 the vegetation is more openly spaced and less shrubby.
11 And there we have more ground cover showing up, which is
12 a lot of coldenia and snakeweed.

13 And in the semidesert grassland community we
14 have all these same species because, you know, the
15 grassland has become kind of invaded by these species
16 over time. But there are still the native grasses
17 present such as gramma grasses, burro grass. And we do
18 have an invasive grass in the project area, Lehmann's
19 lovegrass, which we are going to work on with Arizona
20 Game & Fish.

21 Q. Could you please describe for the Committee
22 members the potential impacts on plant life from this
23 area.

24 MEMBER HAMWAY: Just I had one quick question.
25 Is buffelgrass identified?

1 MS. DARLING: We haven't done our native plant
2 inventories yet, but during the initial field studies
3 there was not buffelgrass identified.

4 MEMBER HAMWAY: Okay.

5 MS. DARLING: But we hate buffelgrass, so...

6 MEMBER HAMWAY: I know.

7 BY MS. MORRISSEY:

8 Q. And with that, could you let the Committee
9 members know any anticipated impacts.

10 A. (BY MS. DARLING) Yes. So we are going to
11 conduct plant inventories at all of the proposed pole
12 locations and access road improvements and staging areas
13 so we can avoid any high value biological plant species
14 and wildlife species.

15 First we will avoid, and then, where we can't,
16 we will transplant, replace, reseed, whatever, you know,
17 measures we have developed with landowners. So we are
18 only, again, we are only going to permanently clear the
19 small areas around the monopoles, and we are going to
20 follow all those mitigation measures we discussed what
21 we developed with Arizona Game & Fish Department.

22 Q. Did UNSE investigate whether any special status
23 species occur in the vicinity of the project?

24 A. (BY MS. DARLING) Yes. The biological
25 evaluation that was conducted by WestLand Resources

1 identified the lesser long-nosed bat and Pima pineapple
2 cactus as potentially occurring in the project area.
3 There are no known suitable day roosts in or adjacent to
4 the project area for the lesser long-nosed bat. And
5 there is also a very low number of saguaros and agave,
6 which are the food source for that species in the
7 project area.

8 There is one known occurrence of that species
9 within two miles that has been documented by Arizona
10 Game & Fish Department. And based on the potential for
11 Pima pineapple cactus to be in the project area, we did
12 do the presence/absence survey for our existing
13 right-of-way, and we identified 13 viable Pima pineapple
14 cactus with five pups, and four dead ones.

15 Q. And what mitigation measures does UNSE intend to
16 apply?

17 A. (BY MS. DARLING) So prior, once we have
18 identified our project area, once we have an approved
19 corridor, we will survey for mature saguaro and agave.
20 Those will be first -- you know, every attempt will be
21 made to avoid those first. If we can't avoid them, we
22 will transplant them to other areas of the, you know,
23 adjacent project area, with the landowner's permission.

24 And then, if necessary, because depending on
25 numbers, I mean we will talk to Fish and Wildlife

1 Service, determine if we have to develop any additional
2 measures beyond this based on the number of saguaros and
3 agaves. It is not anticipated we will need any formal
4 consultation, though. And we will also do a
5 presence/absence survey for Pima pineapple cactus in
6 whichever, for the additional areas that we haven't
7 surveyed previously.

8 Q. And moving on to the next slide, land ownership
9 and land use.

10 A. (BY MS. DARLING) Yes. This table, so this
11 table is correct. This table depicts the land ownership
12 within each of the three alternative routes. So for
13 State Land it varies from about 70 to 85 percent, and
14 private land 15 to 30 percent.

15 Q. Could you please discuss land uses in the
16 vicinity of the project.

17 A. (BY MS. DARLING) Sure. So I am going to try
18 and use this without blinding anybody. How do you do
19 it? I don't see it.

20 So at the northern end of the project area, I
21 will start on the west side and go down Wilmot Road, and
22 then I will go back to the east side.

23 So on the west side of Wilmot Road at the very
24 north end where the project starts, this is private
25 land, and there is a planned master-planned community

1 here called Verano. And that's on the west side of the
2 road. And then going down it is State Land, and then
3 this little piece of private land is owned by City of
4 Tucson. It is a water facility. And then we have state
5 land again. And then we have some private land, a
6 little bit of private land here owned by Rosemont Mine.

7 And then on the east side we have all state land
8 undeveloped. And then we have a pocket of residential
9 that is right along the BLM boundary there, and it goes
10 all the way down on the Wilmot Road. And that
11 residential is kind of like ranchettes, large lots with
12 single-family homes, or some trailer homes, but on large
13 lots.

14 And then going across the Santa Rita
15 Experimental Range here, it is managed by University of
16 Arizona. So it is both grazing and a research facility.
17 So they have scientific study plots in there and
18 historic photo points.

19 And then here we have a little more pocket of
20 rural residential again here, and state land down to
21 Kantor. So mainly it is rural residential, grazing, and
22 scientific research.

23 CHMN. CHENAL: Member Woodall.

24 MEMBER WOODALL: So the State Land parcel at
25 issue here for this project, it is agricultural use?

1 MS. DARLING: I believe there are grazing leases
2 on it, yes.

3 MEMBER WOODALL: And as far as you know, no one
4 is doing any planning to develop that?

5 MS. DARLING: When we met with State Land, they
6 indicated that, you know, they had plans, better plans
7 for it, future development. But I don't know whether
8 those are short term, long term, if they know something
9 they are not able to say yet. I don't know. But they
10 indicated that there was a reason why they didn't want
11 us to the west side, was, you know, that there were
12 better land uses coming.

13 MEMBER WOODALL: With due respect to the Land
14 Department, it has been my observation that they never
15 want any infrastructure on their property because they
16 have a duty to maximize income to the trust. So if they
17 can get it anywhere else, that's going to be their
18 strong preference. I just wondered if there was like an
19 industrial park that was thinking about going in there.
20 But you have no further information?

21 MS. DARLING: Nothing that I know of, no.

22 MEMBER WOODALL: Thank you, ma'am.

23 BY MS. MORRISSEY:

24 Q. And Ms. Darling, I see on your slide that you
25 have got some public uses listed. Could you please

1 describe any of the other public uses besides grazing
2 and research that you had described earlier.

3 A. (BY MS. DARLING) Yes. So they are not in the
4 project area, but north up here, north are all of the
5 correctional facilities. I can find the list. Sorry.

6 Q. That's fine.

7 A. (BY MS. DARLING) The Arizona State prison
8 complex, the City of Tucson Public Safety Training
9 Academy, the Federal Correctional Institution, Pima
10 County Regional Training Center, and U.S. Penitentiary.
11 And they are all located north of the project area
12 between I-10 and about a half a mile north of the
13 project area.

14 Q. And could you please describe for the Committee
15 the land use plan analyses that you conducted in order
16 to get this information.

17 A. (BY MS. DARLING) So we looked at all of the
18 land use plans for Pima County and Santa Cruz County and
19 City of Tucson, as well as the Pima County Sonoran
20 Desert Conservation Plan, which provided zoning for the
21 project area. And then we also conducted site visits
22 and looked at the area with our eyes.

23 Q. And could you please describe just briefly the
24 land use plans of the state or of the local and county
25 entities.

1 A. (BY MS. DARLING) Do you mean their zoning?

2 Q. Yes. Sorry. I could have been more clear. Any
3 sorts of policies or zoning, the type of land use that
4 they had anticipated.

5 A. (BY MS. DARLING) Okay. So Pima County, it has
6 rural homestead and rural residential zones, both east
7 and west of Wilmot Road. Santa Cruz County has
8 designated other areas down by the Kantor substation as
9 state land, and then sort of nearby areas are designated
10 as ranch and low density residential. And City of
11 Tucson has the area zoned as low intensity rural, medium
12 intensity rural, and medium to high density -- high
13 intensity urban, sorry.

14 Q. And you already summarized the state land use
15 plans in the vicinity of the project. Are you aware of
16 any other future private departments?

17 A. (BY MS. DARLING) I mentioned the Verano, which
18 is on the far northwest side of the project area, and
19 there is another one called Wilmot Park, which is just
20 south of Andrada Way, kind of below this BLM land here.
21 And their entrance is actually off of Wilmot Road.

22 Q. And based off of these studies and this
23 information, what do you conclude regarding land use?

24 A. (BY MS. DARLING) I think there will be few
25 direct impacts to existing uses. No residences will be

1 displaced. We aren't going to divide any existing
2 residential or mixed use area with the transmission
3 line. And we are going to coordinate with Pima County,
4 you know, regarding any land uses for the Sonoran Desert
5 Conservation Plan.

6 CHMN. CHENAL: Member Hamway.

7 MEMBER HAMWAY: So the planned development of
8 Verano, how far along is it? And have they been a part
9 of these proceedings and have they lodged any kind of
10 comment?

11 MS. DARLING: They have gotten through the
12 rezoning of the Verano parcel, and we have spoken with
13 them. They are aware of the line. We actually have an
14 easement from them already where the line crosses from
15 the west side of Wilmot Road over to the east side of
16 Wilmot Road. They have not voiced any complaints. They
17 just are waiting to see whether or not we might need an
18 easement from them.

19 MEMBER HAMWAY: Okay. Thanks.

20 BY MS. MORRISSEY:

21 Q. Ms. Darling, did UNSE analyze any scenic areas
22 in the vicinity of the project?

23 A. (BY MS. DARLING) Yes. There are -- we did both
24 with Google Earth, sort of like the flyover that you
25 saw, we did that, and then we also went out into the

1 project area, and we know the area as well having lived
2 there in that area.

3 There are two, generally two types of views.
4 There is the open Sonoran Desert view with the long
5 range view of the Santa Rita Mountains. And then there
6 is the view to low density residential development.
7 Those are essentially the only two views in the area.

8 When you are in the Sonoran Desert driving along
9 Mt. Hopkins Road, you are heading towards the Santa Rita
10 Mountains, and that's where the Madera Canyon and
11 Elephant Head recreation areas are. So it is the best
12 view in the project area, I guess you could say.

13 Q. And what impacts does UNSE anticipate on those
14 scenic views that you just described?

15 A. (BY MS. DARLING) So we don't anticipate any
16 significant impacts since there is already the existing
17 line there and the replacement of the line is about 30
18 foot offset from any existing line. And the structure
19 design has the nonreflective finish and the
20 self-weathering steel material which tends to blend in
21 with the background of the mountains better than a shiny
22 structure. And then again, with revegetation and
23 reseeding of disturbed areas, we don't anticipate any
24 long-term impacts.

25 CHMN. CHENAL: Excuse me.

1 MEMBER HAMWAY: I just wanted to know what the
2 big rectangle in the middle of the thing is to signify.

3 MS. DARLING: Yes. That's our next slide.

4 MEMBER HAMWAY: Oh, good.

5 MS. DARLING: Another perfect PowerPoint setup.
6 So that is the Canoa Ranch Conservation Park. And
7 that's a park managed by Pima County, and it is a big
8 historic site in Pima County. So we are about -- at our
9 closest point we are about three-quarters of a mile away
10 from there.

11 BY MS. MORRISSEY:

12 Q. And are there any impacts that you anticipate on
13 that Canoa Ranch property?

14 A. (BY MS. DARLING) None at all.

15 Q. Ms. Darling, did UNSE analyze any impacts to
16 historic sites and structures or archeological sites?

17 A. (BY MS. DARLING) Yes. We did both the Class I
18 cultural resources assessment and a Class III cultural
19 resource survey of the existing right-of-way.

20 Q. And what did the Class I and Class III studies
21 reveal?

22 A. (BY MS. DARLING) So the conclusion of both are
23 that there are no known historic properties to be
24 affected by the project. There are six sites within the
25 project area, all of which have been determined

1 ineligible. And one new site was located during the
2 Class III Survey, which was also determined ineligible.

3 I have to clarify that that's a determination
4 made by the archeologist who conducts the survey, and
5 the report still needs to be submitted to the Arizona
6 State Land Department for their archeologist's
7 concurrence, and then submittal to SHPO for their
8 concurrence.

9 Q. And just to clarify, that was for eligibility
10 for the National Register of Historic Places and Arizona
11 Register of Historic Places?

12 A. (BY MS. DARLING) Yes. Thank you.

13 Q. And if any cultural resources are discovered,
14 what mitigation measures does UNSE intend to apply?

15 A. (BY MS. DARLING) Our first choice would be to
16 site all ground-disturbing activities outside site
17 boundaries. And that shouldn't be -- we should be able
18 to do that, I mean with the length of the spans and
19 things like that. If we were unable to do that, we
20 would have to consult with, you know, whoever the land
21 management agency is and SHPO, and conduct testing or
22 data recovery. But we do not anticipate ever having to
23 do that. I am also going to provide cultural resources
24 training as part of that environmental program that I
25 talked about previously.

1 Q. Could you please describe the existing
2 soundscape in the area of the project.

3 A. (BY MS. DARLING) So as we discussed, it is
4 pretty low density residential use and minimal roads.
5 Wilmot Road is really the only main thoroughfare in the
6 area. There is some east-west running roads that are
7 not heavily driven so that the ambient noise level is
8 estimated to be about 35 dBA. And we do not expect
9 that, following construction, that noise level would
10 change.

11 So the noise impacts would be from construction
12 which will be done only during daytime. And they will
13 be very rare in nature, because we only spend about one
14 or two days at any one location for any -- so there is
15 not a long length of time at any one location. And
16 there are no sensitive receptors in the areas such as
17 hospital, schools, churches.

18 Q. And, so, Ms. Darling, if you could just please
19 summarize some of the mitigation measures that UNSE
20 intends to apply to mitigate those environmental
21 effects.

22 A. (BY MS. DARLING) So I already talked about the
23 Arizona Game & Fish Department measures. In addition to
24 those, we will complete environmental surveys of any
25 areas that we did not previously survey. We are going

1 to avoid sensitive environmental resources to the extent
2 practical. We will work with the appropriate parties to
3 identify and implement measures where avoidance is not
4 possible. We will obtain any required permits we need,
5 such as Section 404 permit for waters of the U.S., storm
6 water permits, dust control permits, et cetera. Those
7 all hold their own requirements for environmental
8 protection.

9 We will provide environmental training to all
10 personnel that will be in the project area. We will
11 have the dedicated environmental monitor. We will
12 conduct post-construction restoration, such as the
13 reseeding. And we will prepare project plans prior to
14 construction, which are like an avian protection plan,
15 the noxious weed plan, storm water pollution prevention
16 plan, et cetera, et cetera. There are many of those.

17 Q. And in your expert opinion, based off of these
18 analyses conducted and the mitigation measures to be
19 applied, is it your opinion that this project is
20 compatible with the environment and ecology of the State
21 of Arizona?

22 A. (BY MS. DARLING) Yes.

23 MS. MORRISSEY: Thank you.

24 And does the Committee have any questions?

25 CHMN. CHENAL: I have a question or two for

1 Ms. Darling. The last answer you gave, there are many
2 different types of plans --

3 MS. DARLING: Yes.

4 CHMN. CHENAL: -- that you will comply with, I
5 mean, whose plans are those?

6 MS. DARLING: They are both internal as well as
7 plans imposed by others. So one example is we agreed
8 with Arizona Game & Fish Department that we would
9 develop a plan for invasive noxious weeds. And that
10 would include washing vehicles before entering the
11 project area. It would include inspecting vehicles
12 prior to leaving the project area and knocking off any
13 plants or mud from the vehicles so as not to transfer
14 weeds out of the project area to other areas, as well as
15 monitoring disturbed areas after they reseeded to make
16 sure that invasive species aren't taking hold in those
17 areas.

18 CHMN. CHENAL: So those are, for example, with
19 Game & Fish.

20 MS. DARLING: Right.

21 CHMN. CHENAL: And I will have a question about
22 that. We can even be finished by 5:30. This won't take
23 long.

24 MS. DARLING: Okay.

25 CHMN. CHENAL: These other plans you mentioned,

1 the external ones, besides Game & Fish. Who could you
2 just list off?

3 MS. DARLING: Yes. So storm water prevention
4 pollution plan is a federal law. It is regulated by the
5 State of Arizona. So we would have to develop that
6 because we are disturbing greater than one acre of land.

7 The avian protection plan I mentioned is
8 actually something we agreed to with Arizona Game &
9 Fish, but we have one in place already. There is the --
10 what else is there? The dust control plan would be a
11 county established plan. I am trying to think what else
12 there is. I have a list.

13 CHMN. CHENAL: Well, it is not a test. But
14 those are independent agencies that have those
15 requirements, agencies or counties or such.

16 MS. DARLING: Correct.

17 CHMN. CHENAL: And some of these, though, are
18 with Game & Fish. So I believe I heard in the testimony
19 that the applicant is working out a form of condition
20 which will incorporate the agreement reached between the
21 applicant and Game & Fish, if I understand that
22 correctly. Or did I mishear that?

23 MS. MORRISSEY: That's our understanding, that
24 we will be formalizing a document that references those
25 mitigation measures that was applied or that were

1 discussed with AGFD and included as an exhibit in
2 Ms. Darling's testimony.

3 CHMN. CHENAL: And I am looking at that now. It
4 is that Game & Fish letter. It has a lot of
5 requirements in there that you testified to, and I just
6 want to -- I think it would be appropriate to have some
7 condition that, you know, obligates the applicant to
8 comply with this instead of just a private agreement
9 that there is a condition that addresses it.

10 So that's the condition, Ms. Morrissey, that you
11 are working on right now?

12 MS. MORRISSEY: Yes. We are open to crafting a
13 condition that specifically discusses complying with
14 those AGFD measures.

15 CHMN. CHENAL: Well, I would like to see that.
16 And I just -- it isn't in your existing proposed CEC, to
17 my knowledge. I mean some aspects are, but not the
18 specific requirements that Game & Fish would like to
19 see. And I think some of these are important. And we
20 talked to some, and some of the members have asked
21 questions, like Member Hamway, about, you know, cleaning
22 the tires so it doesn't bring in, you know, things like
23 that.

24 So there are a lot of things in here that I
25 think are specific. So I just want to make sure the

1 applicant is preparing -- you said you were open to it,
2 but I am asking a little more than that if you are
3 actually going to prepare it.

4 MS. MORRISSEY: Yes. It is my understanding
5 that we will be outlining those issues, also with
6 respect to issues raised by Member Noland and
7 Ms. Woodall, trying to keep it from being an
8 overwhelming list necessarily inside of the CEC itself,
9 but trying to make sure that that is actually
10 specifically defined.

11 CHMN. CHENAL: Okay. So we will look forward to
12 that.

13 Member Woodall.

14 MEMBER WOODALL: I don't see any reason -- I
15 mean to me it would be logical for you to say the
16 applicant will comply with the conditions set forth in
17 Exhibit B to the CEC, which is a letter from Game &
18 Fish. And that way you don't have to try to reword it
19 and it is just like everything that's in their letter we
20 are going to do. And I think that would just be easier
21 than you having to characterize it myself. That's my
22 personal take on it.

23 CHMN. CHENAL: My personal take is 180 degrees
24 from that, because five years from now, when someone
25 looks at the CEC and there is a reference to some

1 letter, no one will ever be able to find it.

2 MEMBER WOODALL: No, it will be attached to the
3 CEC. That's my point.

4 CHMN. CHENAL: Yes.

5 MEMBER NOLAND: I absolutely agree with Member
6 Woodall. And it doesn't mean I don't agree with you.
7 But make it an attachment or an exhibit that stays
8 attached to the CEC, and then there would never be any
9 question.

10 I just don't want to end up in another year
11 going with a 50-page CEC. It is hard to pick out the
12 really pertinent points that you want to have in there
13 and have people be able to read easily when you load
14 everything else up. If you are really interested in
15 that particular point, then it is part of the document
16 but not in the wording of the CEC, other than by
17 reference.

18 CHMN. CHENAL: Well, that also then increases
19 the requirements of the applicant when you incorporate
20 by reference and agree to all the matters that are
21 outlined in a letter. That may be more complicated to
22 follow than just specific requirements in a condition.
23 But let's see what you come up with. We may have a
24 difference of opinion on this one.

25 MEMBER NOLAND: We may.

1 CHMN. CHENAL: Let's see what you come up with
2 and let's see what the applicant prefers. I mean, if
3 the applicant prefers to incorporate by reference and
4 agree to all the terms and conditions set forth in the
5 Game & Fish letter, okay. To me that's more than I
6 would ask for. But let's just see what you come up
7 with.

8 MS. MORRISSEY: We will do our best to make sure
9 we address all of your concerns.

10 MEMBER DRAGO: Not to muddy the waters, but I
11 did hear that there is an archeological report pending,
12 archeology report pending, is that correct?

13 MS. DARLING: We -- no, we have completed it for
14 Nogales Tap to Kantor.

15 MEMBER DRAGO: That's what I thought I heard.

16 MS. DARLING: For Nogales Tap to Kantor we have
17 completed a Class I and Class III survey; however, that
18 was of our existing right-of-way. So if Alternative 1
19 or Alternative 2 are approved, we have to go back out
20 and survey those areas that have not been previously
21 surveyed and amend that Class III survey report.

22 MEMBER DRAGO: Perfect. Thanks for the
23 clarification.

24 CHMN. CHENAL: Any further questions from
25 members?

1 (No response.)

2 CHMN. CHENAL: I see it is 5:33. This may be a
3 logical time, unless people want to keep going, this may
4 be a logical time to adjourn for the evening and then
5 resume tomorrow morning.

6 Are there any housekeeping items we should
7 address before we adjourn for the evening?

8 MR. GUY: I guess the only, at the risk of the
9 Chairman throwing something at me, is just before we
10 leave, I assume we will still be planning to do the site
11 tour for the physical tour, but since we did the Google
12 tour and you have now seen that, I just wanted to
13 confirm that. Just --

14 MEMBER WOODALL: I personally don't plan to
15 attend because I saw the hills and dales and I got a
16 little car sick today anyway. And I can't be out in the
17 sun for three hours. So I personally am not going to
18 attend. My apologies.

19 CHMN. CHENAL: Member Noland.

20 MEMBER NOLAND: Mr. Chairman, so you thought
21 that this would take about three hours, if I remember
22 correctly. So for those of us that are not going on the
23 tour, what time would you estimate that we would resume
24 hearings at the Desert Diamond facility?

25 CHMN. CHENAL: Good question. Mr. Guy, I would

1 say 1:00, right?

2 MR. GUY: I think that's our current schedule.

3 CHMN. CHENAL: I think the applicant estimated
4 three hours for the tour. And then we would come back,
5 have lunch, so 1:00 would probably be a fair.

6 Now, I mean, who would be interested in going on
7 the tour? I mean -- yeah, okay, we still have people
8 that are interested.

9 Timing. So in terms of the presentation of the
10 applicant, we will have four hours tomorrow, four and a
11 half hours, and then we are left with Friday. How much
12 time do you think the applicant will need?

13 I think, Mr. Hains, you said that you will
14 probably need, let's say, an hour.

15 MR. HAINS: Gave or take.

16 MR. GUY: I think we are very much on track. I
17 would expect just based on the prepared materials that
18 Ms. Bissonnette's testimony will last an hour, hour 15
19 minutes at most, ignoring questions somewhat. There
20 will be some questions in that time frame. And that
21 would be our last witness and our last presentation of
22 our direct case. So an hour, hour 15 minutes.

23 We could be finished by 2:30, you know, with the
24 caveat at one point we talked about taking Staff out of
25 order. And we are still perfectly happy to do that if

1 we need to accommodate Staff's questions, but if we can
2 take Staff at 2:00, then we can actually probably
3 finish.

4 CHMN. CHENAL: Mr. Hains.

5 MR. HAINS: I think Staff would be perfectly
6 fine starting at 2:00.

7 CHMN. CHENAL: And we have agreed at the
8 prehearing conference to take Staff out of order if
9 necessary as an accommodation. So it sounds like, with
10 any luck, we will comfortably finish the evidence
11 tomorrow.

12 Mr. Jacobs, are you intending to put on any
13 witnesses if there is a stipulation that's reached on
14 the record?

15 MR. JACOBS: No, I am not.

16 CHMN. CHENAL: So we should comfortably finish
17 by tomorrow afternoon, even maybe, with any luck, even
18 begin deliberations. Okay. I think we are in good
19 schedule.

20 So let's adjourn for the evening. And we will
21 meet at the -- will there -- there obviously will be a
22 hearing meeting, that we should meet in the casino or in
23 the next venue at 9:00.

24 MR. GUY: Yes. If everything goes according to
25 schedule, we will have a hearing facility set up much

1 like this one ready to go at 9:00 in the morning. But
2 then we will meet there, go back out to the parking lot
3 for the tour. For those that either have gone on the
4 tour or are just at the facility, I believe lunch will
5 be provided at noon. But of course you are also welcome
6 to have lunch on your own.

7 So we have the facility at 9:00, tour at 9:00,
8 lunch at 12:00, hearing starts at 1:00.

9 CHMN. CHENAL: And then we will skip the dinner
10 at 5:00 or whenever, as you did here, but we will skip
11 that, but then we have the hearing at 6:00. And that
12 may not take very long.

13 MR. GUY: That's the plan, yes.

14 CHMN. CHENAL: All right. Anything further?

15 (No response.)

16 CHMN. CHENAL: All right. Thank you. Thank you
17 for everyone. We made a lot of progress today.

18 (The hearing recessed at 5:37 p.m.)

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1 STATE OF ARIZONA)
2 COUNTY OF MARICOPA)

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