

1 BEFORE THE ARIZONA POWER PLANT AND
 2 TRANSMISSION LINE SITING COMMITTEE

3
 4 IN THE MATTER OF THE) DOCKET NO.
 APPLICATION OF SALT RIVER) L-00000B-21-0322-00195
 5 PROJECT AGRICULTURAL)
 IMPROVEMENT AND POWER) LS CASE NO. 195
 6 DISTRICT, IN CONFORMANCE WITH)
 THE REQUIREMENTS OF ARIZONA)
 7 REVISED STATUTES, SECTIONS)
 40-360, et. seq., FOR A)
 8 CERTIFICATE OF ENVIRONMENTAL)
 COMPATIBILITY AUTHORIZING THE)
 9 CONSTRUCTION OF AN OVERHEAD)
 DOUBLE-CIRCUIT 230 KV)
 10 TRANSMISSION LINE FROM THE)
 EXISTING HENSHAW SUBSTATION TO)
 11 INTEL'S OCOTILLO CAMPUS, A NEW)
 RS-28 SUBSTATION TO BE)
 12 CONSTRUCTED ON INTEL'S)
 OCOTILLO CAMPUS, AND AN)
 13 OVERHEAD TRANSITION CORRIDOR)
 AT THE EXISTING SCHRADER)
 14 SUBSTATION, ALL WITHIN THE)
 CITY OF CHANDLER, MARICOPA)
 15 COUNTY, ARIZONA.)
 _____)

16
 17 At: Chandler, Arizona
 Date: November 8, 2021
 Filed: November 16, 2021

18 REPORTER'S TRANSCRIPT OF PROCEEDINGS

19 VOLUME I
 20 (Pages 1 through 160)

21 COASH & COASH, INC.
 22 Court Reporting, Video & Videoconferencing
 1802 N. 7th Street, Phoenix, AZ 85006
 23 602-258-1440 Staff@coashandcoash.com

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

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1 BE IT REMEMBERED that the above-entitled and
2 numbered matter came on regularly to be heard before
3 the Arizona Power Plant and Transmission Line Siting
4 Committee at Hilton Phoenix Chandler, 2929 West Frye
5 Road, Chandler, Arizona, commencing at 1:09 p.m. on the
6 8th of November, 2021.

7

8

BEFORE: PAUL A. KATZ, Chairman

9

JACK HAENICHEN, Public Member
10 MARY HAMWAY, Cities and Towns
LEONARD DRAGO, Department of Environmental Quality
11 RICK GRINNELL, Counties
JIM PALMER, Agriculture
12 JOHN RIGGINS, Arizona Department of Water Resources
ZACHARY BRANUM, Arizona Corporation Commission
13 (Videoconference)
MARGARET "TOBY" LITTLE, Public Member
14 (Videoconference)

15

16

APPEARANCES:

17

For the Applicant:

18

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

21

and

22

SALT RIVER PROJECT
23 Ms. Karilee S. Ramaley
In-House Counsel
24 Post Office Box 52025
Phoenix, Arizona 85072

25

1 APPEARANCES:

2 For Intervenor City of Chandler:

3 Crockett Law Group
4 Mr. Jeff Crockett
5 2198 East Camelback Road, Suite 305
6 Phoenix, Arizona 85016

7 and

8 City of Chandler
9 Ms. Kelly Schwab
10 175 South Arizona Avenue, 2nd Floor
11 Chandler, Arizona 85225

12 For Intervenors The Reserve at Fulton Ranch Homeowners
13 Association, Pine Lake Estates Homeowners Association,
14 and Southshore Village Homeowners Association:

15 Osborn Maledon
16 Ms. Meghan H. Grabel
17 2929 North Central Avenue, 21st Floor
18 Phoenix, Arizona 85012

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1 CHMN. KATZ: Most of you know who I am. I'm
2 the new Chairman -- or, relatively new Chairman of the
3 Line Siting Committee. My name is Paul Katz. I do
4 have about 45 years of law practice, and about 21 of
5 them as a Superior Court judge here in Maricopa County.
6 And I'm starting to get to know the Committee Members,
7 as well as the lawyers who are regularly appearing in
8 front of us.

9 And I'd like to get us started, and I would
10 begin by starting at my far right, working toward me
11 and then to my left, for the Committee Members that are
12 present to identify themselves for our record, if you
13 would, please. Go ahead.

14 MEMBER HAENICHEN: My name is Jack Haenichen,
15 and I'm representing the public. I have a background
16 in electronics and semiconductors and things electrical
17 in general, so that's my role on this Committee.

18 MEMBER HAMWAY: Mary Hamway representing
19 cities and towns.

20 MEMBER DRAGO: Len Drago representing the
21 Arizona Department of Environmental Quality.

22 MEMBER GRINNELL: Rick Grinell representing
23 the counties.

24 MEMBER PALMER: Jim Palmer representing
25 agriculture.

1 MEMBER RIGGINS: John Riggins representing
2 Arizona Department of Water Resources.

3 CHMN. KATZ: And I'll have first Zachary,
4 who's appearing virtually, identify himself, and then
5 Member Little as well.

6 I think you're muted. I think you were
7 muted. Try it again.

8 MEMBER GRINNELL: Still muted.

9 CHMN. KATZ: Go ahead, Member.

10 I don't know if we're having -- I can't
11 hear -- we're just going to work on it.

12 Try it again, Member Branum. Go ahead,
13 Member Little.

14 I think we're having audio problems. Just
15 bear with me a minute.

16 MEMBER BRANUM: I can hear you, Toby.

17 MEMBER LITTLE: Yes.

18 CHMN. KATZ: Now I can hear both of you.

19 Go ahead and identify yourself for the third
20 or fourth time, Mr. Branum.

21 MEMBER BRANUM: Zachary Branum, representing
22 the Arizona Corporation Commission. Thank you.

23 CHMN. KATZ: And thank you.

24 And now Member Little.

25 MEMBER LITTLE: Toby Little representing the

1 public.

2 CHMN. KATZ: Thank you very much. I think
3 that that takes care of things.

4 I will ask our attorneys, if they would, to
5 identify themselves. We're not going to identify
6 witnesses quite yet, but the attorneys to identify
7 themselves and indicate on whose behalf you are
8 appearing.

9 MR. DERSTINE: Good afternoon. Matt Derstine
10 appearing on behalf of Salt River Power and Improvement
11 District. Appearing with me is Karilee Ramaley, senior
12 principal attorney for SRP.

13 CHMN. KATZ: And next.

14 MR. CROCKETT: Good afternoon, Chairman Katz,
15 Members of the Committee. My name is Jeff Crockett,
16 Crockett Law Group. I am representing the City of
17 Chandler in this proceeding. And seated to my right is
18 Kelly Schwab, who is the City Attorney.

19 CHMN. KATZ: And last, but not least.

20 MS. GRABEL: Thank you, Chairman Katz,
21 Committee Members. Meghan Grabel of the law firm
22 Osborn Maledon. I have been retained by three
23 homeowners associations in this case: The Reserve at
24 Fulton Ranch Homeowners Association, Pine Lake Estates
25 Homeowners Association, and Southshore Village

1 Homeowners Association.

2 CHMN. KATZ: And I know that we probably have
3 some members of the public that will be sitting through
4 this hearing and some that may be appearing later this
5 evening, this afternoon. We're going to have a public
6 comment session at 5:30 this evening in this room. I
7 would ask any members of the public who are listening
8 in on these proceedings, either in person or virtually,
9 to make sure that you don't engage in any conversations
10 with any of the Committee Members. The open meeting
11 law prohibits us from discussing anything with -- of
12 substance with the parties or with members of the
13 public. Everything we do has to be recorded by our
14 court reporter during the course of an ongoing meeting.

15 And obviously, our hearings are going to be
16 in this room. I'm hoping that we get done by this
17 Wednesday. If not, we'll have to take a break
18 Thursday, because it's Veterans Day, and come back on
19 Friday. But in light of certain agreements that have
20 been reached, I'm hopeful that we'll be able to get
21 done by no later than Wednesday afternoon or evening.

22 The other thing that we haven't decided on is
23 I don't know whether it makes sense or not to have an
24 in-person, on-the-shuttle-bus tour versus having a
25 virtual tour, because I don't think that it's going to

1 be overwhelmingly complicated for people to get an idea
2 of what's going on and I know that the Intel site is
3 under construction and we're not going to be touring
4 the Intel site, as interesting as that might be.

5 But do you have any thoughts, Mr. Derstine?

6 MR. DERSTINE: Well, I would say that we have
7 prepared a tour route. We're ready to -- and we have a
8 vehicle that's large enough to accommodate all the
9 Members of the Committee. So if the desire of the
10 Committee is to take a tour, we're ready to do that and
11 we can present and show the Committee the proposed
12 route tour and the stops along the tour.

13 As you indicated, Mr. Chairman, you're
14 correct that we won't have access necessarily to the
15 Intel campus, and there's a number of spots where we'll
16 have to -- at least on Old Price Road we'll have to
17 drive down and turn around and come back the way we
18 came, so there's some limitations and restrictions in
19 terms of what we can do on a tour. But if the
20 Committee would desire to have a tour, we're happy to
21 do that.

22 CHMN. KATZ: Well, what I would like to maybe
23 do is have a motion from a Member of the Committee to
24 either take an in-person tour or to just do a virtual
25 tour of the site. And it's my understanding that the

1 majority, if not all of the lines in question are going
2 to be underground.

3 MR. DERSTINE: There are significant portions
4 of the routes which will be underground. There is --
5 the one leg or segment from the Henshaw substation down
6 to the Intel campus is an aboveground line to the point
7 where it then turns onto the Intel campus, there it
8 goes underground.

9 My only suggestion on the point of the tour
10 would be that you may want to wait to consider whether
11 you want to take a tour until you've seen the virtual
12 flyover, which we hope to get to this afternoon, and at
13 that point in time you may have more information, the
14 Committee may be in a better position to decide on a
15 tour.

16 CHMN. KATZ: I'm going to take your advice.
17 I don't think we need a motion now. Let's go and get
18 started with the evidentiary presentation. And if
19 Members of the Committee, a majority of the Committee,
20 feel it's appropriate to take a tour, we will do that.

21 I do have a couple of things we need to take
22 care of. I believe that the City of Chandler has filed
23 a motion -- or, request to intervene in these
24 proceedings. And if that's the case, I'd like
25 Mr. Crockett or Ms. Schwab to confirm that.

1 MR. CROCKETT: Chairman Katz, yes, that's
2 correct. The City of Chandler has filed a notice of
3 intent to be a party in this proceeding. The City of
4 Chandler is an affected jurisdiction within the meaning
5 of A.R.S. 40-360.05(A)(2), and as such is entitled, as
6 a matter of right, to intervene in this case.

7 CHMN. KATZ: Do you expect that you will be
8 either cross-examining witnesses that are called by SRP
9 or presenting any witness testimony of your own?

10 MR. CROCKETT: Chairman Katz, we will be
11 presenting one witness who has some brief testimony. I
12 do not anticipate really any cross-examination of any
13 of the SRP witnesses at this point.

14 CHMN. KATZ: I would then ask a Member of the
15 Committee, if they would, to move to allow the
16 intervention of the City of Chandler, which I think,
17 under our statutes and rules, they have the right to be
18 joined as a party. But I think we ought to, as a
19 Committee, consider that. Do I have a motion from
20 anyone?

21 MEMBER HAENICHEN: I move to have them be a
22 party.

23 CHMN. KATZ: That was Jack Haenichen,
24 Member Haenichen.

25 MEMBER PALMER: Second.

1 CHMN. KATZ: And we have a second. Who
2 seconded that?

3 MEMBER PALMER: Right here.

4 CHMN. KATZ: Okay. Got you, Jim Palmer.

5 And all of those who are in favor of allowing
6 this intervention please say aye.

7 (A chorus of ayes.)

8 CHMN. KATZ: Anyone opposed?

9 (No response.)

10 CHMN. KATZ: Hearing silence on that, I'll
11 next hear from Meghan Grabel as well. I believe she
12 has requested the opportunity to intervene.

13 MS. GRABEL: Thank you, Chairman Katz,
14 Committee Members. Yes. As I mentioned earlier, I
15 represent three homeowners associations, the residents
16 of whom live in the segment along this route from the
17 existing Schrader substation to Chandler Heights Road.
18 They were initially -- they engaged me in this
19 proceeding because at that time that segment was
20 proposed to be aboveground. Since then, SRP has
21 diligently worked with the City and Intel and have
22 reached an agreement whereby Intel will pay to bury the
23 power lines along those roads. So we would like to be
24 allowed to intervene, but simply to monitor the
25 proceedings and ensure that the status quo remains as

1 it is.

2 CHMN. KATZ: And at this point in time, if we
3 allow the intervention, you would have the right to
4 cross-examine witnesses if you choose. But are you
5 intending to call any witnesses in these proceedings?

6 MS. GRABEL: Given what we know so far,
7 Chairman Katz, no, I would unlikely cross-examine
8 anyone or present a witness.

9 CHMN. KATZ: Okay. I'd ask one of our
10 Committee Members, if they would, to move one way or
11 the other to allow the intervention of the homeowners
12 associations that are represented by Ms. Grabel.

13 MEMBER GRINNELL: So moved.

14 CHMN. KATZ: And that was -- Mr. Grinnell has
15 moved.

16 Is there a second?

17 MEMBER HAMWAY: Second.

18 CHMN. KATZ: And that was Member Hamway,
19 correct?

20 MEMBER HAMWAY: Yep.

21 CHMN. KATZ: All in favor say aye.

22 (A chorus of ayes.)

23 CHMN. KATZ: Anybody opposed?

24 (No response.)

25 CHMN. KATZ: Hearing silence, we're almost

1 ready to get going. And I just want to indicate again
2 that any members of the public who aren't represented
3 here will have an opportunity, at 5:30 this evening, to
4 address this Committee. And if there's a whole host of
5 folks that want to talk, we may end up with a time
6 limit of about three minutes per person. And if we
7 don't get that done within an hour this evening, we may
8 have sessions on Tuesday as well, but I would hope that
9 anybody that has a public comment will be able to make
10 it this evening.

11 And now I'd like to just go ahead and ask the
12 applicant, Mr. Derstine, to introduce the witnesses who
13 are likely going to testify here on behalf of Salt
14 River Project.

15 MR. DERSTINE: I'm happy to do that now,
16 Mr. Chairman. Would you like me to do that in advance
17 of doing our opening, or do you want me to introduce
18 the witness panel now? I'm happy to take it either
19 way.

20 CHMN. KATZ: I guess we could just go ahead
21 and do the opening.

22 And then I will be asking the four current
23 panel members if they prefer an oath or affirmation.
24 If everybody is in agreement, we'll do it once. If
25 somebody prefers an affirmation to the oath or vice

1 versa, we'll then do that.

2 But I'm happy to have you go forward with
3 your opening remarks.

4 MR. DERSTINE: Thank you. Ms. Ramaley leaned
5 over and said that she'll tutor me on how to say the
6 full name of Salt River Project at the break, but for
7 now I'll stick with Salt River Project.

8 Can we cue up the left screen for the opening
9 or do I just advance the slide? There it is. And then
10 on the right screen can we move to the map, please.
11 Perfect.

12 I have handled enough of these cases to
13 recognize that siting cases can be a little like life
14 in that sometimes things don't always go as expected.
15 For this case we anticipated a fair amount of
16 opposition to segments of this project, and for that
17 reason we scheduled it for two weeks. As we sit here
18 today, and as you indicated, Mr. Chairman, I think we
19 anticipate that we're going to be done much sooner, but
20 however the case goes going forward and however long it
21 takes I am looking forward and excited to present the
22 case to you.

23 Let me start by telling you what the case is
24 about. In March 2021 Intel announced that it was
25 expanding its manufacturing operations on the Ocotillo

1 campus. Intel is adding two new semiconductor
2 manufacturing plants, or fabs. Those two new fabs will
3 increase Intel's energy demand from approximately
4 230 megawatts to a total of 630 megawatts, so an
5 increase of 400 megawatts over the current load.

6 To serve Intel's load, SRP needs to construct
7 new 230 kV transmission lines from two new existing --
8 or, two existing substations, the Henshaw substation,
9 which is here to the north, looking at the right
10 screen, of the Intel campus, and the Schrader
11 substation, which is to the east of the Intel campus
12 here. That's the case in a nutshell: Siting,
13 constructing transmission lines, and a new substation,
14 230 kV substation on the Intel campus, which is needed
15 to serve Intel's expansion.

16 This Committee has had several cases that are
17 not unlike this, that is, new 230 lines needed to serve
18 a high-load customer, but to my way of thinking this
19 case is unique for a couple reasons. I think what
20 makes it unique in the first instance is that there was
21 early communication, collaboration, and partnership
22 between SRP and the City of Chandler. SRP and the City
23 worked together in planning and thinking about how best
24 to serve the need at Intel with the objective of
25 avoiding new overhead lines in residential areas. That

1 was the City's objective, and SRP shared that goal.

2 I think the other factor that makes this case
3 unique is that, as the chairman mentioned, there are
4 segments of this project that will be constructed
5 underground. There have been a few prior cases in
6 which the Committee has heard testimony about feeders
7 being underground on a customer's site, but I think
8 this is, to my knowledge, one of the first cases in
9 which we have large segments of the overall project
10 which will involve underground construction.

11 And that's the result of, one, early
12 collaboration with the City of Chandler and the City's
13 desire to minimize the impacts on residents who live in
14 the areas surrounding the Intel campus. And then
15 subsequently, after the project was announced and we
16 engaged in some public outreach, Intel stepped up and
17 decided to cover the cost of undergrounding the portion
18 along the railroad, which was the focus of the -- focus
19 of the HOAs who Ms. Grabel represents. And those
20 communities around the railroad raised a number of
21 concerns with having the project constructed as an
22 overhead line along the railroad, even though there was
23 an existing 69 kV line already in place along the
24 railroad, and ultimately Intel made the decision on its
25 own to write the check to cover those underground

1 costs. I think those two things make this case unique
2 and different from some of the other high-load cases
3 that the Committee has considered and heard.

4 So let me talk a little bit about the project
5 and some of the facts and features. There's really
6 three project components. As I mentioned, we have the
7 segment -- the route from the Henshaw substation on
8 down to the Intel campus. You have the separate leg,
9 transmission line route going from the existing
10 Schrader substation, which will travel along the
11 railroad and then head east following the blue line
12 shown here on the map on the right, which will be
13 undergrounded all the way into the Intel campus. And
14 the third component, as I mentioned, is the RS-28
15 substation, which is being constructed on a 23-acre
16 parcel of land on the Intel campus itself. Those are
17 the project components, but I'd like to spend a little
18 bit of time giving you some more facts and what you'll
19 hear in terms of the -- from the testimony from our
20 witnesses on the two routes.

21 On the Henshaw to Intel campus, or the RS-28
22 substation route, you're going to have two new 230 kV
23 lines from the Henshaw substation. That will be
24 constructed as an overhead transmission line running
25 along Old Price Road. Those two new lines will be

1 double-circuited on monopole structures, and they'll be
2 co-located with the existing 69 kV line, which is on
3 the west side of Old Price Road. We're going to be
4 asking for a corridor that's wide enough to allow us to
5 construct the new line either on the west or the east
6 side.

7 And although we're still early in the final
8 design and engineering hasn't been done, it may turn
9 out that it's best and easiest to construct the new 230
10 line on the east side, while leaving the existing 69 kV
11 line that serves Intel today on the west side of Old
12 Price Road, and then once the 230 line is completed,
13 bring the 69 over to the east side. But as I
14 mentioned, those details and those final designs have
15 yet to be worked out, but we'll ask for a corridor to
16 give us the optionality, the ability to do either.

17 I think the other important thing to
18 recognize about the Henshaw to RS-28 route is that the
19 line will be undergrounded at the point where it turns
20 east onto the Intel campus. Intel made the decision to
21 underground that portion of the line and the other leg
22 of the project on Intel's campus and they're paying for
23 that cost. So on Henshaw you have a combination,
24 largely overhead construction with this -- the turn
25 onto the Intel campus being underground construction.

1 And let me talk about the Schrader piece of
2 the project. This area, this box highlighted in green,
3 surrounds the Schrader substation. We call it the
4 Schrader overhead transition corridor.

5 CHMN. KATZ: I just have one question, and
6 that is, I don't know -- I think that the people
7 appearing virtually should be able to see the map. I
8 don't know if they can follow the pointer unless we
9 have a cursor.

10 MR. DERSTINE: Is it possible that the AV
11 crew can follow -- when I'm using the laser pointer on
12 the map on the right, can you follow me with your
13 cursor or the mouse that would trace where I am?
14 Perfect.

15 CHMN. KATZ: That would be very helpful.
16 Thank you.

17 MR. DERSTINE: Thank you. Thank you,
18 Mr. Chairman.

19 So Schrader -- Schrader substation is located
20 here. We need to run two 230 kV lines or circuits over
21 to the RS-28 substation to the west. That's being
22 done -- the first circuit, which I've indicated on my
23 slide on the left, Circuit 1, will leave the bay on the
24 east side of the Schrader substation, will be probably
25 the southern bay, and there it will go immediately from

1 that open bay position to a riser structure. And
2 you'll see some photos of the riser structures in our
3 photo simulations. It's very different than the
4 standard tangent structure or monopole structure that
5 you're used to seeing. It will immediately go from
6 that open bay position to a riser structure, where it
7 will go underground and follow the southern boundary of
8 the Schrader substation. And at that point, it will
9 follow along and remain underground along the railroad
10 and then follow this underground path along Chandler
11 Heights to Alma School and then work its way over to
12 the Intel campus. That's the first circuit, Circuit 1.

13 Circuit 2, the second 230 kV line, will leave
14 an open bay position again on the east side of the
15 Schrader substation, but there it's going to be
16 constructed -- will leave that open bay, move to a
17 monopole as a single 230 kV line, and then immediately
18 move to join this existing 230 kV line which travels
19 along the north of the Schrader substation over to the
20 railroad. That existing 230 kV line was certificated
21 in the Line Siting Case 86. I think we've referred to
22 it as the San Tan-to-Schrader 230 kV line.

23 So the new -- the second circuit will join
24 and be co-located with the existing 230 kV line from
25 Case 86 and follow that same alignment over to the

1 railroad where the San Tan-to-Schrader line heads north
2 along the railroad, if I can find it back here. Sorry
3 for the folks who are following me online with their
4 pointer. There the San Tan-to-Schrader line heads
5 north, and the new circuit will then -- will join the
6 Circuit 1 and follow the railroad to the south using a
7 riser structure located at or near the railroad.

8 Those two options, Circuit 1 and Circuit 2
9 that I've just described, assume that SRP is able to
10 obtain a permit from Union Pacific Railroad to
11 construct these 230 lines within the railroad
12 right-of-way, and that hasn't been worked out. It will
13 take some time to finalize those discussions and
14 determine that that's feasible and that the railroad
15 will allow us to construct along the railroad there.

16 So we're also requesting this east option
17 that, if we're not able to obtain the permit from the
18 Union Pacific Railroad, that those two circuits out of
19 Schrader would travel east and just immediately go
20 underground. So it would go from those two open bay
21 positions to riser structures, go underground, and
22 they'd travel to the east and follow the consolidated
23 canal down and then make their way back to the route
24 along Chandler Heights Boulevard. So those are the two
25 routes, that's the Henshaw-to-RS-28 and the

1 Schrader-to-RS-28 transmission line routes.

2 I think this is one of the cases -- the few
3 cases in which the Committee is being presented with
4 extensive amounts of underground construction. And
5 there's a good reason for that, and that is that this
6 Committee only has jurisdiction over aboveground
7 transmission lines. As you'll note, the line siting
8 statute -- the statute that establishes this Committee,
9 the statute that sets forth the process that we have to
10 go through in order to obtain approval to construct the
11 transmission line, it defines a transmission line as a
12 series of new structures erected aboveground supporting
13 one or more conductors designed for the transmission of
14 electrical energy at 115 kV or more. So that
15 definition defines the type of projects that this
16 Committee hears, and it's for that reason that the
17 application that we filed for this case only seeks
18 approval from this Committee for the aboveground
19 portions of the project.

20 But that doesn't mean we're not going to talk
21 about the underground routes or the underground methods
22 that we'll use for the construction. We will spend a
23 fair amount of time describing the underground routes,
24 where they are, why they're there, because we want you
25 to have a full understanding of the project. We're

1 also going to cover the underground construction,
2 because we want you to understand the methods and the
3 costs associated with building a line underground.

4 And finally, we want you to have an
5 understanding of why SRP doesn't bring forward projects
6 and propose to underline segments of the project on its
7 own. The only projects in which SRP, as an applicant,
8 will look to underground the project is if there is a
9 safety consideration, that is, we have conflicts with,
10 say, an airport, that we can't build a project
11 aboveground, or, as in this case, we have a third party
12 that's willing to step up and pay the cost to
13 underground those facilities. So you'll hear a
14 significant amount of testimony on underground routes
15 and construction. And I know that the Committee has
16 some interest in that, so we're happy to share that
17 with you.

18 So that's really the project, the components,
19 what we're building, why we're building it. But let me
20 talk about some other important aspects of the case.

21 MEMBER HAENICHEN: Before you do,
22 Mr. Chairman.

23 CHMN. KATZ: Yes, Member Haenichen.

24 MEMBER HAENICHEN: Mr. Derstine, could you
25 once again use your pointer and show the portions --

1 the aboveground portions that will be considered?

2 MR. DERSTINE: Yeah, the above -- thank you,
3 Member Haenichen. The aboveground portions are the
4 ones that are highlighted in green. So this segment
5 from the Henshaw substation all the way down along Old
6 Price Road, that's aboveground or overhead
7 construction. And then where the line turns blue is
8 where that segment will be undergrounded into the new
9 substation on the Intel campus. Similarly, as I
10 described, the Circuit 1 coming out of Schrader
11 immediately goes underground, but the Circuit 2, the
12 northern circuit that's going to be co-located with the
13 existing 230 line, that will be aboveground along the
14 northern edge of the Schrader substation until it moves
15 over to the railroad track, and there it goes -- it
16 will be placed underground.

17 MEMBER HAENICHEN: Thank you.

18 MR. DERSTINE: And then as you can see here,
19 Member Haenichen, this entire segment noted in blue is
20 underground construction making its way along Chandler
21 Heights and then moving along over to the Intel campus.
22 And we'll describe how that route was selected and why
23 that's the best route and maybe the only route in which
24 we can successfully have underground construction of
25 the project.

1 MEMBER HAENICHEN: Thank you.

2 MR. DERSTINE: So turning to -- this
3 Committee has to consider a number of factors in
4 deciding whether to grant the CEC. Some of those
5 factors relate to the environmental impacts of the
6 project. And the testimony that you'll hear is that
7 this project is being constructed entirely in a
8 disturbed urban environment; and therefore, it's very
9 low-quality habitat for any sort of wildlife and plants
10 other than lawns and what's being planted in medians
11 throughout the City of Chandler. There's no
12 undisturbed habitat for threatened or endangered plants
13 or wildlife.

14 An important consideration of the
15 environmental impact side are the visual impacts of the
16 project. As I mentioned, the new overhead construction
17 that's happening along Old Price Road is going to be
18 co-located with an existing 69 kV line. And this Old
19 Price Road is a -- known as the Price Road corridor, is
20 an industrial/commercial area. And this Old Price Road
21 sits at the back of the aviation and other high-tech
22 businesses that are here within the Price Road corridor
23 to include the Intel campus. So minimal visual impacts
24 there.

25 Here on Schrader you have an existing

1 substation. You can see that there's residential areas
2 that surround the substation, but they've been
3 co-existing there for some time. And so the -- there
4 will be minimal change in terms of co-locating the new
5 230 circuit, the Circuit 2, as I mentioned, with the
6 existing 230 line, and really the biggest change will
7 be the riser structures. And you'll see those riser
8 structures and how they are different from normal
9 tangent or turning structures that the Committee is
10 used to seeing. But I know transmission engineers,
11 folks like Mr. Heim, love riser structures, and I
12 assume that the communities who want this project
13 underground will learn to love riser structures too.

14 Aside from environmental impacts, an
15 important piece of every project is our public outreach
16 and what we do in order to inform the public about the
17 project and gain feedback and input. Although this
18 project was on an accelerated timeline, SRP used a very
19 robust outreach campaign. We publicized not only the
20 overhead components of the project, but also described
21 what would be constructed underground. We used
22 mailers, e-mail, and social media to publicize the
23 project itself in the early stages, the open houses
24 that the company conducted, and this hearing. And it
25 was a combination of a virtual open house to announce

1 the project, and then we had a number of live stream
2 open houses that were used where members of the
3 community could ask questions through the chat
4 function.

5 So that's the case. That's what we're going
6 to build, the environmental pieces, the public outreach
7 piece.

8 Let me talk a little bit in terms of how
9 we're going to present the case to you. The parties,
10 as you know, based on the appearances of counsel, are
11 Salt River Project, the City of Chandler, and the HOAs
12 that surround the railroad segment, represented by
13 Ms. Grabel.

14 In terms of the case presentation, we will
15 have an introductory witness who's going to give some
16 background testimony on Salt River Project, some of the
17 history of the company, and talk a bit about the
18 service territory and the relationship in terms of
19 serving Intel and how SRP responded to the announced
20 expansion and then worked with the City of Chandler.

21 After that introductory witness, we're going
22 to turn the case over to the City of Chandler, and the
23 City of Chandler will -- Mr. Crockett can present his
24 witness. Because we thought -- as I mentioned, because
25 of the early collaboration and partnership between the

1 City and SRP, we thought it was appropriate to have the
2 City present its case and its testimony early in the
3 case.

4 And then we'll turn back to the SRP witness
5 panel, our other witnesses, who will carry the
6 remainder of the case. Their testimony will be
7 supported by our witness presentation slides. As I
8 mentioned, we'll have a virtual flyover for you to see
9 the project elements, including the underground
10 sections of the project. And then you have the
11 placemat, which I think is -- that map is easier to see
12 and differentiate the aboveground and underground
13 segments of the project using the placemat that's
14 before you.

15 At the end of the case, I'm going to ask that
16 you grant us a CEC for the project, that is, the
17 overhead components of the project as we've discussed
18 and identified. We'll ask you to approve also the
19 alternative options out of Schrader. As I mentioned,
20 if we're not able to secure the permit from Union
21 Pacific Railroad, that we'll construct it underground
22 heading east along the canal.

23 That CEC -- that form of CEC would also
24 approve and authorize the co-location of the new 230 kV
25 circuit with the existing 230 line, that essentially

1 amends CEC 86, to allow double-circuit of that existing
2 now single-circuit line.

3 And we're going to ask that you approve an
4 accelerated timeline for commencing construction, to
5 essentially shorten the notice period. Intel has an
6 in-service date that is going to require that SRP start
7 construction as soon as possible so that we can meet
8 their timeline and get them the energy they need in
9 order to start those manufacturing facilities and
10 commission them and then get them to full operation.

11 So that's the case. I think it's an
12 important case. It's important because the Intel
13 expansion is a multibillion-dollar investment in the
14 state. Governor Ducey has mentioned that this is the
15 largest private sector investment in the state of
16 Arizona. The Intel expansion will generate somewhere
17 around 3,000 permanent jobs, high-tech, high-paying
18 jobs at Intel, as well as somewhere in the neighborhood
19 of 15,000 additional local long-term jobs through other
20 businesses that need to supply and support Intel.

21 I think it's a unique case for the reasons I
22 mentioned. It involved early collaboration between SRP
23 and the City of Chandler in terms of the planning of
24 this project, and it involves undergrounding large
25 segments of the project as a result of the City of

1 Chandler stepping up and deciding that it would cover
2 some of the cost of undergrounding, something it didn't
3 have to do, as well as Intel stepping up and deciding
4 to cover some of the cost of undergrounding the project
5 along the railroad, something it didn't have to do.

6 I think it's a good project. It's good
7 because it really does what this Committee is asked to
8 do, and that is, it balances the need for energy to
9 meet the service needs of the new energy demand from
10 Intel. At the same time, it minimizes the impacts on
11 the surrounding community, the City of Chandler. So as
12 I mentioned at the outset, I'm looking forward to
13 presenting this case to you, I'm excited about it, and
14 I thank you for your time.

15 MEMBER GRINNELL: Mr. Chairman, I have a
16 question --

17 CHMN. KATZ: Yes, Member Grinnell.

18 MEMBER GRINNELL: -- of Mr. Derstine. I
19 respect the fact -- our jurisdiction issue, but two
20 questions. If there is, I guess, a conflict between
21 underground and overhead, who has the jurisdictional
22 veto and who is responsible for all the underground
23 authorization? Is it the City of Chandler? Is it the
24 Corporation Commission for underground utilities?
25 Where do we run into potential conflicts?

1 MR. DERSTINE: Mr. Chairman, Member Grinnell,
2 it's a good question. I will answer it this way, in
3 that this Committee and the Commission's jurisdiction
4 over line siting cases are defined by the statute,
5 A.R.S. 40-360, and its definition of a transmission
6 line that is within the jurisdiction of this Committee
7 and projects that we bring before it.

8 I think what you're referring to is if there
9 is a project in which there is a conflict, that is,
10 maybe parties are demanding that a portion of a project
11 be undergrounded, and the applicant is seeking to
12 approve the project as aboveground construction, then
13 who decides that. You don't have that before you
14 today, and I'm hesitant to weigh in on that legal
15 issue, but I would say that this Committee always has
16 the -- you always have the right to deny the grant of
17 an application for a CEC for a variety of reasons, but
18 I don't think you have the jurisdiction or the
19 authority to order that a portion of a project be
20 constructed underground and I don't think that you have
21 the authority to impose conditions on the portions of
22 the project that are being constructed underground.
23 That is beyond the jurisdiction of the Committee, in my
24 view.

25 MEMBER GRINNELL: Well, I respect that part

1 of it, but my concern or my question is simply this.
2 If there is a scenario where you have underground
3 versus overhead, where does the line get drawn on
4 who's -- who's responsible for the approval of an
5 underground versus -- where does that authority come
6 from?

7 MR. DERSTINE: Well, there's two pieces to it
8 in terms of the funding for underground construction
9 and then the approval of the underground construction.
10 So as to your point on the approval, the approval would
11 require that -- for example, along the Union Pacific
12 Railroad, we will have to obtain a permit from Union
13 Pacific in order to build underground along their
14 railroad, just as we would from any private landowner.
15 And so it will be through that private permitting
16 process which would govern our right to construct a
17 project underground.

18 In this case, many of the underground routes
19 are being constructed within the streets of the City of
20 Chandler, and so the City of Chandler would govern
21 whether or not we would have the right to construct and
22 how we construct and whether or not there's conflicts
23 with other underground utilities. And that was part of
24 the early collaboration and planning process between
25 SRP and the City of Chandler in looking at what are the

1 routes and the options for getting from Schrader over
2 to Intel. And if the project is to be constructed
3 underground, what streets don't have underground
4 conflicts, that is, existing sewer and other
5 communications utilities, the other types of things
6 that could prevent you from building a line
7 underground. And Mr. Heim, the project manager, will
8 spend a fair amount of time talking about some of that
9 process and the things that have to be taken into
10 account to build a line underground. But in this case,
11 if you're building on City streets, you'd have to
12 obtain the permit and the right-of-way from the City in
13 order to construct the line underground.

14 MEMBER GRINNELL: Thank you.

15 CHMN. KATZ: And just to clarify things, I'll
16 put my lawyer hat on, I think that we have a situation
17 whereas if it's between underground and aboveground, we
18 don't have the authority to compel a utility company or
19 a power company to underground those lines, and our
20 choices can either be to approve a route that is
21 environmentally compatible, though maybe not popular
22 amongst the neighborhoods of the community, or to just
23 find that it's not appropriate to issue a Certificate
24 of Environmental Compatibility. But we'll worry about
25 that on another day.

1 MR. DERSTINE: Thank you.

2 CHMN. KATZ: Mr. Crockett, do you wish to
3 make an opening statement?

4 MR. CROCKETT: Yes. Chairman Katz, Members
5 of the Committee, again, my name is Jeff Crockett and
6 I'm representing the City of Chandler in this
7 proceeding, and we appreciate the opportunity to make
8 some brief opening remarks.

9 The City of Chandler strongly supports SRP's
10 High-Tech Interconnect Project. The transmission
11 project is required to provide reliable power to
12 Intel's planned \$20 billion expansion of its Chandler
13 campus. The Intel expansion is reported to be the
14 largest private investment in Arizona history and will
15 be a major economic boost for Chandler, the region, and
16 the state, providing thousands of new high-paying jobs.

17 As you will hear from the witnesses, the City
18 of Chandler and Salt River Project worked closely to
19 reach an agreement which minimizes the impact of the
20 transmission lines on Chandler residents and
21 businesses, while delivering on the overall needs of
22 Intel. As part of the proposed project, and in an
23 effort to address Chandler's preference to avoid
24 overhead transmission lines where reasonably possible,
25 the Chandler City Council approved an agreement with

1 SRP to fund the difference between building certain
2 segments of the lines overhead and the added cost of
3 putting them underground.

4 In a recent press release, Chandler Mayor
5 Hartke stated, "This agreement provides the means to
6 minimize impacts on residents by building
7 infrastructure underground where no transmission lines
8 exist today."

9 Intel has also stepped forward to fund the
10 cost of undergrounding that portion of the proposed
11 transmission lines which runs along the Union Pacific
12 Railroad tracks. The City of Chandler greatly
13 appreciates Intel's substantial financial contribution
14 in this project.

15 The remaining overhead segments of the
16 transmission lines are located within areas that
17 already have overhead transmission lines or are
18 commercial in nature.

19 The evidence in this case will show, based
20 upon the applicable factors outlined in A.R.S.
21 Section 40-360.06, that the High-Tech Interconnect
22 Project is environmentally compatible with the
23 surrounding area.

24 The City of Chandler will have one witness,
25 Ryan Peters, who is the City's strategic initiatives

1 director. Mr. Peters served as the City's
2 representative in negotiating the undergrounding
3 agreement with Salt River Project. Thank you.

4 CHMN. KATZ: Thank you. Just give me a
5 second.

6 Ms. Grabel, is there anything that you wanted
7 to say on behalf of the neighborhoods that are
8 potentially affected by this project?

9 MS. GRABEL: Thank you, Chairman Katz,
10 Committee Members. Just briefly.

11 Several months ago I was approached by
12 members of The Reserve at Fulton Ranch Homeowners
13 Association who expressed concerns about the segment of
14 the SRP High-Tech Interconnection Project that would
15 run adjacent, and in some instances extremely close
16 proximity, to their residential communities, really a
17 matter of feet from some homes. They explained to me
18 that the City had agreed to fund the undergrounding of
19 the vast majority of the line, but that the portion of
20 the line bisecting their community and two other
21 neighborhoods, the Pine Lake Estates and Southshore
22 Village neighborhoods, along the Union Pacific Railroad
23 right-of-way would remain aboveground for reasons that
24 did not seem to justify the disparate treatment of
25 those three communities compared to other City of

1 Chandler residents.

2 The Reserve retained me and a technical
3 expert with experience in siting transmission lines to
4 represent their interests both before the City of
5 Chandler and before this Committee today. The Pine
6 Lake Estates and Southshore Village Homeowners
7 Associations then also engaged me to support them in
8 this matter. Collectively, these three HOAs represent
9 roughly 1,700 residents.

10 As noted in the CEC application, SRP
11 conducted very thorough public outreach and was
12 diligent about considering the interests of the
13 communities impacted by the project. We very much
14 appreciate SRP's the City of Chandler's, and Intel's
15 early engagement with the neighborhoods, and we were
16 delighted by the announcement in mid-September that
17 Intel had agreed to pay to bury the proposed power line
18 from Chandler Heights to the Schrader substation,
19 including the segments near my clients' homes. We are
20 incredibly grateful to the City, to Intel, and to SRP
21 for listening to the neighborhoods and finding a
22 workable solution, and we firmly believe that Intel's
23 commitment to fund this portion of the line is exactly
24 the right result.

25 Unlike other projects, this transmission line

1 is being built to provide energy to just one commercial
2 customer, not the City as a whole. For an expansion
3 that will benefit Intel, and the City economically, and
4 of course will generate additional revenue for SRP, in
5 such circumstances it is right that all city residents
6 be insulated from the perceived consequences associated
7 with a visible high-voltage transmission line running
8 through the community, not just a select few, and we
9 believe the solution reached did just that.

10 As a result of this outcome, my participation
11 in this proceeding should be minimal. Our interest is
12 simply that the segment of the line from the existing
13 Schrader substation to Chandler Heights Road be
14 constructed belowground and that the CEC application be
15 approved as filed. Thank you very much.

16 CHMN. KATZ: Thank you. I would now ask, if
17 you would, please, Mr. Derstine, to introduce your
18 witnesses. And then once we've done that, I'll have
19 them stand and ask who prefers the oath versus the
20 affirmation.

21 MR. DERSTINE: All right. My introduction of
22 the witnesses involves the use of some of their slides
23 concerning their background and information. Would you
24 prefer to just simply swear them in advance of them
25 providing that testimony on their background and

1 education?

2 CHMN. KATZ: I think so.

3 MR. DERSTINE: Okay. So I think they're --
4 as a panel, we have the four witnesses there. We have
5 Mr. Chris Janick, Mr. Zackary Heim, Ms. Kenda Pollio,
6 and Ms. Samantha Horgen. I'd ask that -- you can swear
7 them all, I don't know if they prefer an oath or an
8 affirmation, and then we'll go through their
9 backgrounds and go through their introductions.

10 CHMN. KATZ: And we can do both.

11 Is anybody opposed to the oath and prefer an
12 affirmation?

13 MR. JANICK: An affirmation is preferable for
14 all of us.

15 CHMN. KATZ: What? Say that again.

16 MR. JANICK: An affirmation would be
17 preferred for all of us.

18 CHMN. KATZ: Okay. Is there anybody that's
19 opposed to taking an affirmation?

20 (No response.)

21 CHMN. KATZ: Okay. We will do that. Just
22 bear with me for a second. I should know this by heart
23 after all these years, but I want to make sure that I
24 don't screw it up. I'd ask you to all please stand, if
25 you would, and to raise your right hands.

1 (Christopher Robert Janick, Zackary Heim,
2 Kenda Pollio, and Samantha Horgen were duly affirmed
3 en masse by the Chairman.)

4 CHMN. KATZ: You may be seated, and thank
5 you.

6 You may proceed now in calling your first
7 witness.

8 MR. DERSTINE: Thank you, Mr. Chairman. I
9 think, as I mentioned in my opening, I'll go through
10 and introduce all four of the witnesses and have them
11 go through their -- introduce themselves to the
12 Committee and provide some background, and then I'll
13 proceed with Mr. Janick's testimony. And then at that
14 point, we'll turn it over to the City. And then after
15 the City's presentation, we'll proceed with our witness
16 panel.

17 So, Mr. Janick, why don't we start with
18 having you state your name for the record, name and
19 address, please.

20 MR. JANICK: Christopher Robert Janick,
21 PO Box 52025, Mail Station POB009, Phoenix, Arizona
22 85072.

23 MR. DERSTINE: All right. Take a minute and,
24 using your slides on the right screen, introduce
25 yourself to the Committee, please.

1 MR. JANICK: Sure. Chris Janick, I'm the
2 senior director of power delivery at SRP, which is an
3 organization that's responsible for operations,
4 planning, design, engineering, construction, and
5 maintenance of all of SRP's transmission and substation
6 facilities, commonly just referred to as the
7 transmission organization at SRP.

8 I have a bachelor's degree in chemical
9 engineering from Arizona State University. And I've
10 been working for about 25 years, 20 of that is with
11 SRP, where I've primarily held leadership positions in
12 a variety of roles, including environmental, power
13 generation, engineering, compliance, and now
14 transmission.

15 MR. DERSTINE: Mr. Janick, we filed a witness
16 summary, but in general, in looking at your witness
17 summary, my understanding is that you plan to provide
18 the Committee with some background on SRP, a bit of its
19 history, touch on its service territory. I think
20 you'll also give the Committee background on Intel as a
21 customer of SRP and how SRP serves Intel today. And
22 then you'll finish with some discussion of the
23 announced expansion, how SRP plans to serve the
24 expansion, and some of the work that SRP did in
25 collaborating and working with the City of Chandler on

1 how to serve Intel, is that right?

2 MR. JANICK: That's correct.

3 MR. DERSTINE: Okay. Mr. Heim, would you
4 state your name and address for the record, please?

5 MR. HEIM: Zack Heim, address is PO Box
6 52025, Phoenix, Arizona 85072.

7 MR. DERSTINE: And as Mr. Janick did, why
8 don't you take a minute to introduce yourself to the
9 Committee, please.

10 MR. HEIM: Sure. Mr. Chairman, Committee
11 Members, my name is Zack Heim, and I'm the director of
12 transmission line design, construction, and maintenance
13 at SRP. Unlike Chris' title, the title of my
14 department tells you exactly what we do. Importantly
15 for today, I'm also the project manager responsible for
16 siting the High-Tech Interconnect Project.

17 As far as my background is concerned, I have
18 both a bachelor's and a master's degree in civil
19 engineering from Arizona State University. I'm a
20 registered professional engineer in the state of
21 Arizona. I have 22 years of experience -- I started
22 when I was 13, in case you were wondering -- but 22
23 years of experience in the power system engineering
24 business. I've done everything from leading
25 transmission projects ranging from 69 kV up to 500 kV.

1 I have experience in both transmission line
2 construction, as well as transmission system planning,
3 and have served as principal investigator for a
4 number of industry research studies, as well as
5 forensic studies.

6 MR. DERSTINE: You mentioned you're the
7 project manager. As a result, Mr. Heim, you're going
8 to carry the testimony on a number of topics for our
9 case, but those will include discussing the purpose and
10 need for the project, an overview of the routes.
11 You're going to narrate the virtual flyover tour that
12 we're going to present to the Committee. You're also
13 going to touch on the planning process. You're going
14 to spend a chunk of time educating the Committee on
15 underground construction methods and costs and where
16 this project will be constructed underground and why.
17 And you're going to give a detailed description of the
18 aboveground components that we're going to seek
19 approval from the Committee for in the CEC. And
20 finally, you're going to touch on the structures that
21 are going to be used to construct the aboveground
22 portions of the project and the costs associated. Did
23 I get that laundry list right?

24 MR. HEIM: You seem to have gotten it right.
25 Good job.

1 MR. DERSTINE: Thanks.

2 Ms. Pollio, will you state your name and
3 address for the record? I assume you don't have the
4 same address as the gentlemen to your right.

5 MS. POLLIO: I do not. I have a different
6 address. But my name is Kenda Pollio. I'm a principal
7 with KP Environmental. My address is 280 Melba,
8 Encinitas, California 92024.

9 MR. DERSTINE: And introduce yourself to the
10 Committee, please. I know you've testified in a
11 number of siting cases. And I'm reading the bullet
12 right in the bottom of Slide R6. You've testified in
13 17 other cases. But reacquaint the Committee with who
14 you are and your background.

15 MS. POLLIO: Yes. So I have a bachelor of
16 science in environmental studies in urban and regional
17 planning from Florida State University and a master's
18 of science in environmental policy from the University
19 of South Florida. I am an American Institute of
20 Certified Planners, which is an AICP. And I have 32
21 years of environmental consulting experience, all of
22 which is related to utility work and power plant and
23 transmission lines, the environmental studies
24 associated with those.

25 As I mentioned, I am a principal at KP

1 Environmental. Specifically, as I mentioned, I
2 specialize in transmission line right-of-way assessment
3 siting, permitting, and basically compliance of those
4 projects. I've worked on over 175 transmission line
5 and utility projects. I've testified before this
6 siting Committee 17 times, and overall I've testified
7 in other state siting cases 29 times.

8 MR. DERSTINE: You will cover the
9 environmental studies that were performed to support
10 the application. You also -- you and your firm also
11 coordinated or handled a number of the matters relating
12 to the notice that we're required to give, publication
13 of the notice of hearing, et cetera, you'll cover those
14 matters. And then I think to the extent that the
15 Committee is interested in taking a tour, you've made
16 arrangements for that and you can discuss -- provide an
17 overview of what the route tour would be, correct?

18 MS. POLLIO: That is correct.

19 MR. DERSTINE: And Ms. Horgen, would you
20 state your name and address for the record, please?

21 MS. HORGEN: Sure. My name is Samantha
22 Horgen. My address is PO Box 52025, Phoenix, Arizona,
23 85072.

24 MR. DERSTINE: And introduce yourself to the
25 Committee.

1 MS. HORGEN: I'm employed at SRP as a public
2 involvement siting representative. I have a bachelor
3 of science in business management from ASU. I also
4 have a master's degree in business management from
5 Western International University. I have been with SRP
6 for 18 years, 15 of those in public involvement and
7 three in government relations.

8 In this project I'm the lead in facilitating
9 the public outreach process, and I also -- in this
10 position we pursue constructive interaction with the
11 public on these types of projects, but also on projects
12 I've worked on such as sub-transmission 69 kV pole
13 replacement projects, well site expansion, and other
14 types of projects. We also -- or, I also provide
15 feedback from the public to our management and our
16 public team, public involvement team and project team.
17 And we just are considered to be the kind of continuous
18 thread for a project from the beginning to finish, so I
19 will follow this project through to construction, both
20 the underground and the overhead. And I coordinate the
21 interactions with the public if we need specific
22 meetings and work under the direction of the project
23 manager.

24 MR. DERSTINE: Thank you for that. As the
25 public involvement siting representative, you're going

1 to carry the -- present testimony and all things
2 relating to our public outreach campaign, including the
3 open houses, social media efforts, all the mailings
4 that were conducted to notify the public, and the
5 various briefings you had with jurisdictions and
6 stakeholders, right?

7 MS. HORGEN: Yes, that's correct.

8 MR. DERSTINE: Mr. Chairman, that is our
9 witness -- all of our witnesses. As I mentioned, with
10 your permission, I'd like to proceed with Mr. Janick
11 as -- to start us off. And then, as I mentioned, we'll
12 turn it over to the City of Chandler.

13 CHMN. KATZ: That's fine. Mr. Crockett can
14 then -- after you're done with this witness can give us
15 whatever introduction of his only witness, okay?

16 MR. CROCKETT: Yes.

17 CHMN. KATZ: Thank you.

18 Feel free to proceed.

19 MR. DERSTINE: All right. Thank you.

20

21 CHRISTOPHER ROBERT JANICK,
22 called as a witness on behalf of the Applicant, having
23 been previously affirmed by the Chairman to speak the
24 truth and nothing but the truth, was examined and
25 testified as follows:

1 DIRECT EXAMINATION

2 BY MR. DERSTINE:

3 Q. Mr. Janick, we thought it would be a good
4 idea to give the Committee some background on SRP. Can
5 you start us off there?

6 A. Certainly. So SRP, as an organization, has
7 been around now for well over a hundred years, actually
8 originated in 1903 when area landowners, farmers put up
9 all of their land as collateral to secure a loan from
10 the federal governmental through the National
11 Reclamation Act to allow for the construction of
12 Roosevelt Dam to ensure a reliable source of water for
13 the Salt River Valley. The entity immediately started
14 producing electricity with a hydroelectric unit at
15 Roosevelt. Its primary purpose was to support
16 construction of the dam. The actual entity that was
17 created at that time was and continues to be known as
18 the Salt River Valley Water Users Association.

19 Over the several decades that followed,
20 additional dams and hydroelectric facilities and
21 electric infrastructure was constructed, and in 1937 a
22 separate entity was formed really to oversee operation
23 of all of the electric facilities. The organization
24 that was created was a community-based, not-for-profit
25 public power political subdivision of the state of

1 Arizona, which is known as the Salt River Project
2 Agricultural Improvement and Power District. And the
3 entity that was created at that time was primarily for
4 the purpose -- or, allowed for the issuance of tax
5 exempt bonds to fund continuing operations of the
6 electric system during the great recession. And the
7 district and the water user association today are
8 collectively referred to generally as SRP, or Salt
9 River Project.

10 In the 1950s the Valley was really booming
11 economically, and SRP built its first central fossil
12 fuel-fired power stations in the Valley and associated
13 transmission infrastructure. Continuing into the '60s
14 and '70s, with continuing load growth, SRP, often in
15 participation with other utilities, began building
16 several remote coal-fired power generation facilities
17 and well over a thousand miles of 500 kilovolt, or kV,
18 transmission lines to bring all of that energy to the
19 Valley load center.

20 During that same time, SRP began building out
21 a 230 kV network of transmission lines -- sorry -- to
22 move that energy through and around the entirety of
23 SRP's service territory, which is roughly 3,000 square
24 miles in size and includes well over half of the
25 Phoenix metropolitan area, in addition to what we refer

1 to as the eastern mining area, which is where the dams
2 that we operate and our large industrial copper mine
3 loads are located.

4 And SRP has continued to grow our electric
5 system in the decades that followed to become the water
6 and power provider that we are today, delivering just
7 under a million acre feet of surface water to
8 agricultural and urban irrigation users, in addition to
9 municipalities who turn that water into drinking water
10 supplies, and a generation transmission and
11 distribution provider of electricity with a diverse
12 portfolio of resources delivering electricity to our
13 over 1 million residential commercial and industrial
14 customers, with a peak load in excess of
15 7,600 megawatts. And we work now every day to achieve
16 our mission, which is to provide reliable, affordable,
17 and sustainable water and power to the communities and
18 customers that we serve.

19 Q. You mentioned -- the last bullet on Slide L5
20 shows the 2020 retail peak load of over
21 7,000 megawatts. Can you spend a minute talking about
22 what SRP is experiencing on its system today in terms
23 of load growth?

24 A. Sure. Maricopa County, as most of you know,
25 is really experiencing record load growth and growing

1 at a higher rate than any other area in the country.
2 In addition, Maricopa County has -- in terms of job
3 recovery from the pandemic, is as strong as just about
4 any other area in the nation. And the growth
5 historically in our area has been driven by residential
6 construction. What's a bit unique about current times
7 is how much of that load growth is driven by large
8 industrial users, data centers, traditional
9 manufacturing sectors, and semiconductor manufacturing,
10 which is the subject of our discussion as part of this
11 hearing.

12 And what this slide illustrates is how our
13 load forecast has changed in a relatively short period
14 of time. The lower line towards the right of the graph
15 shows the load that we were forecasting a bit over a
16 year ago. And the red line at the top is showing our
17 current longer-term forecast, which far exceeds even
18 the most optimistic of pre-pandemic estimates. And
19 obviously, all of that growth requires significant new
20 electrical infrastructure to serve.

21 Q. You mentioned that a big component of that
22 current load growth is being driven by larger
23 commercial, industrial customers like Intel. Can you
24 spend a minute kind of talking about how SRP serves
25 Intel today?

1 A. Yes. SRP has had a relationship with Intel,
2 actually, since the early '80s. And over the last 40
3 years we've partnered with Intel as they've grown from
4 a single manufacturing facility in west Chandler to
5 include the really world-renowned Ocotillo campus that
6 we're talking about today and becoming one of the
7 largest employers in the region, in addition to SRP's
8 single largest customer. And over that period of time
9 we've not only supported Intel in terms of their
10 growing loads, but have actually partnered with them on
11 innovative projects to improve the resiliency of their
12 facilities to abnormal events on the electric system
13 such as that we would encounter during monsoon
14 thunderstorms.

15 Our service to the Ocotillo campus today,
16 which consists of four fabs, they're numbered 12, 22,
17 32, and 42, is through a number of 69 kV
18 sub-transmission lines which interconnect to two
19 dedicated substations on Intel's campus which are shown
20 on the slide on the right. Those substations are named
21 Synergy and Hoopes.

22 Q. In March -- I think I mentioned in my
23 opening, in March of this year Intel announced its
24 expansion. Can you spend a little bit of time and
25 touch on how the announced expansion -- means for SRP

1 and how that's driving this project?

2 A. Yes. As you mentioned, in the spring Intel
3 announced their \$20 billion planned expansion of the
4 Ocotillo campus, which is forecasted to create
5 approximately 20,000 permanent construction direct and
6 indirect jobs to the local area. That project -- the
7 transmission project that will serve their campus will
8 consist of approximately 7 miles of new transmission
9 lines to a new dedicated substation on their campus
10 immediately adjacent to the Hoopes and Synergy
11 stations.

12 The Intel expansion itself will include two
13 new fabs and supporting facilities that will
14 effectively triple the load of the existing facility,
15 with the potential to grow to nearly a gigawatt of
16 capacity. Those magnitudes of loads can't be reliably
17 served through the 69 kV system that we serve them with
18 today, which is why we're before the Committee today
19 proposing this 230 kV transmission project.

20 Q. Can you give the Committee some insight in
21 terms of how, once Intel announced its expansion, how
22 SRP responded to that and approached the challenge of
23 meeting Intel's increased energy demand and coordinated
24 with the City of Chandler, if you will?

25 A. Yeah, certainly. Broadly speaking, SRP's

1 long history of developing water and power resources
2 has really been foundational to the Valley becoming
3 what it is today. And the way we essentially promote
4 economic development today is based on our mission, as
5 I alluded to previously, which is through the provision
6 of reliable, affordable, and increasingly sustainable
7 energy offerings in order to make the area an
8 attractive place for businesses to locate or expand.

9 And since the time of the announcement in the
10 spring, SRP began working really on a continuous basis
11 with the City of Chandler and Intel to develop a
12 transmission project that can both serve the growing
13 loads of the Ocotillo campus and meet Intel's needs
14 while minimizing the impacts on area residents and
15 businesses. We're certainly very excited to support
16 the City and Intel on this project, which is so
17 important to the local community and the state as a
18 whole, and certainly look forward to engaging with the
19 Committee in our siting effort here today.

20 Q. Thank you. Is there anything else you wanted
21 to cover in terms of the collaboration with the City of
22 Chandler or have we done it?

23 A. I think we've done it, and I know Ryan will
24 probably add a little bit of additional color to the
25 discussion. It's really just been a great partnership

1 and we've really enjoined working with the City of
2 Chandler and Intel over the last six months on this
3 project.

4 MR. DERSTINE: Great. I'll make Mr. Janick
5 available for any cross-examination from counsel for
6 any of the other parties or the Committee. We are
7 going to get into the details with the project itself
8 and cover a lot of the other aspects of the project
9 through the testimony of our witness panel. But if
10 there's any questions that any Member of the Committee
11 or the parties have of Mr. Janick before we let him
12 relinquish his seat and turn it over to the City of
13 Chandler, he's available for that.

14 CHMN. KATZ: I will first ask whether or not
15 any of the attorneys who represent either the City or
16 the neighborhood homeowners associations, if they have
17 any cross-examinations of Mr. Janick.

18 MR. CROCKETT: Chairman Katz, the City of
19 Chandler does not have any questions for Mr. Janick.
20 Thank you.

21 MS. GRABEL: I do not either.

22 CHMN. KATZ: Do any of the Committee Members
23 have any questions that they would like to ask
24 Mr. Janick with respect to the testimony that he's
25 given thus far?

1 (No response.)

2 CHMN. KATZ: Hearing silence, so to speak, if
3 you wanted to present your first and likely only
4 witness, Mr. Crockett, you're more than welcome to do
5 so.

6 MR. CROCKETT: Chairman, thank you. We
7 would. The City of Chandler calls Ryan Peters.

8 CHMN. KATZ: Before we begin, Mr. Peters, do
9 you prefer an oath or an affirmation?

10 MR. PETERS: I have no preference,
11 Mr. Chairman.

12 CHMN. KATZ: Say that again.

13 MR. PETERS: No preference, Mr. Chairman.

14 CHMN. KATZ: Okay. Well, I will proceed with
15 administering the oath. Just bear with me. I've done
16 this dozens of times, but I've got to make sure I get
17 it right.

18 (Ryan Peters was duly sworn by the Chairman.)

19 CHMN. KATZ: Counsel, as soon as he is
20 relatively relaxed, you may begin.

21 MR. CROCKETT: Thank you, Chairman Katz.

22

23 RYAN PETERS,
24 called as a witness on behalf of the Applicant, having
25 been previously sworn by the Chairman to speak the

1 truth and nothing but the truth, was examined and
2 testified as follows:

3

4

DIRECT EXAMINATION

5 BY MR. CROCKETT:

6 Q. Good afternoon, Mr. Peters.

7 A. Hi, there.

8 Q. Would you please state your name and business
9 address for the record?

10 A. Ryan Peters, Mail Stop 605, PO Box 4008,
11 Chandler, Arizona 85244.

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

14 A. I'm employed by the City of Chandler. I'm
15 the strategic initiatives director for the City.

16 Q. As the strategic initiatives director, what
17 are your responsibilities?

18 A. I primarily do government relations. I
19 oversee our transportation policy staff, that includes
20 transit operations, as well as ADA coordination. I
21 also am the lead negotiator with -- interacting with
22 utilities and telecommunications companies.

23 Q. Would you please briefly describe your
24 educational background?

25 CHMN. KATZ: Excuse me. You may want to pull

1 the microphone just a tad closer. You don't need to
2 get on top of it, but just to make sure --

3 MR. PETERS: My apologizes, Mr. Chairman.

4 CHMN. KATZ: Oh, that's --

5 MR. PETERS: I don't want to shout into it.

6 CHMN. KATZ: We can always turn the volume
7 down.

8 MR. PETERS: Sounds good.

9 CHMN. KATZ: Thank you. Go ahead.

10 MR. PETERS: So I have a bachelor's of
11 science degree in political science, a bachelor's of
12 science in psychology, and a master's in public
13 administration.

14 BY MR. CROCKETT:

15 Q. Would you please briefly describe your work
16 experience?

17 A. I've been employed by cities since
18 approximately 2007. I've also worked for the Arizona
19 Legislature. I've worked for the League of Arizona
20 Cities and Towns as a lobbyist down at the Capital.
21 And then with the City of Chandler since 2016 as a
22 government relations professional.

23 Q. And Mr. Peters, are you familiar with the
24 application for a Certificate of Environmental
25 Compatibility that SRP has filed in this case?

1 A. Yes.

2 Q. Have you prepared a summary of your testimony
3 in this case, which has been marked as Chandler-1?

4 A. Yes.

5 Q. Was Chandler-1 prepared by you or under your
6 direct supervision?

7 A. Yes.

8 Q. Mr. Peters, are you authorized to testify
9 today on behalf of the City of Chandler?

10 A. Yes.

11 Q. Did the City of Chandler and SRP have
12 discussions regarding undergrounding a portion of the
13 transmission lines that are being constructed to serve
14 the new facilities at Intel's Ocotillo campus?

15 A. Yes.

16 Q. Were you personally involved in those
17 discussions?

18 A. Yes.

19 Q. Mr. Peters, did those discussions ultimately
20 lead to a written agreement between the City of
21 Chandler and Salt River Project?

22 A. Yes.

23 Q. Do you have before you a document that has
24 been marked as Chandler-3?

25 A. Yes.

1 Q. Is that document a true and correct copy of
2 the agreement that was signed between the City of
3 Chandler and Salt River Project?

4 A. Yes.

5 Q. Mr. Peters, have you prepared a PowerPoint
6 presentation today?

7 A. Yes.

8 Q. Would you please walk us through that
9 PowerPoint presentation?

10 A. I will try.

11 Thank you, Mr. Chairman, Committee Members.
12 I'm happy to be with you today, proud to participate in
13 this project. It's a very exciting time for the City
14 of Chandler. As you -- unfortunately, I had a cover
15 slide that did not -- there it is. So this is a cover
16 slide that, unfortunately, because of the banner at the
17 top, it's kind of hard to see, but it gives you a sense
18 of the aesthetic character of the area. This is
19 Chandler Heights looking at the railroad. Like I said,
20 the picture really demonstrates that the City of
21 Chandler has underground utilities and an
22 underground -- just overall sense of aesthetic
23 character in the area with a lot of trees and bushes
24 and it looks really nice and we wanted to preserve
25 that. So as we went into this project, that was of

1 primary importance to us.

2 Q. Mr. Peters, so -- if I could ask a follow-up
3 question. So what is unique about that photograph is
4 the absence of power lines and transmission lines, is
5 that the point of the slide?

6 A. Yes, that's correct.

7 Q. Okay. Thank you. Go ahead and proceed.

8 A. Thank you. So I decided to present this
9 based off our City Council's strategic goals. Every
10 two years the City Council gets together and adopts a
11 series of strategic goals, and one of those goals is
12 being safe and beautiful. These goals really help the
13 Council and the City leadership evaluate each project
14 as they come across our desks and give us an approach
15 as we work on representing the values of the community.

16 So being a safe and beautiful community is
17 featured as one of those Council-adopted strategic
18 goals. In fact, our City Code has required to
19 underground utilities for nearly 30 years. We
20 recognize that the Code does not necessarily cover
21 transmission facilities, but it does help illustrate
22 how committed Chandler is to minimizing overhead
23 utilities wherever possible. To that end, we work with
24 SRP to meet the City's preference to avoid new overhead
25 lines in the proposed corridor.

1 I'm also going to present briefly a previous
2 compromise that we met with SRP a couple of years ago.
3 And this really illustrates the working relationship
4 that we were able to establish with SRP, and we're
5 grateful for that relationship. So when the HIP
6 project you're considering today was brought to the
7 attention of the City earlier this year, the City and
8 SRP had the benefit of using that agreement, a similar
9 type of project, as a starting point.

10 In 2017, the City and SRP entered into this
11 agreement to underground 230 kV lines that were being
12 installed to serve the power needs of the businesses in
13 the Price Road corridor and Chandler Airport areas.
14 This Price Road corridor project directly informed SRP
15 and the City as we worked together on this HIP project.
16 We learned what City rights-of-way had the least amount
17 of underground conflict and which routes were not
18 viable. We learned how to manage construction
19 sequencing. We learned how to best coordinate our
20 designs to achieve mutual efficiencies. And the
21 agreement we entered into also served as a template for
22 us to use as we engaged on finding an expedient path
23 forward on this particular HIP project.

24 A second strategic goal of the City of
25 Chandler is to attract a wide range of private sector

1 businesses. Economic development is extremely
2 important to the City of Chandler. We recognize that
3 it's how we pay the bills. We want to ensure that
4 there's a balance of residential and economic
5 opportunities in the city. So when Intel's
6 announcement of what is reported to be the largest
7 private investment in Arizona history -- it was
8 extremely exciting to our City. It's certainly the
9 largest in Chandler history.

10 Intel, the City, and SRP have long been
11 tremendous partners with each other to ensure mutual
12 successes. We all recognize that facilities like this
13 require major infrastructure to support, and we have
14 creatively worked together to ensure that needs are
15 met. These investments are certainly beneficial to the
16 City and to our residents; however, the City also
17 strives to minimize the visual and other impact of the
18 required infrastructure in order to preserve the visual
19 aesthetics of the area.

20 So on to the agreement terms. To that end,
21 the City and SRP entered in an agreement to underground
22 the proposed 230 kV lines. This agreement was
23 unanimously approved by our City Council in Open
24 Session on July 24th. Using SRP aesthetic funds, the
25 City agrees to pay the cost differential between an

1 overhead configuration and an underground route. The
2 City will provide SRP with a dedicated easement in the
3 City right-of-way and relocate City-owned utilities to
4 create a clear space for the underground lines to
5 occupy.

6 CHMN. KATZ: You may just want to slow down a
7 little bit.

8 MR. PETERS: Okay. The agreement is also
9 sensitive to the impact that construction can have on
10 residents and businesses and provides guidance on
11 sequencing, traffic management, and other construction
12 activities. It is also worth noting that the agreement
13 allows for overhead lines on the border of the Chandler
14 Ocotillo Water Reclamation Plant, as there are no
15 residences or businesses along that corridor. And just
16 to note, the Chandler Ocotillo Water Reclamation Plant
17 is that lined corridor off on the western border of our
18 community.

19 So in summary, the agreement benefits that
20 our City Council agreed to -- avoid new overhead route,
21 it maintains the area aesthetics and minimizes
22 construction impact, it utilizes available financial
23 resources, preserves Intel's development track, and
24 sets up future opportunities. We support the
25 application.

1 CHMN. KATZ: Thank you.

2 Is there any cross-examination by SRP?

3 MR. CROCKETT: Chairman Katz, if I could,
4 before we --

5 CHMN. KATZ: Oh, sure.

6 MR. CROCKETT: -- move to cross-examination.

7 BY MR. CROCKETT:

8 Q. I was simply going to move the exhibits and
9 just ask, Mr. Peters, the slides that you've been going
10 over have been marked as Chandler-2, is that correct?

11 A. Mr. Chairman, that's correct.

12 Q. And were those slides prepared by you or
13 under your supervision?

14 A. Yes, that's correct.

15 MR. CROCKETT: Chairman Katz, at this time,
16 the City would move the admission of Exhibits
17 Chandler-1, 2, and 3.

18 CHMN. KATZ: I'm assuming there's no
19 objection?

20 MR. DERSTINE: No objection.

21 CHMN. KATZ: They'll be admitted. Thank you.

22 (Exhibits Chandler-1, Chandler-2, and
23 Chandler-3 were admitted into evidence.)

24 MR. CROCKETT: And now Mr. Peters is
25 available for any cross-examination. Thank you.

1 CHMN. KATZ: I'll first go to SRP and then to
2 the neighborhood.

3 MR. DERSTINE: No cross-examination,
4 Mr. Chairman.

5 CHMN. KATZ: Anything at all from you,
6 Ms. Grabel?

7 MS. GRABEL: No, Chairman.

8 CHMN. KATZ: Thank you. May this witness be
9 excused?

10 MR. CROCKETT: If there are no questions from
11 Committee Members.

12 CHMN. KATZ: Oh, I forgot all my brothers and
13 sisters here.

14 Do we have any questions at all from our
15 Committee Members of this particular witness?

16 (No response.)

17 CHMN. KATZ: Hearing silence -- or, I guess
18 you don't hear silence. But anyway, you are excused.
19 If they need to recall you, they'll let you know.
20 Thank you.

21 MR. PETERS: Thank you, Mr. Chairman. Thank
22 you, Members of the Committee.

23 CHMN. KATZ: And let me just ask our
24 reporter, what time did we get started?

25 THE COURT REPORTER: About 1:15.

1 CHMN. KATZ: We'll go probably about another
2 10 or 15 minutes and then take a 10- or 15-minute
3 break.

4 You may call your next witness.

5 MR. DERSTINE: Mr. Chairman, we're going to
6 start off with Mr. Heim.

7

8

ZACK HEIM,

9 called as a witness on behalf of the applicant, having
10 been previously affirmed by the Chairman to speak the
11 truth and nothing but the truth, was examined and
12 testified as follows:

13

14

DIRECT EXAMINATION

15 BY MR. DERSTINE:

16 Q. Mr. Heim, you're sworn and under oath. And
17 during our introduction you introduced yourself as the
18 project manager for this project, right?

19 A. That's correct.

20 Q. And as the project manager, I gather that
21 means you're responsible for anything and everything
22 having to do with this project?

23 A. At least the stuff that goes well.

24 Q. All right. I'm sure the other folks in the
25 room connected with the project are taking note.

1 That included -- your responsibility included
2 the drafting and the preparation of the CEC
3 application, which is marked as SRP Exhibit 1, right?

4 A. That's correct.

5 Q. And to your knowledge, is the information
6 that's presented to the Committee in the application
7 CEC -- or, SRP Exhibit 1 true and correct?

8 A. Yes.

9 Q. As the project manager you kind of had lead
10 responsibility or were involved in either the
11 preparation and/or the supervision of the slides that
12 we're going to use to support your testimony, as well
13 as the testimony from our other witnesses, Ms. Pollio
14 and Ms. Horgen. That slide deck is marked as SRP
15 Exhibit 6, which is a left screen slides, and SRP
16 Exhibit 7, which are the right screen slides. Before
17 we go through those, to your knowledge, is the
18 information that we'll be presenting in the witness
19 slides, left deck and right deck, SRP 6 and 7, true and
20 correct, to the best of your knowledge?

21 A. Yes.

22 Q. All right. With that business out of the
23 way, let's talk about purpose and need. You've heard
24 from Mr. Janick about the announced expansion and I
25 touched on some of the project elements that we planned

1 to construct, but take us back and start over in terms
2 of describing the purpose and need of this project.

3 A. All right. Let's do it. So Mr. Janick
4 touched on earlier how the Intel Ocotillo campus is
5 located in an area called the Price Road corridor. So
6 that's a 5-square-mile area located in south Chandler,
7 and it's highlighted on this schematic on Slide R20 on
8 the right in this blue shaded region here.

9 So what's unique about the Price Road
10 corridor is that it includes high-tech customers not
11 just like -- not just Intel, but other high-tech
12 manufacturers of semiconductors, aerospace equipment,
13 data centers. And from an SRP perspective, there's a
14 common thread that runs among all of the customers that
15 are in that area that are in those types of industries
16 in the sense that they require, in general, large
17 amounts of electricity and also high-reliability
18 electricity.

19 So to draw a finer point on that, specific to
20 Intel, when we talk about higher reliability and what
21 that means in the semiconductor industry, in their case
22 even a short-duration outage or just a small deviation
23 in power quality can result in significant or total
24 loss of the equipment -- or, product that they have in
25 production at any given point in time. And the cost of

1 that is, in part, the cost of the product that is lost
2 during that outage, but also the time required to
3 restart their entire process, which in a more severe
4 situation could take several days. And so with that
5 perspective, SRP takes significant efforts to avoid any
6 type of disruption to not just Intel, but any customer
7 within the Price Road corridor area. So that's the
8 framework for how we view this small blue rectangle on
9 the map before the Committee today.

10 So with that, let me step in a little more
11 detail as far as what this map represents. When SRP
12 plans the transmission system, and specifically the
13 parts of our system that are within the Phoenix metro
14 area, we break it into areas that are called operating
15 areas. And that's, in essence, small, manageable
16 chunks of our system that we can operate independently
17 from one another. And the Slide R20 on the right
18 represents the 69 kV operating area that serves the
19 Price Road corridor itself, and so I'll just highlight
20 a few of the important components of this part of our
21 system.

22 So the first is that each 69 kV operating
23 area is served by usually several 230 kV substations.
24 In the case of this operating area, there are three.
25 The first is the Corbell 230 kV substation; that's

1 located actually in the city of Mesa. And then we have
2 the recently constructed Henshaw substation, which is
3 immediately within the Price Road corridor itself. And
4 then just to the east is the Schrader 230 kV station,
5 which we'll also talk a lot about today.

6 So this overall operating area serves a total
7 of 60 square miles within the Phoenix metro area, which
8 is not too uncommon as far as SRP's system is
9 concerned. And within that 60 square miles, we have a
10 total load on the order of about 1,200 megawatts.

11 What makes this area unique is that of that
12 1,200 megawatts, 400 of those -- oops -- 400 of those
13 exist within the Price Road corridor area itself, and
14 that's current-day load. And so what that means is
15 that the load density within this 5-square-mile area is
16 roughly four times the density of what we see on more
17 of a typical setting within our system. As Intel's
18 expansion continues, as well as other development
19 within the Price Road area continues, we expect that
20 that energy density could reach as many as 10 times the
21 density of what we see in other parts of our system.

22 So when you kind of merge the two concepts I
23 talked about, one is the degree of reliability that is
24 required of SRP in these areas, in tandem with the
25 magnitude of energy density that we're serving, that

1 starts to sort of, I think, paint a picture for why
2 this is such an incredibly important part of SRP's
3 system.

4 With that, let me just talk a little bit more
5 about how this part of our system functions. So I
6 highlighted the 230 kV stations that serve the area,
7 and then all of the other black dots in here represent
8 other residential and industrial substations that are
9 serving customers within the broader operating area,
10 and then the lines between them represent the 69 kV
11 lines that create the network that we use to distribute
12 energy throughout all of those stations.

13 Specific to Intel, they sit here on the
14 schematic. So Mr. Janick had mentioned the Synergy and
15 Hoopes 69 kV stations; those are served by a total of
16 four 69 kV circuits. And what that means for SRP is
17 that, in general, we strive to always maintain at least
18 three of those circuits in service at any point in time
19 even if we're doing maintenance. But in general, we go
20 to great lengths to make sure that all of the circuits
21 serving Intel are in service as much of the time as we
22 can make it. And even beyond just the circuits that
23 are connected to Intel, but even within the substations
24 that are adjacent to Intel, we go to a significant
25 effort to maintain high reliability and limit the

1 outages that Intel is exposed to.

2 I've talked a little bit about the system
3 that serves Intel from a physical standpoint. Let's
4 talk about its capacity. The graph on the right, the
5 upper bar chart on Figure R21, that represents the
6 capacity of the existing 69 kV system that serves Intel
7 today. Intel's current load is roughly 230 megawatts,
8 and the capacity of that system is just 20 megawatts
9 greater than that, so a total of 250 megawatts of
10 capacity.

11 SRP does have the ability to introduce more
12 69 kV lines onto the Intel campus, which would increase
13 the load serving requirement -- or, the load serving
14 capability to their campus. But the reality is that
15 with Intel's announced expansion, their load will
16 increase to roughly 630 megawatts across the entire
17 campus, which is well in excess of what any expansion
18 to the existing 69 kV system could support.

19 Furthermore, Intel has the ability to expand
20 beyond the manufacturing facilities that they've
21 announced to date, and their ultimate load forecast is
22 represented by this purple line on the lower cylinder
23 chart at a total load of 900 megawatts. So that's the
24 gigawatt that Mr. Janick referenced previously. If
25 630 megawatts is well in excess of what the 69 kV

1 system can manage, certainly the 900 megawatts is even
2 further than that. So that supports the reason that
3 SRP needs to connect Intel with direct connections to
4 our 230 kV system in order to provide for their future
5 load growth.

6 In addition to Intel's requirement, you'll
7 note on R21 that there is additional capacity generated
8 by HIP, which will go to serve all of the remaining
9 customers within the Price Road corridor area. So the
10 HIP adds another 250 megawatts of capacity beyond the
11 ultimate load that we intend to serve at the Intel
12 campus.

13 Q. So you laid kind of the foundation in terms
14 of the Price Road corridor, this very energy-dense area
15 of the City of Chandler, and then the specific needs of
16 Intel and the fact that the existing 69 kV system
17 simply doesn't have the capacity to serve the energy
18 demand that's resulting from the two new fabs. Is
19 there any timing considerations in terms of when SRP
20 needs to build the infrastructure to serve Intel's
21 expansion?

22 A. Sure. So let's go through the timing. So I
23 mentioned capacity and reliability as key concerns for
24 customers in the Price Road corridor area. Timing of
25 infrastructure expansions is often not far behind that

1 consideration when we talk to these types of customers,
2 and certainly this project is no exception to that.

3 As part of Intel's planned expansion, what
4 they're actually striving to do is to address the
5 global shortage of semiconductor chips that certainly
6 probably all of us have heard about in the news
7 recently. And with that, they're under a lot of
8 pressure to get this portion of their expansion
9 energized and ready to go sooner than later and have
10 asked SRP to have the first phase of the 230 kV project
11 in service by September of 2023.

12 So to add a little more detail to that, we'll
13 focus on Slide R22 on the right screen. So we'll start
14 at here, today, the CEC hearing, November 8th 2021. In
15 order to meet September 2023 in-service date for Intel,
16 SRP has a very near-term need to start construction.
17 And so based on the timing of this hearing, if the
18 Committee votes to proceed with approving this CEC,
19 then the Arizona Corporation Commission meeting in
20 mid-January would be the date that we would seek to
21 gain final approval for the CEC and then have the
22 intent of starting construction of the substation on
23 Intel's campus effectively right after that ACC Open
24 Meeting.

25 What you'll note from this timeline is that,

1 and we'll talk about this in more detail, Intel's
2 Substation RS-28 is a substantial undertaking from a
3 construction standpoint and will take roughly 20 months
4 to complete construction. And in terms of energizing
5 the first phase of Intel's project by September 1st of
6 2023, the substation construction will consume
7 effectively all of that time window, and so that
8 represents the urgency that SRP has to begin
9 construction on the substation very soon. And so as we
10 talk about the CEC language later in this hearing,
11 we'll discuss some of the language that's specific to
12 that time frame.

13 CHMN. KATZ: Thank you. I think this would
14 probably be a good time --

15 MEMBER GRINNELL: Chairman.

16 CHMN. KATZ: Yes, Mr. Grinnell.

17 MEMBER GRINNELL: Mr. Heim, may we go back a
18 previous slide, sir?

19 MR. HEIM: The left or -- I'll do both. How
20 is that?

21 MEMBER GRINNELL: This one right here on the
22 right. Thank you. So the existing kV is supplying
23 250 megawatts, is that correct?

24 MR. HEIM: That's correct.

25 MEMBER GRINNELL: And that is to the existing

1 corridor as we see it today?

2 MR. HEIM: That is specific capacity to the
3 Intel campus itself.

4 MEMBER GRINNELL: Okay. Now, the kV 230
5 addition to that, is that going to be a parallel
6 circuit or is that going to be a series? Are you going
7 to add 69 to 230 or are you going to run parallel
8 circuits?

9 MR. HEIM: Let me see if I'm --

10 MEMBER GRINNELL: Maybe I'm not asking the
11 right question here.

12 MR. HEIM: I think I might know the question
13 you're asking, so let me take a swat at it and see what
14 you think.

15 MEMBER GRINNELL: Okay. Thank you.

16 MR. HEIM: So you might be getting to a plot
17 twist that I'm going to get to here shortly, which is
18 that the intent of this project is to replace all of
19 Intel's 69 kV service with this new 230 kV project. So
20 by the time we're complete with the HIP 230 project, we
21 will disconnect Intel from the 69 kV network and retire
22 their existing 69 kV substations and they'll be served
23 entirely from this new 230 kV project.

24 MEMBER GRINNELL: Okay. To that end, if you
25 have 69 kV providing 250 megawatts, that's roughly

1 three to one. If you do three to one, is that going to
2 be enough power, with the 230, to provide the potential
3 920 megawatts in the potential future, or will we be
4 revisiting for another -- an additional -- do you see
5 where I'm going?

6 MR. HEIM: I'm not sure I understand the
7 three to one.

8 MEMBER GRINNELL: All right. Well, if you
9 have 69 kV that's providing 250 megawatts, so you're
10 basically a little bit -- three and a half to one -- do
11 you see where I'm --

12 MR. HEIM: Are you talking about in terms of
13 the voltage difference?

14 MEMBER GRINNELL: The voltage to the megawatt
15 comparison. Will the 230 be adequate enough should the
16 Intel property require the 920?

17 MR. HEIM: Sure. So the short answer is,
18 yes. The little bit of color I would add to that would
19 be that oftentimes on our transmission system the
20 limitation, in terms of the capacity that we have to
21 serve a specific area, is not always just unique to the
22 circuits that are serving a given substation. It may
23 be kind of the broader transmission network that has
24 some other limiting factor that limits the capacity
25 that we serve in any given location. And so just given

1 that, can't necessarily draw a straight line between,
2 you know, a 69 kV line provides X capacity and a 230
3 line provides Y capacity. They're just a little more
4 nuanced than that.

5 CHMN. KATZ: Thank you.

6 MEMBER GRINNELL: What about your customers
7 on the -- are they going to be -- would that affect
8 them in any way on your Price Corridor there?

9 MR. HEIM: Yes, but it is in a positive way.
10 Because we intend to disconnect Intel from the 69 kV
11 system and put them on the 230 kV system, that system
12 is -- it's more robust in terms of managing a large
13 load, like what we're talking about with Intel. So as
14 they do things that might affect our system, the
15 customers that are connected to the 69 kV network
16 wouldn't necessarily see the same power quality
17 fluctuations and so forth. In addition, by removing
18 Intel from the 69 kV system, that frees up capacity on
19 the 69 kV system for other customers to make use of.

20 MEMBER GRINNELL: Thanks.

21 CHMN. KATZ: Thank you. We'll take our break
22 now. I have about five minutes to 3:00, and I'd like
23 to make sure we're all back here, ready to go by 10
24 after 3:00, because we did get a late start, and I'd
25 like to get as much in as we possibly can. We do stand

1 in recess.

2 (Off the record from 2:55 p.m. to 3:14 p.m.)

3 CHMN. KATZ: We can go back on the record and
4 we can continue with our current witness' testimony.

5 MR. DERSTINE: Thank you, Mr. Chairman.

6 BY MR. DERSTINE:

7 Q. Mr. Heim, you were responding to questions
8 from Member Grinnell kind of on the capacity and
9 whether or not the new 230 system was going to have
10 sufficient capacity to serve Intel if there's future
11 growth, and I think you covered that.

12 Did you want to finish up and circle back to
13 your discussion of the timing consideration?

14 A. Yep, let's do it. Okay. So I think where I
15 left off, I was talking about the timeline to construct
16 Intel's Substation RS-28. And that's the -- that's the
17 critical timeline, in 19 and a half months, to energize
18 the first phase of their project by September 1st of
19 2023. So I'll just touch on the last two scope
20 elements, and then we'll move on from the timeline.

21 So the next item is the overhead line
22 construction. Like we'll talk about later, there's
23 actually less overhead construction on this project
24 than there is underground. And also, the timeline to
25 construct overhead lines is generally shorter compared

1 to their underground equivalent. So we view the
2 overhead 230 kV lines consuming about eight months to
3 construct on this project and can occur within the same
4 time window as the substation construction.

5 The last element of this timeline, the
6 longest one down at the bottom, is 22 months to
7 construct the underground components of the project.
8 So like we'll talk about later, in general, underground
9 construction consumes a lot more time than overhead,
10 and that certainly bears out on this project. We
11 expect to completely energize the underground portions
12 of the project by the middle of 2024, March, April of
13 2024.

14 Last thing I'll touch on in terms of the
15 timeline, so circling back to the original concept,
16 which is the urgency with which the semiconductor
17 industry is trying to respond to the current
18 semiconductor shortage. We've developed this project
19 in such a way that it allows for some expandability in
20 terms of capacity for Intel. And in doing that, that,
21 like I've talked about before, adds flexibility for
22 them to add additional fabs, but also the ability to
23 just retool their existing factories within a shorter
24 time frame than the initial build-out that we're
25 talking here. So I'll add some more color to that

1 later in the presentation.

2 Q. All right. So you've given the background on
3 Price Road corridor, the energy dense area, the
4 transmission system that serves that area, as well as
5 Intel, and then the fact that we simply don't have
6 sufficient capacity on the 69 system that serves Intel
7 to meet the energy demand for these two additional fabs
8 that are going to be coming online, and you've covered
9 the timeline that we need to meet in order to serve
10 those two new fabs. We've covered all that kind of at
11 a high level. Do you want to speak specifically about
12 what we need to build in order to serve Intel?

13 A. Yes, sir. So this gets to the scope of what
14 SRP is proposing. So on September 15th, 2021, SRP
15 amended our 10-year transmission plan to include the
16 scope of work that's shown on the map on Slide R23.
17 Like Mr. Derstine already referenced, the plan is to
18 construct a new double-circuit 230 kV line between the
19 existing Henshaw substation that I'm highlighting now
20 down to the proposed RS-28 substation, and then also a
21 double-circuit 230 kV line from the existing Schrader
22 substation over to the new RS-28 substation.

23 One note about the Schrader-to-RS-28 piece.
24 So like Mr. Derstine already talked about, that's
25 primarily underground. The other important piece of

1 that is that, at this point in time, the plan is to
2 only construct one of these underground circuits. The
3 Committee's probably aware in past cases that -- pretty
4 common within the transmission industry to build
5 double-circuit-capable overhead transmission lines, and
6 then we add a second circuit at a future point in time,
7 when needed, based on capacity requirements. And the
8 reason we do that is because the economy of scale of
9 adding a second circuit to a set of existing overhead
10 structures is relatively straightforward. It doesn't
11 cost twice as much to create a double-circuit overhead
12 transmission line.

13 In the case of an underground line, like
14 we're talking about from Schrader to RS-28, it
15 literally does double the cost of the transmission line
16 when we add a second circuit. So, and I'll explain
17 this in more detail later, but the intent between
18 Schrader and RS-28 is to construct the first circuit
19 entirely, and then we intend to make some provisions
20 for the second future circuit, but in general, that
21 will be future construction to add capacity if Intel
22 requires it.

23 Q. So that second circuit coming out of
24 Schrader, the plan is to build, as I referenced, I
25 think, in the opening slide, the first circuit, or

1 Circuit 1, with the intent to build Circuit 2
2 presumably either within the 10-year time frame of the
3 CEC or you'll seek approval from the Commission to
4 extend that timeline to bring on that second circuit,
5 depending on Intel's energy demand and needs, is that
6 about right?

7 A. That's correct.

8 Q. Okay. So you've talked about kind of the
9 three components, the two routes -- the two legs from
10 Henshaw, from Schrader, and the substation at a high
11 level. I think we're going to now provide the
12 Committee with some real detail on the routes
13 themselves, right?

14 A. Yes, sir. Okay. So I already touched on
15 the, in general, the overhead components of the
16 project, so what I'd like to do first is step back a
17 little bit and just talk about the overall geography of
18 the area, some of SRP's existing system, and then we'll
19 get into the scope of the project that we're proposing
20 here. So I'll spend quite a bit of time on Slide R25
21 here.

22 Talked previously about the Price Road
23 corridor on that schematic that we showed a few slides
24 back. And I'll highlight on this slide, if I can get
25 to the -- the laser button is precariously close to the

1 fast forward button. There we go.

2 So I'll use the laser to outline the existing
3 Price Road corridor development area. So it's
4 generally this area that's highlighted by the laser, so
5 that's the 5 square miles that we've been referring to,
6 and that's the City of Chandler's economic development
7 corridor. So in general, industrial-type customers and
8 commercial customers within this area. And then
9 highlighted in yellow, at the south end of that
10 corridor, is Intel's Ocotillo campus.

11 So their Ocotillo campus resides on roughly
12 700 acres of land at the southern end of the Price Road
13 corridor and is bounded by the Gila River Indian
14 Community to the west, the Sun Lakes Retirement
15 Community to the south, and then residential
16 communities along the entire eastern edge of the Price
17 Road corridor. So that's a real high-level overview of
18 the state of development in the area.

19 So let me talk a little bit about SRP's
20 existing transmission infrastructure. So we have the
21 Henshaw substation that was energized in April of 2021
22 and was actually the outcome of the Price Road corridor
23 siting case that we had before this Committee a few
24 years ago, and there's existing 230 kV lines that go
25 off the map to the north from that substation.

1 Similarly, we have the existing Schrader
2 substation located near Ocotillo Road and the Union
3 Pacific Railroad. That has existing 230 kV lines that
4 make their way north along the Union Pacific Railroad
5 tracks, and then another set of overhead 230 kV lines
6 that go to the northeast and off toward the east on
7 Ocotillo Road here.

8 Zooming in to the 69 kV system, it in essence
9 forms a box around this entire map. So we have
10 existing overhead 69 kV lines that go north and south
11 along the entire length of the Union Pacific Railroad
12 and then along Germann Road and over to Henshaw
13 substation, and then also existing double-circuit
14 overhead 69 kV along the entire length of Old Price
15 Road here. And then there, in fact, are no overhead
16 existing 69 lines or 230 lines within the interior of
17 the box that I just drew. So that's the overlay of
18 SRP's system in the area.

19 So with that, rather than kind of talking
20 about the overhead components using this map, I'll fast
21 forward one more so that we can talk about the project
22 more in its totality. So the map on L17 is the same
23 one that we were just showing on the right screen, and
24 the map on R26 is that same map with the overhead
25 components highlighted in green and then the

1 underground components highlighted in the blue line
2 style that's shown on our placemats as well.

3 So before getting into the routes themselves,
4 just want to kind of highlight the point that we've
5 already talked about, which is the unique confluence of
6 cooperation between SRP, the City of Chandler, and
7 Intel in terms of developing a project like this where,
8 in fact, the magnitude of undergrounding is more than
9 the overhead that we're here siting with the Committee
10 today. And that just speaks to the degree of
11 collaboration that occurred between those three
12 entities. And certainly not something that I've seen
13 in my career, and I'm not going to necessarily hold my
14 breath for it to happen again. But it did happen in
15 this particular project, and so we wanted to
16 acknowledge how unique that was and the degree of
17 cooperation that occurred there.

18 So with that, I'll just step through, at a
19 high level, the proposal within each corridor. And
20 I'll start at the Schrader overhead transition
21 corridor. So for a person that talks about overhead
22 transmission corridors all the time, that one is a
23 little bit of a tongue twister. But what's occurring
24 there is, on the east end of Schrader substation,
25 that's where the 230 kV buses that the new circuits

1 need to connect with need to go to, and that connection
2 needs to occur ultimately in an overhead position. And
3 what the overhead transition corridor allows is for us
4 to take the underground lines that will come up along
5 the Union Pacific Railroad and transition them from the
6 underground along the railroad corridor itself to the
7 overhead connections at the east end of the Schrader
8 substation.

9 The other thing that the transition corridor
10 allows, and you'll note it in the language of our CEC,
11 is that it allows for the placement of overhead
12 structures within the eastern portion of Schrader
13 substation itself if system conditions require us to
14 reconfigure that connection at a future point in time.
15 And I'll get into that in more detail later in the
16 testimony.

17 The next phase of the project going east from
18 west is the underground portion where we'll go
19 underground along the Union Pacific Railroad corridor
20 and then west along Chandler Heights Boulevard, north
21 along Alma School, and then west on Lake and Chaparral
22 Drive -- or, Chaparral Way into the Intel substation.
23 Like I noted before, the intent is to build just one
24 underground circuit at this point in time, with a few
25 limited exceptions.

1 Most notably, where we go through Lake and
2 Chaparral, that's more of a residential area than the
3 major arterial roads that we see on Alma School and
4 Chandler Heights, and part of the agreement that SRP
5 and Chandler worked out was to fund the placement of an
6 empty duct bank for the second circuit through this
7 area. So what we'll do is we'll build the new first
8 circuit, and then an additional duct bank through which
9 we won't pull any conductor at this point in time. And
10 the reason for doing that is so that we only have to
11 excavate in that area one time. And then whenever the
12 second circuit is needed in the future, we would then
13 complete the duct bank through Alma School, Chandler
14 Heights, and the Railroad, and similarly to RS-28 in
15 order to complete that second circuit. But the intent
16 there is just to limit the construction disruption that
17 those neighborhoods would see in the event that we need
18 the second circuit.

19 CHMN. KATZ: Let me just ask, is that
20 ductwork basically concrete underground tunnels?

21 MR. HEIM: What it is is what we call a duct
22 bank. So it 's a trench within which we place
23 underground conduits encased in concrete, and then that
24 allows us to pull the cable through underground but
25 doesn't require any excavation once we're installing

1 the cable.

2 CHMN. KATZ: Understood. And I'll let you
3 explain whenever we get to that later. I just was
4 curious. Thank you.

5 MR. HEIM: I've got all kinds of good
6 pictures on that.

7 MEMBER GRINNELL: Mr. Chairman, real quick,
8 that neighborhood that you just addressed, is that
9 neighborhood being powered by overhead 69 kVs right
10 now?

11 MR. HEIM: Indirectly, yes. So the 69 kV
12 network I highlighted along Old Price Road here, that
13 continues south to Riggs Road. And then we have a
14 number of existing 69 kV substations that are just off
15 the map to the south, but those are serving this
16 neighborhood through the distribution network that way.

17 CHMN. KATZ: And that was Member Grinnell.

18 And the purple that is there as you head west
19 and then you zigzag up toward the Intel campus, is that
20 all underground?

21 MR. HEIM: I'm not quite sure I understand
22 the location.

23 CHMN. KATZ: Go to the purple or the blue
24 that runs into the -- right there. Is that line
25 underground or above?

1 MR. HEIM: This entire portion of the
2 proposed project is underground.

3 CHMN. KATZ: Thank you.

4 BY MR. DERSTINE:

5 Q. Mr. Heim, this may be a point where it's
6 easier to see on the placemat, but this section, using
7 my laser pointer on the right screen, the leg that's
8 along on the railroad, it's not as broad blue as this
9 section along Chandler Heights and where it turns into
10 the neighborhoods, but that is also underground here
11 along the railroad, correct?

12 A. That is correct. The section along the
13 railroad is going to be entirely underground. The
14 reason it looks a little bit different on the map is
15 that we have an overlapping line style there to
16 represent the existing overhead 69 kV line.

17 Q. And in terms of the timing for Circuit 1 and
18 Circuit 2, the intent would be to build the first
19 circuit in that leg going underground along the
20 southern edge of the Schrader substation and then to
21 the railroad, south to the Chandler Heights. That
22 would be constructed as the first phase. And then,
23 depending on the energy demand at Intel and the need
24 for the second circuit, that would be the piece that
25 we'd be co-locating with the San Tan-to-Schrader 230

1 line, do I have that part right?

2 A. That's correct.

3 Q. Okay. All right.

4 A. Okay. So with that, that concludes the
5 segment between Schrader and RS-28.

6 So I'll talk a little bit about RS-28 here.
7 That's located at the southern edge -- not the edge,
8 but the southern portion of the Intel campus on roughly
9 23 acres. It will be located roughly 650 feet to the
10 north of the Sun Lakes property boundary here and fully
11 enclosed within a 12-foot-high masonry block wall
12 around the entire perimeter. As just a talking point,
13 the existing 69 kV substations that will eventually be
14 retired are located directly to the north of the RS-28
15 substation today.

16 From there, the intent is to continue
17 constructing, in this case, two circuits from RS-28
18 roughly .3 miles to the west to the edge of Intel's
19 property and the Old Price Road alignment. And from
20 there, we would transition to an overhead
21 double-circuit 230 kV line that will follow the Old
22 Price Road alignment all the way to the existing
23 Henshaw substation.

24 Couple things to note about that. Like I was
25 talking about earlier, we have an existing

1 double-circuit overhead 69 kV line that exists through
2 this entire corridor. And the intent is to co-locate
3 those existing 69 kV circuits with the new 230 kV
4 overhead line. Like Mr. Derstine talked about already,
5 we do require flexibility to place the new line either
6 on the east or the west side of the Old Price Road
7 alignment. And regardless what alignment we choose,
8 we'll place the new 69 kV circuits on the same tubular
9 structures as the new 230 line will be on.

10 MEMBER HAMWAY: Mr. Chairman.

11 CHMN. KATZ: Yes, Ms. Hamway.

12 MEMBER HAMWAY: I have a quick question. So
13 in a previous application we learned that these fabs
14 were extremely sensitive to electromagnetic fields and
15 they needed to be around -- the measurement needed to
16 be about 1 milligauss. So by undergrounding it, does
17 that take away that requirement, or does Intel have
18 that same limitation about the vibrations?

19 MR. HEIM: So Intel has not had a discussion
20 with SRP about any specific sensitivity to EMF.

21 And in direct response to the question about
22 how undergrounding affects EMF, EMF exists whether you
23 place the line overhead or underground, but the profile
24 of the electromagnetic field is somewhat different. In
25 general, what you find is that if you place a line

1 underground, the EMF profile tends to be more centered
2 on the duct bank and dissipates fairly quickly as you
3 move laterally away from the duct bank more so than you
4 would see with an overhead line.

5 MEMBER HAENICHEN: Mr. Chairman.

6 CHMN. KATZ: Mr. Haenichen.

7 MEMBER HAENICHEN: Mr. Heim, this question
8 has to do with the kind of disturbances -- electrical
9 disturbances that would bother a semiconductor
10 manufacturer such as Intel or others. That's what this
11 question is about.

12 MEMBER HAMWAY: My question?

13 MEMBER HAENICHEN: No, my question.

14 MEMBER HAMWAY: Oh, okay.

15 MEMBER HAENICHEN: Don't you take my
16 question.

17 MEMBER HAMWAY: No, I'm not taking your
18 question.

19 MEMBER HAENICHEN: Here is the question: Has
20 SRP or the electrical industry in general had enough
21 experience at this point with undergrounding
22 high-voltage transmission lines to say that
23 undergrounding versus overhead -- in terms of those
24 disturbances that would bother a semiconductor company,
25 which one is better? Which one has a better record?

1 MR. HEIM: And to clarify, by "electrical
2 disturbance" you're talking about an actual fault or --

3 MEMBER HAMWAY: Something that causes it to
4 lose a whole batch of wafers that are in process.

5 MR. HEIM: So from an electrical industry
6 perspective, and I think Intel would probably share
7 this perspective, I wouldn't characterize one as better
8 than the other. They're just different from one
9 another.

10 So in the case of an underground transmission
11 line, it's not exposed to the open environment,
12 therefore if you're going to have an issue with an
13 underground line, it's generally going to be related to
14 something inherent with the undergrounding system
15 itself, either a defect in a termination or a defect in
16 a splice; whereas, with an overhead line, they're open
17 to the environment, and so a lot of the disruptions
18 that we experience with overhead lines tend to be
19 related to weather events, whether it's debris or
20 storms making their way into an overhead conductor and
21 causing a fault condition.

22 So what tends to happen through the life
23 cycle of an overhead line is we will have
24 short-duration, intermittent outages or faults
25 associated with things like weather disturbances or

1 contamination or something like that. In the case of
2 an underground line, they tend to have failures or
3 issues either when they're very new, so a recently
4 installed -- if we have an issue with workmanship or
5 material defects, those will generally become apparent
6 in the near term as that line is operated, or they will
7 have an experience as they reach the end of their life
8 cycle, but generally not in the middle.

9 And so from that perspective, underground
10 lines can offer a long duration period of time without
11 interruptions. But the downside of that is that if you
12 experience an issue on underground lines, generally the
13 repair is going to be more time consuming because that
14 is indicative of a failure of a splice or a piece of
15 cable, which can take a lot longer to address and fix
16 versus a tree limb or something that made contact with
17 an over headline. So you're just trading one issue for
18 another, from our perspective.

19 MEMBER HAENICHEN: Okay. Well, let me ask
20 the question in a different way. I was really looking
21 for statistics. From a customer's point of view, is he
22 more or less likely to have a problem like the kind we
23 were discussing with the underground as opposed to the
24 overhead, or is there just not enough experience yet to
25 tell?

1 MR. HEIM: So I actually have a slide on this
2 later in the slide deck. The statistics on SRP's
3 underground transmission faults or issues are slim.
4 We've had underground systems installed since the
5 mid-'90s, and to date we've experienced only two faults
6 on those systems. Certainly we've experienced more
7 faults on our overhead transmission system in that
8 period of time. But back to the original point, the
9 duration of the outages associated with those are
10 fundamentally different from one another. And that's
11 why we don't necessarily say one is better than the
12 other; it's just trading one risk for another.

13 MEMBER HAENICHEN: But what would a company
14 like Intel pick if they had their choice?

15 MR. HEIM: They, in our discussions with
16 them, share the same perspective that I just reflected.
17 It's not necessarily a preference for one or the other,
18 just a recognition of the different risk profile that
19 each one brings.

20 MEMBER HAENICHEN: See, I've been involved in
21 a lot of these hearings over the years. And from the
22 perspective of the public, the homeowners and so forth,
23 it's a viewshed issue. They don't give a darn about
24 the failure rate and all that kind of stuff. But from
25 a manufacturer that has tens of millions of dollars

1 worth of in-process work at risk, it's a whole
2 different ball game. They want to be sure that that
3 electrical energy is going to be high quality and
4 steady during the course of operating their facilities.
5 So it's a different ball game altogether.

6 MR. HEIM: That is correct. And one of the
7 things that we'll talk about is the level of redundancy
8 that's built into the system that we're serving Intel
9 with. And one reason for that is that if we were to
10 experience an issue with one of the underground
11 systems, the time to repair that could take a while.
12 And so what we've developed is a system that has
13 redundancy, that takes that into account, so that we're
14 not interrupting Intel as a function of an issue with
15 either on overhead or an underground line.

16 MEMBER HAENICHEN: What's the highest voltage
17 underground lines that your company has put in, 230?

18 MR. HEIM: SRP's is 230 kV.

19 MEMBER HAENICHEN: Well, it's not an easy
20 problem to make judgments on.

21 MR. HEIM: That's a true statement.

22 MEMBER HAENICHEN: Yeah. Thank you.

23 BY MR. DERSTINE:

24 Q. I guess on that point that Haenichen Member
25 is raising, Intel has made the decision to underground

1 the new 230 lines on its campus, is that right?

2 A. That's correct.

3 Q. So whatever the calculus is on Intel's part
4 concerning this project and these new 230 lines, they
5 have elected to cover the cost and made the decision to
6 go with underground construction?

7 A. Yes. And I'll touch on a little bit of why
8 they took that decision a little bit later in the
9 testimony. Just from a reliability perspective, I'll
10 highlight that especially the Henshaw-to-RS-28 circuits
11 are, in fact, a hybrid of an overhead/underground line.
12 And so from that perspective, Intel and the service to
13 their substation has a reliance upon both an
14 underground and an overhead circuit. And so that, I
15 think, speaks to their perspective, as well as ours, is
16 that they don't necessarily treat the reliability of
17 those two things separate from one another.

18 MEMBER HAENICHEN: One more question from me.
19 Has your company considered the possibility, when you
20 put in an underground system like this, that
21 transmission voltage -- putting extra sets of
22 conductors in there just in reserve? In case there is
23 a failure, you can just quickly hook them up?

24 MR. HEIM: The answer is yes and no. And
25 again, I'll talk about this in more detail later, but

1 the cost of the cable itself is so significant that we
2 don't preinstall cables as spares. But we do include
3 spare conduit positions within each duct bank so that
4 if we need to replace a cable, we can. But then that
5 allows us to keep a spare cable on hand off site so
6 that it can be deployed to any specific failure
7 locations.

8 MEMBER HAENICHEN: And these empty conduits
9 that you have in there for future use, is there a pull
10 thread or something going through them so you can --

11 MR. HEIM: Yes, sir. The industry term is a
12 mule tape. Don't ask me why it's called that.

13 MEMBER HAENICHEN: Mule tape. Okay. Very
14 interesting.

15 BY MR. DERSTINE:

16 Q. You've fielded some questions on the
17 undergrounding segments. I think you've covered the
18 Schrader section that is largely underground, and you
19 were spending some time taking the Committee through
20 the Henshaw route on down to Intel. Did you cover what
21 you needed to cover there in terms of discussing that
22 component of the project?

23 A. I think I did. And we'll have the
24 opportunity to talk more later if I didn't, I think.

25 Q. Okay. The one thing I wanted to touch on.

1 When you were pointing to and showing the portion of
2 the project from Schrader that goes through this
3 residential area, you testified that you were going to
4 install a second duct bank there to avoid tearing up
5 those streets a second time when you're ready to bring
6 in that second circuit, did I have that right?

7 A. That's correct. So that's just limited to
8 the portion along Lake Drive and Chaparral between
9 Dobson Road and Alma School Road as the only locations
10 along the project route where we're more within a
11 residential area as opposed to a major arterial road.

12 Q. And why are you going through the residential
13 area anyway? Why don't you just bring that underground
14 route straight along Chandler Heights Boulevard
15 straight to the Intel campus?

16 A. At the intersection of Chandler Heights and
17 Alma School, Chandler Heights Road stops here, so
18 there's no actual roadway that makes its way east and
19 west between that intersection and the Intel campus.
20 It's just residential property. And therefore, the
21 route that we're showing here is the only technically
22 feasible route to make that connection.

23 MEMBER HAENICHEN: Mr. Heim, later in your
24 presentation are you going to cover the need for
25 cooling of the underground lines?

1 MR. HEIM: Yes, sir.

2 MEMBER HAENICHEN: Thank you.

3 BY MR. DERSTINE:

4 Q. So we've -- you've covered the routes. Is
5 this the point in time where it makes sense to take on
6 the flyover simulation and show the routes from the
7 air?

8 A. Let's give it a go.

9 Q. Take a minute and tell us, in terms of how
10 the flyover simulation is prepared, where we're going
11 to start and orient the Committee to the starting point
12 and where we'll go from there.

13 A. All right. I think the flyover should happen
14 on the left screen. Let me see if I can get my map on
15 the right here.

16 Megan, can you put this one on the left
17 screen so I can have R27 up on the right screen? We
18 can do that too.

19 Okay. So Mr. Derstine, to your question,
20 we're going to start at the east end of the project at
21 Schrader substation, and then we'll make our way south
22 along the Union Pacific Railroad, west along Chandler
23 Heights Road, north on Alma School, west through Lake
24 and Chaparral, and then onto the Intel campus, and then
25 from there make our way north along Old Price Road.

1 Okay. So here we are looking west toward the
2 Schrader substation. And it's bounded on the east side
3 by the consolidated canal, which is just out of the
4 view behind us. And then the overhead transition
5 corridor that we've noted ends at the Union Pacific
6 Railroad alignment, which I'm highlighting on the right
7 screen here.

8 CHMN. KATZ: Is there any way that we can
9 follow that with a cursor so that the virtual folks can
10 follow?

11 MR. HEIM: Yep, there we go.

12 So here is the Union Pacific Railroad
13 corridor.

14 And before we start making our way along the
15 corridor, I just want to highlight a number of
16 important features in this frame so everybody can kind
17 of orient themselves to the challenges that SRP is
18 trying to solve in this particular location and some of
19 the opportunities that exist there.

20 Like I touched on previously, the 230 kV
21 buswork within Schrader substation is located at the
22 eastern side of the substation, so that's what I'm
23 highlighting here. And then in the center of the
24 substation, that's where the existing 69 kV buswork is
25 located. And then ultimately, at the extreme west end

1 of the station we have a distribution substation there
2 that takes 69 kV down to 12 kV voltages that then go on
3 to serve the neighborhoods in this immediate vicinity.

4 The transmission lines I talked about briefly
5 that are connected to Schrader. Within this blue
6 corridor here, that is where the existing
7 Schrader-to-Corbell 230 kV line is located, so that
8 goes west out of the substation and then turns north
9 along the Union Pacific Railroad corridor. So that's
10 the overhead line that SRP intends to reconstruct to a
11 double-circuit corridor in order to make our transition
12 to underground here at the Union Pacific Railroad.

13 BY MR. DERSTINE:

14 Q. And just looking at your legend in the top
15 left, those big lime green Xs indicate what?

16 A. So these green Xs indicate the location of a
17 riser structure, so that's where SRP makes a transition
18 between an overhead transmission line to an underground
19 duct bank.

20 And so we have two of those here. We've got
21 one at what is basically the southeast quadrant of
22 Schrader substation, and so this will be the
23 approximate location of the first riser structure that
24 SRP constructs. And that's to handle the first circuit
25 that will go underground out of the station and then

1 follow an easement that SRP already owns along the
2 southern edge of the substation all the way to the
3 Union Pacific Railroad tracks. Like I noted before,
4 for the northern circuit, which would be the one that
5 SRP intends to build second, we would reconstruct the
6 existing overhead line to handle the second circuit and
7 then make that underground transmission line transition
8 at the riser structure here at the Union Pacific
9 Railroad corridor.

10 Couple other notes on this view before we get
11 moving. There are a total of six 69 kV circuits that
12 make their way west out of Schrader substation. Two of
13 those exit from the southern edge of the substation and
14 then turn south along the Union Pacific Railroad
15 corridor, so that's the existing overhead line that we
16 referenced previously. And then a total of four of
17 them make their way west out of the northern side of
18 the substation, and all of those then turn north to go
19 north along the Union Pacific Railroad corridor also.

20 What's not in this view is there are two more
21 230 kV circuits that make their way to the east from
22 Schrader substation, so they would continue a little
23 bit further out of view, in essence, down the bottom of
24 the screen and to the east along Ocotillo Road.

25 Last thing I'll note is the amount of

1 development adjacent to Schrader substation. So to the
2 north, satellite imagery hasn't quite caught up with us
3 yet, but these are all existing homes that were
4 recently constructed. And so the imagery in this view
5 isn't totally up to date. To the south is the existing
6 Pine Lake community, and that directly abuts the
7 southern edge of the Schrader substation.

8 And with that, I think we can start our
9 flight.

10 (Virtual tour plays.)

11 MR. HEIM: Okay. Like I noted, the first
12 circuit 60 SRP intends to build will be along the
13 southern edge of that parcel and then it will join that
14 future second circuit. And the intent is to build both
15 duct banks along the eastern edge of the Union Pacific
16 Railroad corridor. The reason for that is two things.
17 First is the existing 69 kV circuit is located on the
18 west side, so that would be a construction issue to
19 deal with. And also, crossing underneath a railroad
20 track requires fairly specialized construction, and
21 it's easier for us to do that as we cross Chandler
22 Heights Road versus doing it up by the Schrader
23 substation itself.

24 As we make our turn to go west along Chandler
25 Road -- Chandler Heights Road, the entire corridor is

1 fully developed, so there's residential and commercial
2 development on either side of the road. And at this
3 point in time, SRP is still working with the City of
4 Chandler to define the location of those circuits
5 within the roadway based on existing underground
6 utilities and other technical constraints.

7 So here is where we approach Alma School, and
8 if we could pause right there for a second. Maybe
9 rewind a bit. There we go. Right there.

10 So here is where we make our turn to go north
11 along Alma School Road. And this, I think, gives a
12 good perspective on why we can't continue further to
13 the west. This is where Chandler Heights Road dead
14 ends and, therefore, the requirement to take a little
15 bit of a more meandering path to get to Intel's campus.

16 And as we make our turn on Alma School,
17 there's primarily commercial property on both sides of
18 the roadway here until we get to Snedigar Park located
19 here on the east side as then some residential
20 development as we approach Lake Drive.

21 And then get ready with the pause button,
22 Megan, as we turn left right here.

23 So here is our turn onto Lake Drive, and this
24 is the first roadway that I mentioned where the intent
25 is to build both circuits' worth of duct banks as

1 opposed to just the one. And what I'm highlighting
2 here on the screen is the -- this is the parking lot
3 for the Chandler Traditional Academy, so that's an
4 elementary school. And that's a great example of why
5 SRP and Chandler are striving to really limit
6 repetitive construction disruptions in this area. The
7 intent is to do all of the construction in this area
8 during school and holiday breaks to eliminate the
9 potential for issues with students, parents trying to
10 get to the school during the school year. And with
11 constructing both duct banks, that's going to be a lot
12 of choreography that has to happen during the
13 construction phase. And so the intent is, let's just
14 do that the one time and have it over with, as opposed
15 to doing that up to two times for the two circuits that
16 we're going to construct.

17 BY MR. DERSTINE:

18 Q. I know you're going to get into this in our
19 chapter where we're actually going through the methods
20 for underground construction, but can you just define
21 what a duct bank is or describe that for the Committee?

22 A. Sure. So a duct bank is a collection of
23 conduits that we put in a trench within the ground, and
24 it allows us to house a number of circuits underground
25 and pull cable through those conduits between splicing

1 points. And so a duct bank is really kind of like an
2 underground subway for underground transmission cables,
3 is the best way I can describe it. So it acts as the
4 vehicle for us to get cables from one location to
5 another.

6 MEMBER HAENICHEN: And how deep are these
7 buried?

8 MR. HEIM: So our standard burial depth for
9 an underground 230 kV line duct bank is to have the top
10 of the duct bank at about 4 feet deep. And then the
11 duct bank itself consumes about two and a half feet of
12 depth, and so the bottom of the trench is in the
13 6-and-a-half-foot range. That's what we strive for.
14 Sometimes obstacles underground require us to go deeper
15 than that, but our preference is to keep them as
16 shallow as we can for heating purposes.

17 BY MR. DERSTINE:

18 Q. All right. Why don't you continue on.

19 A. Okay. So we're continuing west along Lake
20 Drive, and then here comes Chaparral Way. And so we
21 make a left-hand turn onto Chaparral. Very similar
22 roadway to what we saw on Lake Drive. And this takes
23 us out to Dobson Road, where we then transition onto
24 the Intel campus itself.

25 As we get onto the Intel campus, the game

1 plan is to make our way toward the southern edge of the
2 campus.

3 And then if we can pause, right about here
4 would be good.

5 So this is the main east/west underground run
6 along the Intel campus, and then you can see in the
7 foreground is the outline of the new RS-28 substation.
8 And so, again, that will be a 23-acre substation site
9 surrounded by a 12-foot masonry block wall and is
10 located about 650 feet to the north of the Sun Lakes
11 property boundary that you can see with the tree line
12 in the distance here.

13 One note about this simulation is that we
14 don't have a representation of what the Intel campus
15 will look like here. So currently this is showing the
16 undeveloped state of the campus where Intel owns this
17 parcel, but they've been subletting it for agricultural
18 purposes. The intent, at this point, is for Intel to
19 redevelop this entire parcel.

20 So to the west of the RS-28 substation, and
21 we'll see this better as we fly along, that's where the
22 new fabs will be located. And then to the east, here
23 in the foreground, this will be administrative and
24 support buildings. And the south, this entire stretch
25 east to west will be parking and storm water retention,

1 with a landscaping barrier immediately adjacent to the
2 Sun Lakes community. So that's a high-level overview
3 of what the Intel campus will look like, even though we
4 don't have a way of representing it in the rendering
5 here.

6 So let's keep on making our way to the west.
7 What you're seeing here is the existing retention basin
8 that Intel uses. So this will remain in place, and
9 then there will be another parking structure here.

10 As we reach the Old Price Road, this is where
11 we get to our next riser structure. So this is the
12 transition point where we then go to an overhead
13 transmission corridor all the way to the new Henshaw
14 substation -- or, existing Henshaw substation, rather.

15 So if we can maybe -- well, let's go a little
16 bit further.

17 MEMBER GRINNELL: Mr. Chairman.

18 CHMN. KATZ: Yes, Mr. Grinnell.

19 MEMBER GRINNELL: Mr. Heim, that corridor is
20 already in place, we don't have to address this at all?

21 MR. HEIM: We do. And I'll give a little bit
22 of history on why that's the case. We did have a prior
23 siting case that involved this exact -- well, a very
24 similar corridor to this, and I'll take you through the
25 history why we relinquished that application and

1 therefore need to seek approval from the Committee on
2 that.

3 MEMBER GRINNELL: But there's already
4 currently a 69 kV line on that corridor, correct?

5 MR. HEIM: There is an existing 69 kV line.
6 So there's a double-circuit 69 kV line along this
7 entire corridor. As a 69 kV line, like Mr. Derstine
8 said, that's not subject to a CEC. And so as we
9 redevelop this to be a 230 kV corridor, that's where
10 the CEC comes into play.

11 MEMBER GRINNELL: Okay. And then on the Gila
12 River Indian Community, I'm assuming there's
13 cooperation all along on this issue?

14 MR. HEIM: Correct. We've been in
15 coordination with the Gila River Indian Community.
16 They're part of our notification area and are aware of
17 the project. The proposed 230 kV line will not be
18 located on the Gila River Indian Community, so they
19 don't necessarily have jurisdiction over how we place
20 it on the non-GRIC side of the fence there.

21 So before we move on, Megan, this is a good
22 visual of how the corridor looks or will look. To the
23 east here you can see this is Intel's existing fab. So
24 this is the type of structure that will be replicated
25 further to the south as they add their new fabs.

1 And then further in the distance, north of
2 Ocotillo Road is the City of Chandler's water treatment
3 campus. And that lends to -- really the overall view
4 of this portion of the corridor is that we have
5 industrial sites all along the eastern side of the
6 corridor and then agricultural uses along the west side
7 on the Gila River Indian Community.

8 All right. Let's keep going. So as we make
9 our way north, the existing 69 kV circuits in this area
10 are two of the four circuits that serve Intel's campus.
11 And like I mentioned, there's a lot of sensitivity
12 toward maintaining service to Intel as we go about the
13 construction process for this line. And one of the
14 reasons that we're requesting flexibility to locate the
15 new 230 line either on the east or the west side of Old
16 Price Road is to give us flexibility to manage outages
17 on the existing 69 kV circuits as we go through the
18 construction process.

19 As we approach Queen Creek Road, this is
20 where Old Price Road stops, and then there's actually
21 no roadway as we make our way for the final piece into
22 Henshaw. This is the existing Wells Fargo campus to
23 the east, and then there's a health care facility on
24 the GRIC to the west. We expect development on these
25 undeveloped parcels to look very similar to what we see

1 on the Wells Fargo campus. And the intention is to
2 obtain an 80-foot easement behind those properties
3 between the boundary with the Gila River Indian
4 Community and the adjacent development to the east of
5 the corridor.

6 And here we arrive at the freshly mowed lawn
7 of Henshaw substation.

8 BY MR. DERSTINE:

9 Q. The routes that you've taken us down,
10 starting at Schrader, working our way down the railroad
11 and then onto Chandler Heights and then working through
12 the neighborhoods to get to the Intel campus and then
13 as we turned up along Old Price Road, were those --
14 those routes were what were essentially discussed and
15 worked out with the City of Chandler or were these
16 decisions made by SRP?

17 A. All of the routing that I just went through
18 was developed in concert with the City.

19 Q. And the decisions about where to underground
20 and where to build overhead, those were also
21 coordinated and were part of that early collaboration
22 with the City of Chandler?

23 A. Correct.

24 Q. Old Price Road, I think you indicated it ends
25 at one point. I assume -- there's an Old Price Road.

1 Does that mean there's a New Price Road?

2 A. There is a New Price Road. So Old Price Road
3 terminates at the intersection with Queen Creek Road
4 right here. The New Price Road makes its way off the
5 map to the north and then follows my laser pointer down
6 until it intersects with Dobson right here.

7 Q. And so Old Price Road is kind of the back
8 side of many of those businesses. You mentioned the
9 Wells Fargo campus and the other businesses that are
10 within the Price Road corridor. The portion of Old
11 Price Road up to the point where it ends is kind of the
12 back side of those businesses, and we'll be stringing
13 this new overhead transmission line along kind of that
14 backyard of those businesses and industries?

15 A. That's correct. And then as we go south from
16 Queen Creek along Old Price Road, that's primarily just
17 access for the water treatment facilities and Intel's
18 campus itself. It's not generally used for any other
19 purpose than that.

20 Q. All right. Anything else you wanted to
21 mention or make note of for the Committee that wasn't
22 in the flyover but they should understand concerning
23 these routes?

24 A. I think that covered it.

25 Q. I think now we're going to spend a little bit

1 of time going back in time, right? You want to talk
2 about some of the two prior siting cases that involved
3 projects or proposed projects that were within this
4 Price Road corridor area?

5 You and I have gone back and forth on this a
6 little bit. I've continued to say, Zack, we really
7 don't need to cover this old history. And you said,
8 no, Matt, we really do. So let's talk about why we do,
9 and then I'll have you cover it, okay?

10 A. So can we just acknowledge who won that
11 argument?

12 Q. Yes. You are the winner, so let's talk about
13 it.

14 A. All right. Well, I, for one, think that
15 context is important. So for the Members of the
16 Committee that think it is too, you're welcome. If
17 you're not one of those Members, I apologize and this
18 won't take too long.

19 So SRP has had two prior siting cases before
20 the Committee that invoked the name Price Road
21 corridor, and so I just want to give everyone a brief
22 history for what those cases were and some of the
23 relationships that exist between those cases and what
24 we're proposing with HIP today.

25 So in 2015, that was the first case that SRP

1 came before the Committee with. That was Case No. 170
2 and was labeled as the Price Road Corridor Project, and
3 it included some similar scope elements to what we're
4 before the Committee with today. So the full scope of
5 that project was to, focusing on R30 here, was to build
6 an overhead double-circuit 230 kV line from the
7 existing Knox substation, which is located near the
8 Loop 202 and I10, and construct an overhead line to
9 the, at that time, proposed RS-27 substation at Germann
10 and Price Road. If you've been keeping track of our
11 maps, this is now Henshaw substation and was energized
12 in April of 2021, so not very long ago. And then from
13 there, we would construct an overhead single-circuit
14 230 kV line to RS-28, which would be located on the
15 Intel campus, and then a single-circuit overhead 230 kV
16 line that would make its way north along the Union
17 Pacific Railroad corridor all the way to Schrader
18 substation.

19 The history on that project is that we came
20 before the Committee, in a hearing like this, and
21 gained approval for the portions of the project that
22 are highlighted in green. So RS-28, the short segment
23 over to Old Price Road, RS-27, and then the overhead
24 piece along the Union Pacific Railroad. So the irony
25 is that here we are again siting a line with you that

1 has gaps in it on the map, just for a different reason.
2 The reason at this point in time is that all of the
3 remaining portions of the project were located on the
4 Gila River Indian Community, and therefore outside the
5 jurisdiction of the Line Siting Committee.

6 The Line Siting Committee at the time voted
7 to recommend approving the CEC on this project.
8 Subsequent to that hearing, the Gila River Indian
9 Community Tribal Council denied SRP's routes on the
10 community itself, and that followed a four-year siting
11 process to gain NEPA approval and all of the other
12 approvals that are required to site a line on the
13 Indian Community. So upon that denial, SRP withdrew
14 our CEC application for Case 170. So that's part of
15 the story.

16 Then we move to --

17 Q. Can I stop you there for a minute? Go back.
18 If I'm looking at the map for the 2015 case, the
19 highlighted segment in green, that is the same segment
20 along the railroad that we're now going to be
21 constructing the 230 circuits underground. Do I have
22 that right?

23 A. That's correct.

24 Q. So in 2015 the Committee approved an overhead
25 route along the railroad there. That was approved by

1 the Siting Committee. But by the time you got to the
2 Commission, the Gila River Indian Community, the tribal
3 leadership, denied the application for the permit or
4 the right-of-way, whatever the correct terminology is,
5 for the remainder of the project. And so you were left
6 to withdraw that application and that project was --
7 the 2015 project was never constructed?

8 A. That's correct. And I guess while we're on
9 it, I should probably highlight one key difference
10 between that case and this one is -- I noted how we
11 only required a single-circuit from RS-27 to RS-28 and
12 on to Schrader. That's a very important difference
13 from what we're here with today, which is a
14 double-circuit line for that entire distance. And that
15 gets to part of the conversation we were having about
16 the need for redundancy and capacity into Intel's
17 campus based on their current development plan.

18 Q. And the 2015 case was -- the need for that
19 was based on load projections to serve what was
20 anticipated at the time would be new data centers and
21 other sorts of businesses within the Price Road
22 corridor that -- ultimately, I guess Chandler changed
23 its land use and plans and so the load forecast changed
24 after the 2015 case. Do I have that part right?

25 A. That's correct.

1 So that takes us to the 2017 case, so that's
2 Case 175. And Mr. Derstine is correct, there's really
3 two things that happened between 2015 and 2017. The
4 first is that SRP went to work trying to find an
5 alternative route that was not on the Gila River Indian
6 Community; but in parallel, the City of Chandler was in
7 the process of reevaluating their general plan.

8 The initial scope of Price Road corridor in
9 2015 was based on a general plan from the City which
10 emphasized data centers to a higher degree than the
11 plan that was published prior to this 2017 case. And
12 in response to that, SRP lowered the load forecast as
13 the City moved away from emphasizing data centers
14 toward employment-based development that caused us to
15 revise our load forecast downward. And therefore, what
16 we determined is that we could actually serve the
17 revised load forecast with a simplified scope of the
18 project being just this double-circuit 230 kV line
19 between Knox substation and RS-27, now Henshaw. And
20 that's what led to -- that revision of the load
21 forecast is what allowed us to serve the area with the
22 simplified scope. The Committee then approved the CEC
23 in September of 2017. And like I mentioned, we
24 energized it in April of 2021.

25 Few items I just want to highlight related to

1 these topics. The first is, this project, the dashed
2 black and green here between L2 and L3 and also between
3 U1 and U2 here represent SRP's first installation of
4 underground 230 kV transmission lines.

5 The other thing that's notable between these
6 two cases is that in both cases the load forecast for
7 Intel was the same. SRP's ultimate build-out -- or,
8 Intel's ultimate build-out was forecasted to be around
9 470 megawatts of total load. And in this revision of
10 the project in 2017, the intent was to serve Intel
11 using additional 69 kV lines out of RS-27 to serve
12 their growth. And that's the common thread between
13 these two cases that we wanted to make the Committee
14 aware of is just how different Intel's load forecast is
15 with this new expansion compared to what we had talked
16 about previously.

17 Q. When I listened to the City's witness, he
18 indicated that the City and SRP had some experience in
19 working together on a prior project. This was that
20 project, right?

21 A. This was that project.

22 Q. And the smaller segment shown, L2, L3, that's
23 undergrounded, why was that placed underground?

24 A. So the segment, L2 to L3, is located directly
25 south of the north/south facing runway in Stellar Air

1 Park. And for safety reasons, SRP placed this segment
2 of the project underground to allow aircraft in and out
3 of the airport.

4 Q. And the other piece, U1 to U2?

5 A. So U1 to U2 is located within the Price Road
6 -- New Price Road road right-of-way. And that is the
7 similarity between the agreement that SRP had with the
8 City of Chandler with this case -- "this case" being
9 the 2017 case -- in comparison to the agreement for
10 HIP.

11 Q. And so Case 175, the 2017 case, is really
12 where SRP and the City gained some experience on how to
13 work together in terms of planning a project and how to
14 minimize the impacts of a project and make sure it
15 works for the City and for the community. Do I have
16 that right?

17 A. That's correct.

18 Q. Anything else the Committee should know about
19 Case 175?

20 A. I think that about sums it up.

21 Q. All right. So I guess you were right. It
22 made sense to cover that. I apologize.

23 A. I don't want to point fingers.

24 Q. All the time we spent arguing about it.

25 So we've talked about the history. I think

1 you want to now turn to the planning process. And you
2 and I mentioned that SRP gained and learned from the
3 experience from the 2017 case in terms of how to work
4 with the City of Chandler, and probably the City
5 learned from that experience as well. Why don't you
6 talk about the planning process for this project.

7 A. Sure. So I think what we wanted to do is
8 highlight the degree of collaboration between SRP, the
9 City, and Intel as we've developed the scope of this
10 project, and importantly, give a sense to the Committee
11 how the project has evolved from the point in time that
12 we first started working with the City to what we're
13 before the Committee with today. And so we just want
14 to provide a little bit of context for how that whole
15 process went. And I'll use the timeline on the left to
16 kind of go along with the changing map on the right
17 screen to help folks understand how that process went.

18 So let's contemplate the first iteration of
19 HIP. And so focusing on Slide L24 on the left screen,
20 I'm highlighting the shaded region on this timeline
21 that represents the period in time from March 2021,
22 when Intel first announced their expansion, to
23 August 2021 as encapsulating the period of time between
24 Intel's announcement to SRP's first virtual open houses
25 where we were having our first dialogue with the public

1 about the scope of the project.

2 So the way the project looked at that point
3 in time, similar routing to what we're showing the
4 Committee today, but the key differences being along
5 the Union Pacific Railroad corridor south of Schrader
6 here highlighting on R34, that component of the project
7 was proposed to be overhead. And similarly, the
8 east/west piece on the Intel campus was proposed to be
9 overhead. And I'll go through the decision making that
10 got to where we are today on both of those segments,
11 but let me first give a little bit of context for the
12 decision making with the City of Chandler.

13 So following Intel's announcement in March of
14 2021, SRP immediately set about evaluating their load
15 request and how our system would respond to the
16 magnitude of load that Intel was requesting, the
17 900 megawatts. And what we quickly determined was that
18 we really needed four 230 kV circuits to serve the
19 Intel campus. But given the similarities that we
20 already knew about from the prior Price Road corridor
21 siting cases, we were able to draw upon that and
22 develop the scope of work here where we would increase
23 the number of circuits between Schrader and RS-28 to
24 include a second circuit, and that would provide the
25 capacity needed to serve both Intel's near-term growth

1 and their long-term growth.

2 Once we had determined that, that's when we
3 held our first meeting with City of Chandler staff to
4 alert them to the infrastructure requirement that would
5 come along with Intel's expansion. And the City staff
6 alerted us to their desire to keep from building new
7 overhead transmission lines in areas where they don't
8 already exist. And so as a reminder for where they
9 already exist, we have the existing double-circuit
10 69 kV lines along Old Price Road and we have the
11 existing 69 kV lines along the Union Pacific Railroad
12 north and south on R34.

13 So a high-level takeaway from that
14 conversation with the City of Chandler is that, based
15 on that criteria, what we were really on the hunt for
16 was a way to get east and west from Schrader over to
17 the Intel campus as a way of honoring the City's
18 requirement. And so we evaluated a number of
19 underground routing options with City staff.
20 Obviously, City staff have a very good understanding
21 for the City's infrastructure within these roadways,
22 and so we worked with them to understand what kind of
23 the underground landscape was in terms of utilities and
24 things that would be in the way of our proposed
25 transmission line if we were to place it underground.

1 So I'll kind of start with the routes that
2 got us to the route that we're proposing. If you were
3 to look at this map without the lines drawn on it,
4 probably an intuitive way to get east and west from
5 Schrader over to Intel would be to follow Ocotillo Road
6 as the only contiguous arterial road that gets you
7 between those two points. And so we took a hard look
8 at that.

9 What's unique about Ocotillo, it's not like
10 most arterial roads when you look at it from an
11 underground utility perspective. The reason for that
12 is that it's a major thoroughfare for water treatment
13 facilities that feed into the City of Chandler's water
14 treatment campus here just to the north of the Intel
15 campus. So most, I would say, arterial roadways have
16 what I would call the usual suspects in terms of
17 underground utilities. You'll have a sewer line, a
18 water line, a storm drain. In the case of Ocotillo,
19 there's 11 parallel pipelines within that roadway, and
20 that's the usual suspects, plus brine lines, force
21 main, reclaimed water, all of which are related to the
22 water treatment campus in Chandler. And there's just
23 simply no space to put an underground duct bank within
24 that roadway, and City of Chandler staff was very
25 helpful in helping us understand that early on in the

1 project.

2 So then that put us to Chandler Heights Road,
3 which, as we talk about Chandler Heights and Alma
4 School, those represent more of what I would call the
5 usual suspects of underground utilities. There's not a
6 high density of underground utilities in that roadway.

7 Now, we did evaluate with City staff
8 alternatives to going overhead along the Union Pacific
9 Railroad corridor here. Principally, the main
10 alternative would be to go down Arizona Avenue.
11 Arizona Avenue, from an underground utility
12 perspective, looks a lot like Chandler Heights. There
13 is space within Arizona Avenue to place an underground
14 duct bank there. The challenge is that you still have
15 to get to Arizona Avenue, and the pathway to do that is
16 along Ocotillo Road, which has all of the same
17 conflicts that I already stepped through.

18 So recognizing those conflicts and the
19 requirements of the City to avoid new overhead lines
20 where they don't already exist, as far as the City of
21 Chandler and SRP were concerned, the underground route
22 that we're proposing here met the criteria of no new
23 overhead lines where they don't exist and was
24 financially and technically feasible to accomplish for
25 both parties. And so this represents the map that we

1 first launched the project in June of 2021 with and
2 then was reflected in our first virtual open houses
3 that we posted in July.

4 Let's step forward to the next place in time
5 here. So this represents the period of time between
6 August and September of 2021, and that was the point in
7 time when SRP was getting ready to have our first live
8 online open houses. And we'll talk a little bit more
9 about the difference between a virtual open house and a
10 live open house later. But, in essence, the virtual
11 open house was an enhanced version of our website where
12 we used videos and so forth to give folks a little more
13 color as far as what the project really was, whereas
14 the live online open house was a Zoom meeting, like
15 we're doing here, where folks had the opportunity to
16 interact with project staff and ask questions.

17 Immediately -- well, during the time that SRP
18 and the City of Chandler were working to evaluate this
19 east/west route, similarly, Intel was working to
20 understand the land use on their campus itself.
21 Probably wouldn't surprise anybody to know that
22 developing a 700-acre semiconductor manufacturing
23 campus is a complex and iterative process, to put it
24 very mildly. And during that phase and time, Intel
25 identified that placing the east/west portion of the

1 project on their campus underground would provide some
2 important benefits to them.

3 First one being is that our underground
4 easements are narrower than an overhead easement. So
5 from a land use perspective, it was to Intel's
6 advantage to limit the amount of land that was
7 dedicated to our transmission easements for their own
8 use as they develop their parcel. And also, if the
9 design process of a campus like this is complicated, so
10 is the construction process. This is going to be a
11 very active construction area for Intel, with lots of
12 overhead cranes and equipment. And again, from the
13 Intel perspective, having our lines underground and out
14 of the way of overhead cranes and other construction
15 equipment was an advantage that they valued. And so
16 for those two reasons, they elected to fund the cost
17 difference to place this portion of the project
18 underground to realize those benefits.

19 Then we fast forward one more time to the
20 version of the project that we're before the Committee
21 with today, and so that starts back in September of
22 2021 and encapsulates the point in time when SRP had
23 our second round of live online open houses. And
24 probably the main takeaway that SRP, the City of
25 Chandler, and Intel heard relative to the prior

1 iteration of the project is that there was a lot of
2 public interest in the proposed overhead segment along
3 the Union Pacific Railroad. And during this point in
4 time, Intel again elected to step in and fund the cost
5 differential to place this remaining 1 mile segment
6 underground.

7 So one last point I just want to make on the
8 Union Pacific Railroad corridor itself is that -- we
9 already talked about the City of Chandler's criteria in
10 identifying where they would fund undergrounding versus
11 overhead based on the fact that there's an existing
12 overhead line in that corridor today. The other
13 challenge associated with the Union Pacific Railroad
14 corridor is that it is a railroad corridor. As such,
15 SRP cannot get a dedicated easement to locate our
16 transmission facilities within that corridor. That's
17 something that SRP has done for overhead transmission
18 lines.

19 The difference is that, when we talk about an
20 underground transmission line, you're now talking about
21 an asset that is, in order of magnitude, more costly to
22 install in the first place, but then if the railroad
23 were to require that to be relocated in the future,
24 then SRP would incur probably an even higher cost to
25 relocate those underground lines to another place at a

1 future point in time. So from a cost and risk
2 perspective, that was not a tenable risk for either SRP
3 or Chandler, as the funding entity, to take on.

4 So as part of the agreement for Intel to fund
5 the cost differential to go along the Union Pacific
6 Railroad, they've also agreed to take on the long-term
7 relocation risk associated with that as the party
8 that's funding the undergrounding in this location.

9 Q. I guess I'm curious, and maybe Members of the
10 Committee are. Did SRP go to Intel and encourage Intel
11 to pick up the cost of undergrounding along the
12 railroad in light of what we were hearing from the
13 neighborhoods along the railroad, or did that decision
14 by Intel come about in a different way?

15 A. That was a decision that Intel took on their
16 own volition. As our customer, SRP can't put Intel in
17 a position to fund off-site undergrounding or aesthetic
18 improvements to our system that are, one, not located
19 on their campus, and two, doesn't have a relationship
20 with the capacity that they require. So we were very
21 careful not to apply pressure to Intel to take that
22 decision.

23 MEMBER HAENICHEN: Mr. Chairman.

24 This might be a good time, Mr. Heim, to tell
25 us what it does cost to underground a high-voltage line

1 per foot.

2 CHMN. KATZ: And that was Member Haenichen.

3 MR. HEIM: Sure. So we've testified before
4 that the cost to underground a transmission line is
5 generally 10 to 15 times more than the equivalent
6 overhead line, and that's true in this case. So in the
7 case of an overhead 230 kV transmission line, those
8 cost anywhere from a million to a million and a half
9 dollars per mile to construct. In the case of a
10 single-circuit underground 230 kV line, same math
11 applies, it's 10 to \$15 million per circuit mile. Like
12 I talked before, that's --

13 MEMBER BRANUM: Looks like the room had left
14 briefly.

15 CHMN. KATZ: Is that Mr. -- or, Member
16 Branum?

17 MEMBER LITTLE: Yeah, I think it came back
18 on.

19 MR. DERSTINE: Did we lose the feed to the
20 Committee Members? Are we okay, George?

21 MEMBER LITTLE: We can see them, but we can't
22 hear them.

23 CHMN. KATZ: Can you hear me now?

24 MEMBER LITTLE: Yes.

25 MR. DERSTINE: Can Member Branum hear us?

1 MEMBER BRANUM: Yes, I can. Thank you.

2 MR. DERSTINE: We apologize for the
3 interruption.

4 MR. HEIM: Okay. Good to go? So where was
5 I?

6 So anyway, so the cost for a single
7 underground 230 kV circuit is about 10 to 15 million
8 per mile. But like I noted, when we add a second
9 underground transmission line, it's literally double
10 that. Versus if I were to build an overhead
11 single-circuit transmission line at 1 to 1 and a half
12 million a mile, adding a second circuit to that might
13 only add 30 percent to the cost as opposed to a hundred
14 percent. So that's where the economic benefit of
15 overhead versus underground comes in.

16 MEMBER HAENICHEN: So in the case of the
17 underground, then, the bulk of that cost is the
18 conductors themselves?

19 MR. HEIM: That is a large chunk, but it is
20 not the only major cost. The underground excavation is
21 very expensive by itself, utility relocations. The
22 labor associated with building an underground line is
23 significant. So there's really -- I can't think of a
24 single component of an underground line that's actually
25 cheaper than the equivalent of the overhead.

1 CHMN. KATZ: You also have concrete expenses,
2 correct?

3 MR. HEIM: Correct. And it's not even usual,
4 normal concrete.

5 BY MR. DERSTINE:

6 Q. And you have -- coming up in your
7 presentation you have a whole chapter on underground
8 construction methods and costs, right?

9 A. We're actually at that chapter right now.

10 Q. That would be the next chapter after we get
11 through the planning process?

12 A. Yeah, as we turn this page.

13 CHMN. KATZ: And just for a timing
14 perspective, we'll be at an hour and a half in about
15 five minutes. I don't know if we want to go a few
16 minutes past that or break at 4:45?

17 MR. DERSTINE: Whatever you prefer. Maybe it
18 would be helpful if we could finish Mr. Heim's
19 discussion on the planning process, looks like he's
20 near the end of it, and then we can break there, and
21 then come back quickly and take on the underground
22 construction piece to finish out the day before public
23 comment.

24 MEMBER PALMER: Question, Mr. Chairman.

25 CHMN. KATZ: What is your thinking, our

1 reporter's thinking?

2 THE COURT REPORTER: I'm fine.

3 CHMN. KATZ: It you get too weary, let us
4 know, because we'll then take a break. And at 5:30
5 we're going to have public comments, if there are any,
6 and I think there's at least one or two.

7 MEMBER PALMER: Mr. Chairman, just a quick
8 question. Are we going to discuss, before we break for
9 the evening, whether we do the tour in the morning?

10 CHMN. KATZ: We can either discuss that this
11 evening or we can do it as our first order of business
12 tomorrow morning, sleep on it.

13 MR. DERSTINE: Well, Mr. Chairman, it may be
14 helpful if we can have that decision today so we know
15 if we need to have the bus and the transportation, et
16 cetera, ready for tomorrow morning.

17 MEMBER PALMER: They would need to know that
18 tonight.

19 CHMN. KATZ: That's fine. I just think that
20 we don't want to go too much longer before we discuss
21 that item -- issue that was just brought up by
22 Mr. Palmer.

23 MR. DERSTINE: Well, if we can finish the
24 planning section, which I think we've just about done,
25 and then take a break, when we come back if you want to

1 go right to a discussion of the route tour and then see
2 if we have any time left to address anything else.

3 CHMN. KATZ: That's fine. You can just
4 finish this section, we'll take about a 10-minute break
5 or so, and then just briefly discuss whether or not we
6 want to do a tour or not.

7 MEMBER PALMER: Very good. Thank you.

8 CHMN. KATZ: Please proceed.

9 MEMBER HAMWAY: Could I ask a quick question?
10 So along the railroad track that Intel's paying for, is
11 that a double-circuit also or just one 230?

12 MR. HEIM: So Intel is funding the
13 construction of the first circuit, and the second
14 circuit is kind of held for future negotiation with
15 them. The intent would be to follow the same
16 alignment, we just haven't gotten to the funding of
17 that piece yet.

18 MEMBER HAENICHEN: But given that, would
19 Intel be willing to pay for more conduit for a future
20 circuit?

21 MEMBER HAMWAY: That was my question. Are
22 they laying the conduit for the second line at the same
23 time?

24 MR. HEIM: No. So same mindset along the
25 railroad corridor as Chandler Heights and Alma School,

1 particularly even more so, the construction aspect of
2 the railroad corridor itself, we don't have traffic to
3 contend with or road closures. And so from the Intel
4 perspective, doesn't bring the -- it doesn't avoid the
5 same downsides that adding a second duct bank through
6 Chaparral and Lake has, where we have all of the
7 challenging logistics with the school and the
8 neighborhood. And so from an Intel perspective, that's
9 a fairly substantial amount of capital investment that
10 isn't necessary required right now and doesn't bring
11 any immediate benefit.

12 MEMBER HAENICHEN: But what about the benefit
13 to SRP? Would they be willing to put those extra
14 plastic pipes in there? It wouldn't cost that much.

15 MR. HEIM: The duct bank that we will install
16 will have two spare conduits in it just in case we
17 experience a cable failure or some kind of issue. But
18 when we talk about double-circuit underground
19 transmission lines, that's actually two separate and
20 distinct underground duct banks, so separate trenches,
21 everything. So there's no economy of scale that comes
22 along with putting in additional conduits for that
23 second circuit.

24 MEMBER HAENICHEN: Because you wouldn't want
25 two 230 lines real close to each other, is that it?

1 MR. HEIM: For heating purposes, we keep them
2 separated.

3 MEMBER HAENICHEN: Yeah, and you're going to
4 go into the heating.

5 CHMN. KATZ: Those questions were from
6 Member Haenichen, and there was a brief question or two
7 from Member Hamway.

8 You may proceed.

9 BY MR. DERSTINE:

10 Q. Tying up our discussion on planning --

11 MEMBER HAMWAY: I just want to make one other
12 comment. Sorry, Mr. Derstine. So the amount of
13 undergrounding that Intel is taking on themselves looks
14 to be about 2 miles. Is that what you are calculating?

15 MR. HEIM: That's pretty close. So it's
16 almost perfectly a mile from Schrader down to Chandler
17 Heights, and then the east/west portion along their
18 campus is about a mile. Where it gets a little murky
19 in terms of the math is that this piece between H2 to
20 RS-28 is, in fact, double-circuit, so the amount of
21 circuit miles they're installing is a little bit more
22 than that. But that's pretty close as far as the
23 trenching distance is concerned.

24 MEMBER HAENICHEN: So it's about 30 million
25 bucks' worth?

1 MR. HEIM: About, yeah.

2 MEMBER HAMWAY: You did that fast.

3 MEMBER HAENICHEN: I just guessed.

4 CHMN. KATZ: I don't think we need to make a
5 record of any small talk between the parties, but let's
6 go ahead.

7 BY MR. DERSTINE:

8 Q. Anything else you wanted to add on the
9 planning, Mr. Heim.

10 A. I think that covers it.

11 Q. All right. We're at the end of the bar graph
12 and the end of the discussion of the planning process.
13 Let's get to the topic of the day. What does it take
14 to put a transmission line underground, I guess, in
15 terms of costs and methods?

16 A. So did we want to do this or take a --

17 MR. DERSTINE: Oh, we want to take our break.
18 Thank you for reminding me. Yeah, this is the right
19 time. I know our court reporter --

20 CHMN. KATZ: And I'm showing it's just about
21 4:46, we'll say 4:45. Maybe back here at 5:00 and then
22 run probably only for about 15 minutes or so, so that
23 we're rested and prepared to handle public comments.

24 MR. DERSTINE: All right. Thank you.

25 CHMN. KATZ: Thank you.

1 (Off the record from 4:46 p.m. to 5:00 p.m.)

2 CHMN. KATZ: The first thing I'd like to take
3 up is whether or not we're going to do a tour. And
4 then we'll perhaps get into some additional testimony,
5 depending on the time. I've asked Mr. Derstine to give
6 us maybe a little overview of what would be done with
7 the tour, the pros and cons of it. And then I'll take
8 up a motion to either do a tour or not do a tour, and
9 if it gets seconded we'll have a discussion and make a
10 decision.

11 MR. DERSTINE: All right. Thank you,
12 Mr. Chairman. Yeah. As I mentioned, Ms. Pollio worked
13 out in advance, in anticipation of the possibility that
14 the Committee would want to take an actual drive-around
15 tour of the project, worked out a proposed route tour.
16 The screen on the right shows what we initially
17 conceived of as being that route tour and the stops
18 along the way. But it's my understanding that we have
19 some road closures and other restrictions that have
20 come into play that may limit even what we had
21 initially conceived of as the route tour.

22 But I'm going to turn it over to Ms. Pollio
23 to kind of talk about what we can see and what we can't
24 and where we can go and where we can't go on this route
25 tour, and that may make a big difference for the

1 Committee in terms of whether you decide to spend the
2 time driving.

3 MS. POLLIO: Okay. Thank you. I'll go ahead
4 and reference, this is included in SRP Exhibit 14, so
5 we did prefile this route tour. So what I'll do is
6 just briefly go over it and then also talk about some
7 of the restrictions. We actually had -- our
8 construction manager was out there today on Intel's
9 campus, who just sent us this information about what
10 some of the restrictions are because of the active
11 construction, so this is hot off the press. Literally
12 minutes ago we received the information, so it's very
13 appropriate.

14 But what I'll do is -- again, on the left
15 screen are the directions, not necessarily that you
16 need to read those, but if we did go on a route tour
17 that kind of gives -- prints out the written
18 directions. But on the right screen you will see the
19 map that you've seen many a times, but with some bright
20 pink lines. And those bright pink lines are basically
21 what we are proposing the route tour would be.

22 So coming from the hotel, basically you're
23 going to come down -- we would basically come down
24 Arizona Avenue and we would then turn to go into the
25 Schrader substation. So there is a road that traverses

1 the Schrader substation, kind of goes in between the
2 existing Schrader substation and the vacant -- there's
3 a vacant SRP-owned lot. So we would be able to pull
4 off and see that Schrader substation. It was very
5 clear in the virtual route tour. I think you were able
6 to see what that Schrader substation looked like. So
7 that would be -- that's our proposed Stop 1.

8 Then we would come out -- obviously, we
9 cannot follow the railroad corridor down. So instead,
10 you would come out and go down Arizona Avenue, and then
11 basically we would follow the underground route segment
12 that Mr. Heim spoke in detail about, so, you know, from
13 Chandler Heights Road and basically following that in
14 the virtual route tour.

15 From this point, the Intel campus is under
16 active construction. So we originally were trying to
17 come into Intel's campus here, but that is not
18 available right now because of that active
19 construction. So the alternative was for us to go up
20 Dobson and then try to pull into the main entrance of
21 the Intel campus. Here you would be able to see the
22 Intel campus. But again, this is all of the existing
23 facility, so it is somewhat hard to see the RS-28
24 substation, but you would be able to see Intel's
25 campus. So that was kind of the best we could do based

1 on those construction constraints.

2 We would be able to turn around, come back up
3 Dobson, and then basically what we're looking at doing
4 is trying to come over -- again, this is New Price
5 Road, this is Old Price Road. So we would come over
6 and go down Old Price Road. Here is where we're
7 getting -- again, our construction manager was there.
8 About at Ocotillo, which is about right here, there is
9 a roundabout. It is blocked right now with
10 construction vehicles and active construction and
11 they've closed this road because of construction. So
12 we would need -- we could stop safely, we could be in
13 the roundabout, you could get out and see the campus,
14 but we would not be able to go further down the road.
15 So we would have to use that roundabout to then make a
16 U-turn, come back up Old Price Road. So that --
17 instead of our third stop being down at the -- down at
18 the southern portion of Intel's campus, it would have
19 to be at this roundabout. So that would be the third
20 stop.

21 Oh, okay. Zack said he doesn't think we'd be
22 able to stop at the roundabout. So we would just have
23 to actually go through the roundabout and then back up
24 and go up New Price Road. And then we would be able to
25 see the existing Henshaw substation, and that would be

1 our fourth stop, and then we would head back to the
2 hotel.

3 So again, apologize for the modification, but
4 we're glad that we were out there today. It would
5 probably be a lot of off roading. And with a very
6 large -- I think we have a 27-passenger vehicle that
7 we'd all be in, this is the best that we can do without
8 getting stuck or having any type of safety issues.

9 CHMN. KATZ: I don't know --

10 MEMBER HAMWAY: Are you thinking about an
11 hour, hour and a half?

12 MS. POLLIO: We had planned that it probably
13 would be more like two, two-plus hours. And I'm
14 thinking that just because, while it doesn't seem like
15 a very long route, getting everyone in the van, if you
16 did want to stop and get out and walk around and look,
17 that's what we were kind of taking into consideration.
18 If you think that we just want to drive it and make a
19 U-turn and come in, I think we can probably do it in
20 less time.

21 CHMN. KATZ: Would you point out for us where
22 the aboveground lines would be located once again?

23 MS. POLLIO: Yes. So this one area right
24 here is this overhead transition corridor that Mr. Heim
25 has been discussing. This is where the riser

1 structures -- if you remember in the virtual route
2 tour, there were two riser structures that would be
3 inside of this, and there's some existing poles along
4 that north side of Schrader substation that would be
5 utilized. But that's the -- in this area, that is the
6 aboveground portion. Then the additional aboveground
7 portion is from Henshaw, which is here at H1, down Old
8 Price Road to H2.

9 The remaining pieces are all underground. So
10 all of the railroad corridor, Chandler Heights, and
11 basically coming through Alma School, Lake, Chaparral,
12 onto Intel's campus is all underground.

13 CHMN. KATZ: And none of the aboveground goes
14 through residential -- or, close to residential
15 neighborhoods, is that correct?

16 MS. POLLIO: That is correct. The overhead
17 transition corridor is all within the existing Schrader
18 substation and the existing SRP-owned disturbed area.
19 And the Old Price Road is bound by all of the Price
20 Road development to the east and the Gila River Indian
21 Community to the west.

22 CHMN. KATZ: Okay. Well, unless there's
23 specific questions to ask Ms. Pollio, maybe we go ahead
24 and get a motion either to take the tour or not take
25 the tour. And then if there's a second, we'll go ahead

1 and discuss it.

2 Mr. Haenichen.

3 MEMBER HAENICHEN: I just have a comment.
4 Normally, I'm a champion of these tours because I think
5 they add a lot to the thing, but this is an unusual
6 situation because Thursday we can't meet anyway. And
7 so if that caused us to spill over into Friday, it
8 would be a -- because I've got a four-hour drive to get
9 home -- it would be a great inconvenience for me. But
10 if that's the will of the Committee, I'll go along with
11 it.

12 MEMBER GRINNELL: Mr. Chairman, I would move
13 that we dispense with the tour.

14 CHMN. KATZ: There's a motion on the floor to
15 dispense with the tour. Is there a second?

16 MEMBER HAENICHEN: Second.

17 CHMN. KATZ: Okay.

18 MEMBER PALMER: Can we have some discussion,
19 Mr. Chairman?

20 CHMN. KATZ: Yes, we --

21 MEMBER PALMER: Because I was about ready to
22 make a motion that we have the tour, because I -- you
23 know, these virtual tours, they've served us well when
24 that's all we could do, but I've looked forward to the
25 day when we can get our eyes and feet out on what we're

1 doing. And I think they're invaluable, and if it means
2 taking two extra hours I think it's worth doing and I'm
3 strongly in favor of it.

4 CHMN. KATZ: Okay. And again, we'll just
5 consider this part of the discussion. If the majority
6 of the Committee feels that we should dispense with the
7 tour, they will prevail. And if the majority of the
8 Committee thinks that a tour is going to be valuable
9 here, you can make -- you or someone else can so move.

10 MEMBER HAMWAY: Could I ask another question?
11 Taking two hours to do the tour, will that make us
12 spill over to Friday?

13 MR. DERSTINE: It's a good question. We
14 would certainly do our best to finish on Wednesday --
15 by Wednesday. I don't have a good sense of how -- you
16 know, oftentimes the route tour involves stops along
17 the way, the court reporter gets out, and then we take
18 some testimony where we're pointing out viewpoints or
19 observation points and that sort of thing. I think if
20 we're going to -- the inclination is to -- the vote is
21 to take a tour, then I think we should maximize what we
22 can out of that process and show the Committee what
23 there is to see.

24 As Ms. Pollio mentioned, we're restricted in
25 terms of our access to portions of the project, but you

1 would have the ability to see certainly where the
2 overhead will be constructed on a segment of Old Price
3 Road, although we will get down all the way to the
4 Intel campus, and you'll get to see around the Schrader
5 substation where the risers will be constructed and
6 where we will be co-locating the second circuit with
7 the existing 230 line. So those would be visible. And
8 the rest is driving along the routes where there won't
9 be anything to see because it will be under the road.

10 But I think the -- I agree with Member
11 Palmer, I find that oftentimes the route tour has a lot
12 of value and that you see things getting out and making
13 those stops and pointing out locations. I don't know
14 that -- in terms of this project, it's too bad that
15 we're limited in terms of all of it and that we don't
16 have full access to the project area. So I leave it to
17 the Committee.

18 To your question, Member Hamway, if we spend
19 the two hours on the route tour will that push us into
20 Friday, I can't guarantee that we won't, but we would
21 certainly do our best to complete our case and present
22 our case in an efficient way so we'd be able to
23 complete it by Wednesday.

24 CHMN. KATZ: Mr. Haenichen.

25 MEMBER HAENICHEN: Well, let me suggest this.

1 Isn't it true that the only things in the tour that are
2 germane to this hearing are two spots where there are
3 overheads, right? So we could just visit those, and
4 that would take much less time.

5 MR. DERSTINE: Member Haenichen, you are
6 right in terms of the project components that are
7 before the Committee were the overhead portions along
8 the Schrader -- around the Schrader substation and the
9 Old Price Road. I think Ms. Pollio's point is that it
10 will take us some time to drive to those two locations
11 from the hotel.

12 So Ms. Pollio, if we were just to visit --
13 well, and rather than driving the underground segment
14 along Chandler Heights and through the neighborhood
15 over to Intel, is there a way to shorten the route tour
16 to simply what we can see of the overhead components
17 and does that shorten the estimated time of the tour?

18 MS. POLLIO: I think that what we could do,
19 just thinking this out loud, I guess one is we do have
20 the van coming at 8:00 a.m. So I just wanted to
21 mention that. We do have the ability to do the route
22 tour at 8:00 just as an option.

23 Secondly, I think what we could do is come
24 down and go into Schrader. This is obviously, you
25 know, this transition corridor. We could go back up

1 and go directly over to Queen Creek and then down and
2 back up and then literally go to Henshaw and, you know,
3 all the way. As Mr. Heim mentioned, we cannot get out
4 at the roundabout. So that would basically have us
5 getting out at one stop. And then if we do not need to
6 come down here to just see -- and this is --

7 I will say, Stop Number 2 is just to show you
8 Intel's campus. We were trying to get as close as we
9 could. But that really is nothing that is -- as was
10 mentioned, you would not be able to see any of the
11 segments or the pieces of the project that are part of
12 this case. So it may be time beneficial to just come
13 straight over, go down to the roundabout, come up, and
14 go up. I think that would -- that would minimize the
15 time.

16 MR. DERSTINE: Well, I'm assuming the
17 Committee would like to at least see the Intel campus
18 as a point of reference. I guess we can give some
19 thought to ways in which we can still show the
20 Committee the Intel campus and shorten our stops.

21 MS. POLLIO: And I would say that coming back
22 up over to Queen Creek, it is not that difficult to
23 drive -- because we're not stopping, I think we could
24 get -- you know, come over and if -- again, you see the
25 campus, but we don't all get out on the campus, which

1 is probably a better option anyways, just to drive in
2 so you can see Intel's campus, and then continue on.
3 So maybe, again, just have the stop at Schrader and the
4 stop at Henshaw, and the rest of the time would just be
5 driving, but use the same route tour, I think you could
6 do that.

7 CHMN. KATZ: Member Haenichen, do you want to
8 move to amend the motion?

9 MEMBER HAENICHEN: No. I think what I'm
10 going to do is just go along with whatever the
11 Committee decides.

12 CHMN. KATZ: Okay. That's fine.

13 Any further discussion?

14 MEMBER HAMWAY: I'm fine with 8:00. Is that
15 something we needed to notice?

16 CHMN. KATZ: Yeah, I think we probably can't
17 start until 9:00 in case --

18 MEMBER HAMWAY: We noticed the tour at
19 8:00?

20 MR. DERSTINE: The hearing is noticed to
21 start at 9:00.

22 CHMN. KATZ: And I have mixed feelings. I
23 don't want to be too influential one way or the other.
24 But I generally feel that tours would be very helpful,
25 particularly when we have a lot of overground lines

1 that are running through major intersections or through
2 neighborhoods. I don't know that we gain all that much
3 by looking at a substation where we had an aerial view
4 of that today. And it might be nice to see the Intel
5 campus, but I have mixed feelings. I don't know that
6 it's all that productive with so much going underground
7 and nothing interfering with really traffic or
8 neighborhoods, but I'll shut up.

9 Anybody else have any comments?

10 (No response.)

11 CHMN. KATZ: All of those who are in favor of
12 not taking the tour -- I think we want to talk a roll
13 call vote or we could -- all those who don't want to
14 take a tour or think it wouldn't be productive say aye.

15 (A chorus of ayes.)

16 CHMN. KATZ: All those who want to take the
17 tour would say nay or no. Is there anybody that says
18 nay?

19 MEMBER PALMER: Nay.

20 CHMN. KATZ: And that's Mr. Palmer.

21 Anyone else?

22 (No response.)

23 CHMN. KATZ: I guess we won't be taking a
24 tour. But for those of you who regularly participate
25 in these proceedings, I generally would like to have

1 tours, and on the last couple of hearings I sat through
2 it might have been helpful. But we no longer have the
3 serious COVID issue; although, NPR was talking this
4 morning about Arizona has the highest rate of infection
5 now in the country despite -- well, we have a fairly
6 low rate of vaccination. Nothing further.

7 Do we want to do anything further? It's now
8 20 after.

9 MR. DERSTINE: I think our AV team needs some
10 time to switch over and be prepared with our virtual
11 connections for public comment, so this is probably the
12 right place to stop, unless -- well, I guess I could
13 make Mr. Heim available for any cross-examination if
14 there are any questions on what we covered to this
15 point.

16 CHMN. KATZ: Is there anything, Ms. Grabel?

17 MS. GRABEL: I do have a couple of questions.
18 But I think, if it's all right with you, I'd like to
19 spend the evening formulating how I want to phrase
20 them.

21 CHMN. KATZ: I'd just as soon have us take
22 the break to make sure the court reporter is fresh.

23 Also, if there are any members of the public
24 who are already in this room, you need a sign-in sheet
25 just so we know who's present, and I guess we'll

1 probably have a microphone that gets set up to allow
2 you to address the Committee. We won't be able to
3 answer questions. It's just an opportunity for you to
4 give -- express your concerns in support or against the
5 project, but we don't engage in question and answer
6 with Members of the Committee or the parties.

7 We'll take a recess until 5:30. Thank you.

8 (Off the record from 5:20 p.m. to 5:36 p.m.)

9 CHMN. KATZ: My understanding thus far is
10 that we have at least one member of the public that's
11 filled out a comment card. I don't know whether or not
12 she's going to want to address us. I'll know that in a
13 few minutes. And we have somebody that's appearing by
14 telephone that I believe wants to comment.

15 MR. DERSTINE: I think we were having some
16 issues with our Zoom feed for public comment, but --

17 CHMN. KATZ: I think that they've remedied
18 that.

19 MR. DERSTINE: -- I think we're good to go.

20 And in terms of -- my understanding is we
21 have someone here or maybe two individuals who want to
22 give public comment here in the hearing room. And then
23 do we have -- how many do we have on the virtual feed
24 for public comment? Just one. Okay.

25 CHMN. KATZ: Where do we want to have, if

1 there are people here --

2 MR. DERSTINE: So we have our mic set up here
3 in the corner so they can address the Committee.

4 CHMN. KATZ: Okay. If there is anybody that
5 wishes to speak -- just because you filled out a
6 comment card, you don't have to. But if you do want to
7 speak, you have to fill out a comment card, because the
8 public records -- or, the open meeting law requires us
9 to know the name of the person that is making the
10 comment if they're doing so on the record. And if we
11 haven't gone on the record, we're back on.

12 If we have a member of the public that wishes
13 to address us, you may approach the microphone. The
14 microphone is over there.

15 MR. DERSTINE: Do we have anyone in the
16 hearing room who would like to provide public comment?

17 (No response.)

18 CHMN. KATZ: Does anybody want to --

19 MR. DERSTINE: I guess we do not have anyone
20 here in the hearing room.

21 CHMN. KATZ: That's fine, but this may be the
22 last opportunity. You're all welcome to continue to
23 observe these proceedings either online or in person,
24 but I don't know whether we're going any more public
25 comment opportunities.

1 MR. DERSTINE: Right. And so I guess that
2 leaves our one commenter on --

3 CHMN. KATZ: Right. There's a lady or
4 gentleman on the telephone -- or, on the Zoom link that
5 would like to make a comment, I believe. And if he or
6 she wishes to do so, the individual should identify him
7 or herself by name and then feel free to address to the
8 Committee whatever comments they might wish to make.

9 (No response.)

10 CHMN. KATZ: Do we have that person available
11 on Zoom and does he or she wish to make a comment?

12 Oh, I see. Mr. Morgan, do you wish to make a
13 comment for the Committee's consideration?

14 MR. MORGAN: I guess. I'm in support of this
15 project. I think Intel is an important part of our
16 local economy and needs to -- we need to support them.

17 CHMN. KATZ: Thank you kindly. Anything else
18 that you'd like to add or any concerns that you'd like
19 to share?

20 MR. MORGAN: No. I think the design is the
21 best possible solution. Thank you.

22 CHMN. KATZ: Thank you kindly for joining us.

23 And again, I understand so far we do have
24 some spectators, some might even be dignitaries. But
25 if you don't wish to address us, that's fine. We

1 appreciate everybody being here, and we're going to
2 stand in recess until 9:00 tomorrow morning.

3 (The proceeding recessed at 5:41 p.m.)

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