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| 3 | | |
| 4 | IN THE MATTER OF THE APPLICATION OF)DOCKET NO. TUCSON ELECTRIC POWER COMPANY, IN)L-00000C-24- CONFORMANCE WITH THE REQUIREMENTS) | -0118-00232 |
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| 8 | ORIGINATING AT THE EXISTING) | |
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| 10 | EAST), WITH AN INTERCONNECTION AT) THE PLANNED VINE SUBSTATION) (SECTION 06, TOWNSHIP 14 SOUTH,) | |
| 11 | RANGE 14 EAST), AND TERMINATING AT) THE EXISTING KINO SUBSTATION) | |
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| 13 | RANGE 14 EAST), EACH LOCATED WITHIN) THE CITY OF TUCSON, PIMA COUNTY,)EVIDENTIARY | HEARING |
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| 14 |) | |
| 15 | At: Tucson, Arizona | |
| 16 | Date: July 17, 2024 | |
| 17 | Filed: August 2, 2024 | |
| 18 | | |
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| | GLENNIE REPORTING SERVICE: Court Reporting, Video & Videoconfe | erencing |
| 23 | 1555 East Orangewood Avenue, Phoenix, 602.266.6535 admin@glennie-report | |
| 24 | | _ |
| 25 | By: Jennifer Hon Arizona CR No. | = |
| | GLENNIE REPORTING SERVICES, LLC 602.266.0 www.glennie-reporting.com Phoenix | |

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BE IT REMEMBERED that the above-entitled and
 1
 2
    numbered matter came on regularly to be heard before the
    Arizona Power Plant and Transmission Line Siting
 3
 4
    Committee at Tucson Reid Park Doubletree, 445 South
    Alvernon Way, Tucson, Arizona, commencing at 9:08 a.m. on
 5
    July 17, 2024.
 6
 7
 8
    BEFORE: ADAM STAFFORD, Chairman
 9
         GABRIELA S. MERCER, Arizona Corporation Commission
         LEONARD DRAGO, Department of Environmental Quality
10
         NICOLE HILL, Governor's Office of Energy Policy
         R. DAVID KRYDER, Agricultural Interests
11
         SCOTT SOMERS, Incorporated Cities and Towns
              (via videoconference)
         MARGARET "TOBY" LITTLE, PE, General Public
12
              (via videoconference)
13
         DAVE RICHINS, General Public
         JOHN Gold, General Public
14
15
    APPEARANCES:
16
    For the applicant:
17
        Meghan H. Grabel, Esq.
        Elias Ancharski, Esq.
18
        OSBORN MALEDON
        2929 North Central Avenue
        21st Floor
19
        Phoenix, Arizona 85012
20
        and
21
        Megan Hill
        Tucson Electric Power Company
22
        88 East Broadway, MS HQE910
23
        P.O. Box 711
        Tucson, Arizona 85702
24
25 //
```

```
APPEARANCES: (continued)
 2
    For Banner University Medical Center and Banner Health:
 3
        Michelle De Blasi, Esq.
        LAW OFFICE OF MICHELLE DE BLASI, PLLC
 4
        7702 East Doubletree Ranch Road
        Suite 300
 5
        Scottsdale, Arizona 85258
    For City of Tucson:
 6
 7
        Roi L. Lusk, Esq.
        Principal Assistant City Attorney
 8
        Jennifer J. Stash, Esq.
        Senior Assistant City Attorney
 9
        P.O. Box 27210
        Tucson, Arizona 85726
10
    For Underground Arizona:
11
        Daniel Dempsey, Director
12
        737 East 9th Street
        Tucson, Arizona 85719
13
14
15
16
17
18
19
20
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22
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- 1 CHMN STAFFORD: All right. Let's go back
- 2 on the record.
- 3 Where did we leave off yesterday? I think
- 4 we had -- we were preparing to have any kind of follow-up
- 5 questions from the members to the new panel.
- 6 MS. GRABEL: The cleanup panel.
- 7 CHMN STAFFORD: The cleanup panel.
- 8 MS. GRABEL: I think first, Mr. Chairman,
- 9 we were going to take TEP's rebuttal witness. However,
- 10 we were thinking about it last night. And the rebuttal
- 11 witness is going to speak about property values. And
- 12 there didn't seem to be that much interest in the
- 13 Committee to discuss property values.
- 14 And so although there is some evidence that
- 15 that Mr. Dempsey submitted into the record, we'd be fine
- 16 just not offering that witness if the parties would be
- 17 willing to stipulate to the admission of the report just
- 18 so we could get the information in the record to the
- 19 extent that ever does come up during the proceedings.
- 20 CHMN STAFFORD: And the report is TEP-19?
- MS. GRABEL: Correct.
- 22 CHMN STAFFORD: Mr. Lusk, how does that
- 23 sound to you?
- MR. LUSK: I think that's fine, Mr. Chair.
- 25 Can you repeat just briefly? I'm sorry. I

- 1 was a little distracted.
- MS. GRABEL: Oh, no problem. So we were
- 3 just saying rather than take the time to talk through --
- 4 MR. LUSK: Oh, for the --
- 5 MS. GRABEL: -- the property value
- 6 testimony we won't offer a witness, we'll just stipulate
- 7 to the admission of her report.
- 8 MR. LUSK: Yeah, that's fine.
- 9 CHMN STAFFORD: Ms. De Blasi.
- 10 MS. DE BLASI: Banner doesn't have an issue
- 11 with that.
- 12 CHMN STAFFORD: Mr. Dempsey.
- MR. DEMPSEY: No problem.
- 14 CHMN STAFFORD: Okay. With that Exhibit 19
- 15 is admitted.
- 16 (Exhibit TEP-19 was admitted.)
- 17 CHMN STAFFORD: Now, Ms. Grabel, did we --
- 18 I have a TEP-34, which is an excerpt from the SRP line
- 19 siting case 195.
- 20 I don't have that marked as admitted yet.
- 21 MS. GRABEL: I used that in my
- 22 cross-examination of Mr. Dempsey, but I would like it to
- 23 be admitted, if possible.
- 24 CHMN STAFFORD: Yes. If it wasn't already
- 25 admitted, it's admitted now.
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- 1 (Exhibit TEP-34 was admitted.)
- 2 MS. GRABEL: Okay.
- 3 CHMN STAFFORD: And I believe the City has
- 4 a couple new exhibits.
- 5 MR. LUSK: That's correct, Chair. The two
- 6 exhibits that were passed out this morning and will be
- 7 filed today or were filed yesterday relate to I think
- 8 Member Gold's questions about what the leadership of the
- 9 City would prefer, and those speak directly to that.
- 10 CHMN STAFFORD: All right. Do the other
- 11 parties stipulate to the admission of the City of
- 12 Tucson's 9 and 10, or do they need to cross a witness on
- 13 them?
- 14 MS. GRABEL: Do you want to answer?
- 15 MS. HILL: Mr. Stafford, the applicant will
- 16 stipulate.
- 17 CHMN STAFFORD: Okay.
- 18 MS. HILL: I'm sorry, Chairman Stafford.
- 19 CHMN STAFFORD: All right. With that, the
- 20 City of Tucson's Exhibits 9 and 10 are admitted.
- 21 (Exhibits COT-9 and COT-10 were admitted.)
- 22 MEMBER LITTLE: Mr. Chairman.
- 23 CHMN STAFFORD: Yes, Member Little.
- 24 MEMBER LITTLE: I just looked at
- 25 Exhibit 19 -- TEP-19, and it's voluminous.

- 1 CHMN STAFFORD: Yes. By my count 216
- 2 pages.
- 3 MEMBER LITTLE: And I personally have not
- 4 had a chance to read it, having just gotten it last week,
- 5 and I'm wondering how the other Committee Members feel
- 6 about perhaps having the witness come and give us at
- 7 least a summary of what it says.
- 8 We have some pretty important decisions to
- 9 make in the next few days and I don't imagine that I'm
- 10 going to be able to read this whole thing during the
- 11 breaks.
- 12 CHMN STAFFORD: Good point.
- 13 Members, would you prefer to hear from the
- 14 witness?
- 15 MEMBER RICHINS: Chairman, I'm pretty
- 16 confident that I could give you the summary of that, that
- 17 given who submitted this report to the Committee, that
- 18 it's going to say that it doesn't have an effect on
- 19 property values. Pretty straightforward I'm sure. But,
- 20 you know, so I --
- 21 MEMBER LITTLE: That's good enough for me.
- 22 MEMBER RICHINS: I mean, I think I'm okay
- 23 without the witness because I'm pretty sure I know what
- 24 it is.
- 25 MS. GRABEL: That is what it says.

1 MEMBER RICHINS: Thank you, Meghan. 2 MS. GRABEL: You're welcome. 3 MEMBER LITTLE: I'm good with that. CHMN STAFFORD: All right. Then so now on 4 to member questions. 5 6 They have the cleanup panel here, so if you have questions you want to ask about specific routes or 7 8 specific portions of the route or specific problems with 9 different segments of the route, now is the time. We have Mr. Lindsey, Mr. Bryner and 10 11 Mr. Jocham. They are all still oath. So they're 12 available for questioning now, aren't they, Ms. Grabel? MS. GRABEL: Yes, Chairman Stafford, they 13 14 are. 15 16 CHRIS LINDSEY, CLARK BRYNER, AND JASON JOCHAM (recalled), 17 recalled as witnesses as a panel on behalf of Applicant, 18 having been previously affirmed or sworn by the Chairman to speak the truth and nothing but the truth, were 19 examined and testified as follows: 20 21 22 MS. GRABEL: And if -- you know, if you 23 want me to introduce them again, I'm happy to do it, but 24 I know you guys have seen them for the past week and a half, so I probably don't need to go there. 25

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- 1 CHMN STAFFORD: I think we all remember who
- 2 they are.
- 3 MS. GRABEL: Okay.
- 4 MEMBER RICHINS: Chairman, we did have some
- 5 additional exhibits added to us. I know that you
- 6 acknowledged those, particularly City of Tucson 9.
- 7 CHMN STAFFORD: Yes. We just admitted
- 8 those.
- 9 MEMBER RICHINS: Yeah. I did have one
- 10 question on the exhibit page --
- 11 CHMN STAFFORD: 9 or 10?
- 12 MEMBER RICHINS: I don't see a page number,
- 13 so including the cover sheet -- well, actually including
- 14 the salutation page one, two, three pages in, second
- 15 bullet point.
- 16 CHMN STAFFORD: You're talking about COT-9;
- 17 correct?
- 18 MEMBER RICHINS: Yes. Yes, sir.
- 19 It starts, "The day before filing their
- 20 application..." The exhibit comes from the council
- 21 member who covers this -- whose ward is where this
- 22 project is, I believe.
- Mr. Lusk, can you confirm that?
- MR. LUSK: That's correct, Member.
- 25 MEMBER RICHINS: Okay. There's an

- 1 allegation in there that there's a little bit of bait and
- 2 switch for the council member where it says that they
- 3 reviewed their -- their preferred alternative being B-5
- 4 on the alternative, and then the application went in as
- 5 B-4, and she was kind of really shocked by that change.
- I was just hoping somebody could address
- 7 what happened there because that's kind of a big deal to
- 8 go in and tell a council member that the route is going
- 9 to be B-5 and you submit B-4.
- 10 So what happened?
- 11 MS. GRABEL: Thank you, Mr. Chairman. Oh,
- 12 go ahead.
- 13 CHMN STAFFORD: That sounds like it would
- 14 be a question for Mr. Bryner.
- MS. GRABEL: Yes.
- 16 MR. BRYNER: And, Member Richins, I'd be
- 17 happy to answer that. So there is a story there.
- 18 It was not an eleventh-hour change. It was
- 19 a miscommunication amongst our internal group. So our
- 20 government relations folks, they typically have a lot of
- 21 those briefings with our local elected officials -- well,
- 22 any of our elected official.
- 23 And so they held that briefing with the
- 24 council member who is a new council member. Now, there
- 25 was a change. Probably she was appointed two weeks --

- 1 roughly two weeks before we submitted or filed our
- 2 application.
- 3 MEMBER RICHINS: Councilwoman Uhlich is a
- 4 long veteran of the council.
- 5 MR. BRYNER: Sure.
- 6 MEMBER RICHINS: She was on before for a
- 7 long time, so she's very experienced.
- 8 MR. BRYNER: Yeah.
- 9 MEMBER RICHINS: So let's not chalk it up
- 10 to that.
- 11 MR. BRYNER: No, no. This was our fault.
- 12 We communicated the wrong route. As soon
- 13 as they were made aware, hey, it's not B-5, it's B-4,
- 14 they corrected the record with her.
- 15 MEMBER RICHINS: Perfect. That's what I
- 16 figured happened, that it was just a mistake like that.
- 17 So thank you for clearing that up.
- 18 Appreciate it.
- 19 MS. HILL: May I ask just one follow-up
- 20 question, Mr. Chair?
- 21 CHMN STAFFORD: Certainly.
- MS. HILL: And so, Mr. Bryner, when you
- 23 were talking about Councilwoman Uhlich having just been
- 24 appointed a couple of weeks before, you were aware, of
- 25 course, that she had been she -- is a veteran of the

- 1 Tucson City Council; correct?
- 2 MR. BRYNER: Yes.
- MS. HILL: And so when you were talking
- 4 about her just having been appointed a couple of weeks
- 5 before, were you referring to in terms of her involvement
- 6 with this phase of the project in terms of catching up?
- 7 MR. BRYNER: Yes. So the previous ward 6
- 8 council -- councilman, Councilman Kozachik, he had
- 9 resigned a little bit before this, and he had been very
- 10 engaged.
- 11 So we were anxiously awaiting the
- 12 appointment of his replacement so that we could bring her
- 13 up to speed. So that was the purpose of that meeting.
- 14 MS. HILL: And I should probably disclose
- 15 in all fairness -- I don't believe it's a conflict -- I
- 16 have known Councilwoman Uhlich in her -- in a personal
- 17 capacity for almost 20 years. And so I just want to
- 18 disclose that.
- 19 In all honesty, we've never spoken about
- 20 this project. We will never speak about this project. I
- 21 do not believe there is any conflict.
- 22 CHMN STAFFORD: Thank you.
- 23 All right. I believe Member Hill has some
- 24 questions.
- 25 MEMBER HILL: Thank you, Mr. Chair.

- 1 When we were concluding yesterday, pardon
- 2 me, I understood the applicant was working on a new draft
- 3 CEC. And it would -- I think it would be helpful before
- 4 we dismiss all of the witnesses to take a look at some of
- 5 the language that you might have added or proposed
- 6 that -- just to see how -- if any, questions come up
- 7 about the project related to that. So I think that would
- 8 be helpful.
- 9 MS. GRABEL: Certainly. I think
- 10 Mr. Ancharski is printing them out as we speak. So you
- 11 should have them momentarily.
- 12 MEMBER GOLD: Mr. Chairman.
- 13 CHMN STAFFORD: Yes, Member Gold.
- 14 MEMBER GOLD: I'm guessing now is the time
- 15 when I can ask questions that I was not able to ask
- 16 before.
- 17 So may I ask them now?
- 18 And whoever is appropriate to answer please
- 19 do so.
- 20 First question: Someone asked about the
- 21 Gause electromagnetic field on hospital equipment from
- 22 overhead lines.
- Who can address that?
- MR. BRYNER: I'll take that, Member Gold.
- 25 So I believe that came from -- that was a

- 1 concern that was brought up by Banner or -- in those
- 2 conversations.
- 3 So I guess the way I'd like to address that
- 4 is, first of all, I want to refer you to our application
- 5 Exhibit TEP-1 under Exhibit I.
- 6 MEMBER GOLD: Hang on a sec. TEP-1. Okay.
- 7 I don't see any exhibit there.
- 8 CHMN STAFFORD: It's about 400 pages deep,
- 9 isn't it?
- 10 MEMBER GOLD: I'm sorry. Where should I
- 11 look?
- 12 MR. BRYNER: Under Exhibit I of the
- 13 application.
- 14 MS. GRABEL: Can you help him with a page
- 15 number, Mr. Bryner?
- 16 MEMBER GOLD: It's TEP-1 is only one page.
- 17 MS. GRABEL: No. You need to go to
- 18 application. We didn't put it in the reprint of the
- 19 exhibits because it's 400 pages long.
- 20 So we'll get you a copy, Member Gold.
- 21 CHMN STAFFORD: Oh, I have got one right
- 22 here.
- MR. BRYNER: Page 1,065.
- 24 MEMBER GOLD: Okay. Don't put it on my
- 25 lap. It'll break everything there.

- 1 MEMBER LITTLE: Mr. Chairman.
- 2 MEMBER GOLD: 1065?
- 3 CHMN STAFFORD: Yes, Member Little.
- 4 MEMBER LITTLE: Don't forget about us,
- 5 sending things to Tod so we can get them, please.
- 6 CHMN STAFFORD: You have the -- you should
- 7 have an electronic copy of the application.
- 8 MS. GRABEL: I think she means the CEC. We
- 9 will definitely --
- 10 CHMN STAFFORD: Oh, the CEC, yes,
- 11 absolutely.
- MS. GRABEL: Yeah.
- 13 CHMN STAFFORD: As soon as we have it we'll
- 14 get it to Tod, and he'll get to it you.
- 15 MEMBER LITTLE: Thank you.
- 16 CHMN STAFFORD: Because I think the big
- 17 change we're looking for in that one is what specific
- 18 ordinance, plan, or regulation the applicant is seeking
- 19 a -- the specific finding of being unduly burdensome.
- 20 MEMBER GOLD: Okay. So looking at your
- 21 exhibit on page 1065. That's it.
- MR. BRYNER: Okay.
- 23 MEMBER GOLD: Strength of the various
- 24 electric sources, the distances, and you make reference
- 25 to a microwave, a vacuum cleaner, a hair dryer, and an

- 1 electric shaver. Distance half a foot. But you're
- 2 talking very low voltage. So I want to know what those
- 3 are.
- 4 MR. BRYNER: So what I want to point you
- 5 out to is in that Table 26, the last line, which is a
- 6 138kV transmission line.
- 7 MEMBER GOLD: Okay.
- 8 MR. BRYNER: This is a study that the power
- 9 engineers conducted on one of our I'll call it a sister
- 10 line -- it's the same design -- so that we could
- 11 understand exactly what the EMF strength would be.
- 12 And so if you look at it's got distances,
- 13 it's got 0 feet, which is 16.4 B milliGauss.
- 14 MEMBER GOLD: Oh, I can read. I'm looking
- 15 at this.
- MR. BRYNER: Okay. So --
- 17 MEMBER GOLD: This apparently says --
- 18 because now I'm reading it, this apparently says that
- 19 there is no effect or virtually no effect at the distance
- 20 that overhead transmission lines would be from the
- 21 hospital's equipment.
- 22 Am I reading that correctly?
- MR. BRYNER: Yes, you are.
- MEMBER GOLD: So now I ask for,
- 25 Ms. De Blasi, were you aware of this?

- 1 I know it was on page 1,065 of a document
- 2 that weighs about 30 pounds.
- 3 Did you see this?
- 4 MS. DE BLASI: Yes, I did.
- 5 And I believe my -- Banner's testimony was
- 6 not that there was or wasn't but that it had not been
- 7 tested in the proximity of where TEP is asking for the
- 8 line pretty much next to the hospital if they got their
- 9 400-foot corridor that they're asking for.
- 10 So it wasn't that there would be or would
- 11 not be an effect. It's that the hospital did not have --
- 12 has not had the chance to verify this information, look
- 13 within the hospital where that sensitive equipment be
- 14 with respect to this line so that they could mitigate it.
- 15 I think it was referenced in the council member's letter
- 16 as.
- 17 It's always an issue when a hospital is
- 18 near a power line. There are power lines near hospitals.
- 19 I think, you know, the witness -- my witness was not
- 20 saying that there would not be. It was they had not
- 21 looked at, and they would not want to know that in
- 22 realtime if it were to be sited.
- 23 MEMBER GOLD: Okay. So this is back to
- 24 Mr. Bryner.
- 25 That means that you're not going to put

- 1 your transmission -- if we wind up where your put your
- 2 transmission lines on this route near the hospital, how
- 3 far away from the hospital would you put them?
- 4 MR. BRYNER: So based off of what we were
- 5 looking at it --
- 6 MEMBER GOLD: Yes.
- 7 MR. BRYNER: -- our minimized corridors
- 8 from the 400-foot where we brought that down it would be
- 9 roughly 500-foot away from the hospital the nearest
- 10 location. So that last -- the number in that last field
- 11 on the table --
- 12 MEMBER GOLD: Okay.
- 13 MR. BRYNER: -- would be roughly what we
- 14 would estimate it to be.
- 15 MEMBER GOLD: So basically if you put that
- 16 power line 500 feet away compared to, you know, 50 feet
- 17 away, this was going to be a negligible, if any, effect
- 18 whatsoever. We were only concerned and nobody actually
- 19 tested it in the hospital.
- 20 Am I correct in that understanding?
- 21 MR. BRYNER: Correct. No tests were done
- 22 within the hospital.
- 23 MEMBER GOLD: Okay. So that's -- that
- 24 doesn't appear to be a real issue.
- 25 CHMN STAFFORD: And the revised corridor,

- 1 that's only for B-4; correct?
- 2 MR. BRYNER: So we only revised it for B-4,
- 3 but the same sort of that criteria that I talked about
- 4 for different residential streets, arterial streets, that
- 5 would apply on regardless. So it would be applicable on
- 6 D-1 or 6 or --
- 7 MEMBER GOLD: Gotcha.
- 8 MR. BRYNER: -- or any of the routes that
- 9 go along there.
- 10 MEMBER GOLD: So not a -- it's not
- 11 something I would consider as a danger to the hospital or
- 12 people working in the hospital?
- MR. BRYNER: Correct.
- 14 MEMBER GOLD: Next question.
- 15 I asked if transmission towers in
- 16 commercial areas instead of residential areas were
- 17 preferable to the City of Tucson. So now I'm asking who
- 18 can answer that question?
- 19 We've got our personal opinion, but who
- 20 answers that question?
- I saw the council member stuff, and they
- 22 said follow the laws.
- 23 MR. LUSK: And that is still our
- 24 preference, Member Gold.
- 25 MEMBER GOLD: So the preference is still

- 1 underground?
- 2 MR. LUSK: In the Gateway Corridor, yes.
- 3 MEMBER GOLD: What about near the hospital?
- 4 MR. LUSK: I don't believe that the street
- 5 Lester requires undergrounding in the GATEWAY because
- 6 it's not in the Gateway Corridor Zone.
- 7 MEMBER GOLD: So just Gateway Corridor.
- 8 How about residential areas?
- 9 MR. LUSK: Well, are you talking about
- 10 zoned residential or actual residential?
- 11 MEMBER GOLD: Historic districts. Because
- 12 some of your routes, your preferred route, does go
- 13 through historic districts.
- 14 MR. LUSK: It's their preferred route, just
- 15 to be clear.
- 16 MEMBER GOLD: "The" preferred route.
- 17 MR. LUSK: "The" preferred route. Yeah.
- 18 I think there was a discussion yesterday
- 19 and a question about whether the historic overlays
- 20 require undergrounding. We're researching that, but we
- 21 can't -- because there are so many historic overlay zones
- 22 it's hard to answer that question at this time with any
- 23 sort of certainty because each one has different
- 24 dimensional standards.
- 25 CHMN STAFFORD: Right. But I think it's

- 1 the City's position is still that if those plans require
- 2 undergrounding, then they should be undergrounded.
- 3 MR. LUSK: Correct.
- An overlay route -- excuse me, an overlay
- 5 zone is a regulation through the UDC, which is our -- the
- 6 Tucson city code, and we'd ask that it be enforced.
- 7 MEMBER GOLD: Okay. So you would really
- 8 not want overhead lines in residential areas?
- 9 MR. LUSK: Well, the reason why I -- I have
- 10 a caveat for that, Member Gold, and I'm not trying to be
- 11 obtuse, but the -- when you say residential zone,
- 12 Campbell is a residential zone. It's zoned residential
- 13 all the way down.
- 14 MEMBER GOLD: Except in Campbell.
- 15 MR. LUSK: As long as it's not in the
- 16 Gateway Corridor, Member Gold, what we're looking for is
- 17 that as long as it's not required under the code, under
- 18 the UDC, then we're not concerned as much with whether
- 19 the over -- or, excuse me, where the code requires
- 20 undergrounding we would wish it to be enforced.
- 21 MEMBER GOLD: So residential areas require
- 22 undergrounding?
- MR. LUSK: No, not all residential require
- 24 undergrounding.
- 25 MEMBER GOLD: Historic?

- 1 CHMN STAFFORD: Member Gold, I think what
- 2 the City's position is is that it speaks through the
- 3 code. And if the code requires undergrounding, then it
- 4 requires undergrounding. If it doesn't, then it doesn't.
- 5 So the City's -- the City's not taking the
- 6 position that anything should be undergrounded other than
- 7 what the code would require.
- 8 MEMBER GOLD: Understood.
- 9 But I'm trying -- I'm using terminology
- 10 that I'm not familiar with.
- MR. LUSK: Sure.
- 12 MEMBER GOLD: So maybe I don't mean
- 13 residential areas. Maybe I mean historic districts.
- 14 MR. LUSK: Again, the historic districts in
- 15 the City of Tucson have different requirements for
- 16 different districts, so it's hard to answer for all of
- 17 them.
- 18 But if they require that within the code
- 19 under the zones, whether they're zoned as a historic
- 20 overlay zone, then we would ask that it be enforced.
- 21 MEMBER GOLD: So then here's my question to
- 22 you.
- TEP's preferred Route B-4, does that go
- 24 through any of these historic zones?
- 25 MR. LUSK: I'm not aware that it goes

- 1 through any historic overlay zones but may touch -- may
- 2 touch them.
- 3 MS. GRABEL: Member Gold, Mr. Bryner can
- 4 answer that question for you.
- 5 MEMBER GOLD: Thank you.
- 6 MR. BRYNER: So Route B and -- well,
- 7 Route B goes through the neighborhood preservation zone
- 8 of Jefferson Park, and Route 4 goes through the west
- 9 university historic preservation zone.
- 10 Again, just referring to my testimony that
- 11 I gave on those, both of those -- the way those zones are
- 12 is they have design guidelines with respect to buildings
- 13 within those zones, but they don't have any language with
- 14 respect to utilities.
- 15 MEMBER GOLD: So there's no city
- 16 requirement to underground in those zones?
- 17 MR. LUSK: I would agree with Mr. Bryner.
- 18 MEMBER GOLD: Okay. That takes care of
- 19 that one.
- Now, to underground Campbell in the
- 21 business area I think from Broadway to Speedway, what's
- 22 underneath the ground that would create obstacles?
- MS. GRABEL: Mr. Bryner.
- 24 MEMBER GOLD: Sewer lines. I think we
- 25 heard there were sewer lines yesterday that they can't

- 1 move. You would have to go around and under them.
- What else is under there?
- 3 MR. BRYNER: So we haven't done a full
- 4 study to find out what utilities are under there. We
- 5 haven't done a Blue Stake or anything like that.
- 6 But there are certainly city utilities,
- 7 water, sewer. There's going to be buried a number of
- 8 other utilities. And then there's the unknowns of what
- 9 happened before historically, prehistorically, those
- 10 types of things.
- 11 MEMBER GOLD: Okay. And the City of
- 12 Tucson --
- 13 MR. JOCHAM: Member Gold.
- 14 MEMBER GOLD: -- requires that area to be
- 15 undergrounded, though, correct, according to their rules?
- 16 MR. BRYNER: So according to their rules on
- 17 the gateway it would require that, yes.
- 18 MR. JOCHAM: Member Gold, may I chime in?
- 19 This is Mr. Jocham.
- MEMBER GOLD: Yes, please.
- MR. JOCHAM: So to give a concept,
- 22 Mr. Bryner mentioned we have no idea what's under
- 23 Campbell Road currently.
- 24 But from the City of Tucson's GIS
- 25 information, you know, we are aware at least along the

- 1 Campbell route based off of the GIS there are 22 water
- 2 pipelines and 19 sewer pipe crossings along that route
- 3 that at least we have some -- we have -- we have some
- 4 information on.
- We don't know depth. We don't know how
- 6 they would interfere with the underground transmission
- 7 line, but we know that they're present.
- 8 So right off the bat, we know that there's
- 9 approximately 41 crossings that we would have to work
- 10 with down Campbell at a minimum, not knowing what else is
- 11 present.
- 12 MEMBER GOLD: Okay. Now this goes back to
- 13 Mr. Lusk or whoever you choose.
- 14 Knowing this, knowing this, the City of
- 15 Tucson still wants them to underground on this gateway
- 16 route if they choose it -- if this route is chosen?
- 17 MR. LUSK: Yes. That's the law.
- 18 MEMBER GOLD: Okay. Who pays for it?
- 19 MR. LUSK: Again, that's a question -- so
- 20 what our franchise says is the City doesn't pay for it.
- 21 MEMBER GOLD: The City does not?
- 22 MR. LUSK: So then it would be up to the
- 23 applicant to decide how that gets paid for.
- 24 MEMBER GOLD: I'm sure the applicant
- 25 doesn't want to pay for it.

- 1 MR. LUSK: I'm sure that's true.
- 2 MEMBER GOLD: And I'm sure the voters don't
- 3 want to pay for it with the rate increase because they've
- 4 already voted that down.
- 5 Am I correct in that assumption?
- 6 MR. LUSK: I don't speak for every voter,
- 7 no.
- 8 MEMBER GOLD: Well, was that proposition
- 9 passed or was it defeated?
- 10 MR. LUSK: It was defeated. The up and
- 11 down vote on the franchise was defeated, yes.
- 12 MEMBER GOLD: Gotcha.
- Please, Ms. Hill.
- 14 MS. HILL: So, if I may, since this has
- 15 come up, I'm going to ask the -- I mean, we can have some
- 16 testimony about specific areas of the franchise agreement
- 17 that address undergrounding.
- 18 But we do agree that under the franchise
- 19 agreement there's really no -- really no solution about
- 20 how it gets paid for with the exception of a couple of
- 21 parts that in the franchise fee section that discuss that
- 22 a portion of the franchise fee that's paid to the City
- 23 could be used to pay for undergrounding.
- 24 But I want to caution that because it is
- 25 not the company's position that funds should be taken

- 1 from public safety or any other purposes that the City is
- 2 using that \$30 million or whatever it is a year that the
- 3 ratepayers are paying in utility taxes and franchise
- 4 fees. There are a lot of things that the City has to
- 5 spend that money on.
- 6 So I want to be very clear when I say that,
- 7 when I provide that information, the company is not
- 8 pointing a finger and saying this should be used for this
- 9 because that is not our position. It's just that I agree
- 10 with what Mr. Lusk is saying that there's no solution for
- 11 the payment.
- 12 MEMBER GOLD: Understood. Now the question
- 13 I have then, since you brought it up, because it was
- 14 going to be my next question would you please explain
- 15 this franchise agreement and the franchise fee in
- 16 layman's terms so I understand it?
- MS. HILL: Do you want to start?
- 18 MR. LUSK: Is that for me, Member Gold?
- 19 MEMBER GOLD: Either of you.
- MR. LUSK: Sure.
- 21 MEMBER GOLD: Whoever can explain it.
- MR. LUSK: So I'll start.
- 23 MS. HILL: Could -- if you want to look at
- 24 it, it is UGAZ Exhibit 21, which I think was admitted.
- 25 MEMBER GOLD: I'm sorry?

- 1 MEMBER RICHINS: Chairman, can we confirm
- 2 we're talking about the current, in-place franchise
- 3 agreement expiring in 2026?
- 4 Is this the correct one?
- 5 CHMN STAFFORD: Yes. That's the correct
- 6 one.
- 7 MEMBER RICHINS: Because I just don't want
- 8 any confusion between what was proposed in 412 and the
- 9 current franchise because that's important. Thank you.
- 10 CHMN STAFFORD: Right. What was proposed
- 11 and was Prop 412, and that's Exhibit COT-4.
- 12 They're speaking of UGAZ -- what's the
- 13 number?
- 14 MR. LUSK: 21.
- 15 CHMN STAFFORD: 21. And that's the current
- 16 franchise that is -- current franchise, yes.
- 17 MEMBER GOLD: Okay. So thank you,
- 18 Mr. Richins.
- 19 Please deal with the current franchise
- 20 agreement.
- MR. LUSK: Sure.
- 22 MEMBER GOLD: I wasn't aware there were
- 23 several.
- MR. LUSK: Well, sure.
- 25 MEMBER GOLD: There's one in effect.

- 1 MR. LUSK: We're all in agreement there's
- 2 only one.
- 3 The franchise agreement surface the
- 4 franchise fee goes is under Arizona state law in order
- 5 to -- the municipalities have the option of requiring a
- 6 franchise to operate within the city limits of a public
- 7 service corporation.
- 8 MEMBER GOLD: Can I stop you for a second?
- 9 MR. LUSK: Sure.
- 10 MEMBER GOLD: Before you go into franchise
- 11 fee, please explain what the franchise is.
- 12 MR. LUSK: Oh, it's permission to operate
- 13 within the city limits of Tucson --
- 14 MEMBER GOLD: And what are the parameters?
- 15 MR. LUSK: -- and specifically within the
- 16 right-of-way.
- 17 I'm sorry?
- 18 MEMBER GOLD: The parameters of the
- 19 franchise agreement. It says TEP will do the electrical
- 20 stuff for the City -- I'm trying to simplify it --
- MR. LUSK: Okay.
- 22 MEMBER GOLD: -- and obey the City's laws.
- MR. LUSK: It does say that, yes.
- 24 MEMBER GOLD: Okay. Is there a limit on
- 25 cost?

- 1 MR. LUSK: No.
- MS. HILL: No. So --
- 3 CHMN STAFFORD: And then one real quick
- 4 clarification, though, Member Gold, is that it's the -- I
- 5 think TEP has a certificate of convenience and necessity
- 6 which allows it the monopoly right to serve its
- 7 territory, which is separate -- which is issued by the
- 8 Corporation Commission.
- 9 That's separate and apart from the
- 10 franchise, which is permission from the incorporated city
- 11 to operate within the limits and to use their
- 12 rights-of-ways in the streets for the utility purposes.
- 13 Is that correct? That's my understanding?
- MS. HILL: That is --
- 15 MR. LUSK: That is --
- 16 MS. HILL: That is -- I'm sorry.
- 17 MR. LUSK: No. I agree, Chair.
- 18 MEMBER GOLD: So this is --
- 19 MS. HILL: Mr. Lusk, so I do have one
- 20 clarification.
- 21 MEMBER GOLD: Please.
- MS. HILL: Okay. So where -- and I can
- 23 point you I believe it is Section 26 of the franchise
- 24 agreement.
- 25 MEMBER GOLD: Where is the franchise

- 1 agreement here? Is that COT-4?
- MS. HILL: It's UGAZ --
- 3 MR. LUSK: It's UAZ-21.
- 4 MS. HILL: Yeah, 21.
- 5 MEMBER GOLD: Wait, wait, wait.
- 6 CHMN STAFFORD: One at a time, everybody.
- 7 One at a time, please.
- 8 MS. HILL: Sorry, Chairman.
- 9 MEMBER GOLD: UAZ-21. Ordinances relating
- 10 to the franchise.
- 11 Okay. Where is the provisions of the
- 12 nonexclusive franchise agreement?
- 13 What does nonexclusive franchise agreement
- 14 mean?
- 15 What does nonexclusive mean?
- 16 MS. HILL: So -- so -- and I may be
- 17 stating the wrong -- my copy of it appears to have
- 18 disappeared. So I'll have pull it up here. Give me a
- 19 second.
- 20 But so when we talk about -- there is a
- 21 section there that says that the City is permitted to
- 22 make laws surrounding, you know, to protect the public
- 23 safety, ensure electrical service and everything.
- 24 However, that same paragraph also makes it
- 25 clear that the City can only enforce those to the extent

- 1 they are permitted by state law.
- 2 State law gives this Committee the
- 3 authority to make the finding that we are asking for that
- 4 says that the local ordinance is unduly restrictive and
- 5 not feasible in light of the technology available.
- 6 So that is the limitation on the City's
- 7 power to enforce that ordinance in this particular
- 8 setting.
- 9 MEMBER GOLD: Okay. So the franchise
- 10 agreement if I understand this --
- 11 MR. LUSK: If I may just briefly, Member
- 12 Gold. I think there might be a slight disagreement, and
- 13 that's something we can resolve in another venue.
- 14 But whether or not the finding that this
- 15 Committee makes curtails our ability to enforce our own
- 16 code is up for debate I would say.
- 17 CHMN STAFFORD: Yes. I believe that'll
- 18 have to ultimately be decided by a court, but --
- 19 MEMBER GOLD: Okay. So let's assume we
- 20 stop -- before we go fighting in court, we have a
- 21 franchise agreement that you delegated -- I mean, excuse
- 22 my verbiage if I get it wrong.
- MR. LUSK: No problem.
- 24 MEMBER GOLD: Somehow you've delegated
- 25 Tucson Electric Power to maintain electricity for the

- 1 residents of Tucson so that we can live happily, safely,
- 2 and not have to worry about dying of heat or thirst or
- 3 anything else like that; is that correct?
- 4 That's the purpose of the franchise
- 5 agreement?
- 6 MR. LUSK: I wouldn't use the word
- 7 "delegated," but, yes, we permit them to do so. Yes.
- 8 MEMBER GOLD: So you permit them to do it?
- 9 MR. LUSK: Under the franchise agreement.
- 10 MEMBER GOLD: If you didn't permit them to
- 11 do it, who would do it?
- 12 MR. LUSK: I don't know. I'm sure somebody
- 13 else would --
- 14 CHMN STAFFORD: I think, Member Gold,
- 15 because the City has existing rights-of-ways on its
- 16 streets, and by -- through the franchise agreement it
- 17 allows TEP and other utilities -- that's why it's
- 18 nonexclusive franchise --
- 19 MEMBER GOLD: Oh, okay.
- 20 CHMN STAFFORD: -- to operate in those
- 21 rights-of-ways for their different infrastructure.
- 22 Without a franchise -- I don't -- this is
- 23 getting really hypothetical because I don't think any
- 24 utility operates anywhere in the state in a city without
- 25 a franchise. I think -- I'm pretty sure that's the case.

- 1 I haven't looked at everything, so I can't say that
- 2 100 percent because I haven't investigated it, but I'm
- 3 pretty sure that is the case.
- 4 If for some reason the City didn't have a
- 5 franchise with the electric utility, the electric utility
- 6 does have condemnation authority. So they would have to
- 7 potentially condemn all the territory they need to place
- 8 their infrastructure, which would be a horrible burden on
- 9 everyone involved. So I think that's just -- from a
- 10 practical standpoint that's not really an option. I
- 11 think without the franchise agreement this whole system
- 12 falls apart.
- 13 MEMBER GOLD: So basically the franchise
- 14 agreement gives them routes where they can run their
- 15 lines. It's called rights-of-way --
- 16 CHMN STAFFORD: Right.
- 17 MEMBER GOLD: -- or whatever is.
- 18 CHMN STAFFORD: It gives them the right to
- 19 occupy that space with their equipment.
- 20 MEMBER GOLD: So that is the franchise
- 21 agreement?
- 22 CHMN STAFFORD: That is the primary
- 23 function of it, I believe.
- Wouldn't you agree, Ms. Grabel, Mr. Lusk,
- 25 Ms. Hill?

- 1 MR. LUSK: I agree, Chairman. Yes.
- MS. HILL: That's agreed.
- 3 MS. GRABEL: That is correct. And --
- 4 MEMBER GOLD: So the discrepancy we're
- 5 having right now is with which of those rights-of-way we
- 6 want to take advantage of to get the power that's needed
- 7 to go from place to place, and the second thing is do we
- 8 want it aboveground or belowground.
- 9 And the City's position is that in areas
- 10 where it's required to go belowground you have to put it
- 11 belowground, but TEP says it's almost impossible to do it
- 12 belowground and still accomplish what the City is asking
- 13 you to accomplish without raising people's taxes or
- 14 bearing unbelievable financial burdens and time
- 15 constraints on not only TEP but the residents of the
- 16 City.
- 17 Am I getting that correctly?
- 18 MS. HILL: That is our position. I'll just
- 19 speak for our position, Mr. Lusk.
- 20 MR. LUSK: And just to clarify, so we -- I
- 21 don't want to get too far afield. But I think the
- 22 preferred route is not in a Gateway Corridor.
- 23 MEMBER KRYDER: Say that again.
- MR. LUSK: The preferred route of TEP in
- 25 this line siting is not in a Gateway Corridor.

- 1 MEMBER GOLD: Understood. But they --
- MS. GRABEL: Well, to clarify it does cross
- 3 perpendicularly through Gateway Corridor streets.
- 4 MEMBER GOLD: Several gateway corridors. I
- 5 know.
- 6 MR. LUSK: It does cross perpendicularly,
- 7 but --
- 8 MEMBER GOLD: But, I mean, this is
- 9 their preferred -- their preferred route, not your
- 10 preferred route, maybe not our preferred route.
- 11 This is simply their preferred route. It's
- 12 one route among many.
- MS. HILL: That's correct.
- 14 And so just as a quick -- where it does
- 15 cross the Gateway Corridor, given what we've heard from
- 16 the City here, we are still asking for that finding for
- 17 the perpendicular crossings.
- 18 MEMBER GOLD: Which makes sense and is
- 19 logical, and I think the City would not disagree with you
- 20 on that.
- 21 But I'm talking about our alternate -- I'm
- 22 guessing. I'm guessing.
- MR. LUSK: Well, we would disagree that the
- 24 finding is required for the perpendicular crossing
- 25 because there's specific relief allowed for that.

- 1 CHMN STAFFORD: Right. Which would be the
- 2 special exception. And then so -- but I think what the
- 3 utility's position is is that if they get the specific
- 4 finding, they wouldn't need to pursue a special
- 5 exception.
- 6 Am I correct?
- 7 MR. LUSK: I think we would disagree with
- 8 that as well. I understand.
- 9 MS. HILL: That's it. I mean, that's where
- 10 we are.
- 11 So essentially we intend to pursue the
- 12 special exception even if you give us the finding.
- 13 However, what I think this Committee has
- 14 heard is that the City can't commit to anything. And
- 15 because the City can't commit to anything and we need to
- 16 get a line built, we have to do something. And so we've
- 17 come to this Committee.
- 18 CHMN STAFFORD: Right. So you would say --
- 19 so you would say that time is of the essence for this
- 20 project?
- 21 MS. HILL: Yes. We -- to be just frank,
- 22 and this is, again, an understanding of the political and
- 23 logistical and open public processes the City has to go
- 24 through, this is not an indictment of those processes.
- We have been doing this for years, and we

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- 1 are out of time. We have been working with the City
- 2 since 2019. Here's where we are. We need the finding.
- 3 MEMBER GOLD: So now I would ask Mr. Lusk.
- 4 Do you think there will be any objections
- 5 to them crossing corridors perpendicularly?
- 6 MR. LUSK: From whom?
- 7 MEMBER GOLD: From the City. If TEP --
- 8 MR. LUSK: Well, the City specifically
- 9 created a process that allows that.
- 10 MEMBER GOLD: Okay. So that's not a
- 11 problem.
- 12 They can go under the assumption that they
- 13 can cross corridors perpendicularly to accomplish this
- 14 task.
- 15 MR. LUSK: Right. They can get a special
- 16 exception to do that. And there's a specific process for
- 17 that developed with TEP.
- 18 MEMBER GOLD: Yes. And you would ensure
- 19 that that happens at a quick pace so things could be done
- 20 letting them know that they can cross the perpendicular
- 21 lines. Yes or no?
- MR. LUSK: Well, that would be my -- I
- 23 mean, I don't work -- I'm not the zoning examiner, so
- 24 that's not my position.
- 25 But I'm sure PDSD would do -- would do as

- 1 best they could, yes.
- 2 MEMBER GOLD: Why haven't they done this
- 3 already?
- 4 MR. LUSK: That would be the applicant's
- 5 question.
- 6 MEMBER GOLD: Well, I'm asking the City
- 7 because --
- 8 MR. LUSK: No, the City doesn't file the
- 9 application. The applicant does.
- 10 CHMN STAFFORD: Right. And the utility
- 11 needs a route to file the application.
- 12 MEMBER GOLD: Yes.
- 13 CHMN STAFFORD: So we're kind of in a
- 14 catch-22 here or a circular pattern, you know, because
- 15 they need a route so they can request a specific special
- 16 exception. They can't request a special exception until
- 17 they have a route. So they're here to get the route. So
- 18 that's -- I think it's --
- 19 MR. LUSK: Well, and if I could, Mr. Chair.
- 20 I think there was some discussion yesterday
- 21 about the Vine special exception process. That's a
- 22 different special exception process than the special
- 23 exception process that's allowed for the Gateway Corridor
- 24 Zone, which was developed with TEP.
- 25 So it's not necessarily so that a route

- 1 would be required, although the crossings would have to
- 2 be identified.
- 3 CHMN STAFFORD: Right. So the specific
- 4 crossings, which -- okay.
- 5 MR. LUSK: Correct.
- 6 CHMN STAFFORD: I guess so if they identify
- 7 the crossing specifically, they could get -- they could
- 8 get the special exception, and the rest of the line could
- 9 be nebulous as long as it didn't involve another crossing
- 10 of a Gateway Corridor Zone?
- MR. LUSK: Sure.
- 12 CHMN STAFFORD: Okay.
- 13 MS. HILL: So I think, though, there's
- 14 still a disconnect in that Mr. Lusk is as an attorney and
- 15 he's stated on many occasions he can't make these
- 16 decisions.
- 17 I still from the fact witness that is here
- 18 and the evidence that is in the record, if you take a
- 19 look at UAZ I think it's 23, which was entered in, which
- 20 was the zoning examiner's decision about the special
- 21 exception for the Vine Substation that says we don't know
- 22 where the line's going to go, I don't --
- 23 CHMN STAFFORD: That's 22.
- MS. HILL: 22. Thank you. I don't think
- 25 that Mr. Lusk here -- I don't -- and I don't -- what I

- 1 don't want to do is create a situation where we're trying
- 2 to hold Mr. Lusk in his position as attorney for the City
- 3 to a commitment that a fact witness couldn't make.
- 4 MEMBER GOLD: Understood. So --
- 5 MS. HILL: And I just don't think that's
- 6 appropriate or fair.
- 7 MEMBER GOLD: And I'm aware of that now.
- 8 So I would just make a generalized
- 9 statement that this should have been done between the
- 10 City whatever department is in that bureaucracy and TEP
- 11 long before today, and it wasn't done, to make the
- 12 project go smoother.
- 13 But we're not there now. We're here now.
- 14 So the situation is my understanding they're probably not
- 15 going to have an issue crossing perpendicularly on
- 16 whatever routes they choose and then present, and then it
- 17 will be approved.
- 18 My concern right now is the route. And the
- 19 route which is the shortest, which is the least
- 20 expensive, which is the fastest to do is on one side of
- 21 the equation.
- 22 On the other side of the equation is the
- 23 laws of the City of Tucson, the feelings of the residents
- 24 who live there, and the inconvenience that would be
- 25 caused by construction within the city limits for a

- 1 period of time. And all of that is aimed at a suspense
- 2 date of 2027.
- 3 Now is that an arbitrary suspense date?
- 4 Can that be changed, or is that a date when it has to be
- 5 accomplished?
- 6 MS. GRABEL: Member Gold, I think we should
- 7 address that to the fact panel.
- 8 MEMBER GOLD: Okay.
- 9 MS. GRABEL: So let's let Mr. Bryner or
- 10 Mr. Lindsey answer that question.
- 11 MR. LINDSEY: So, Member Gold, as we
- 12 testified earlier last week, any delay in the 2027 date
- 13 is going to require additional investment in our aging,
- 14 old system.
- 15 So if it does slide past '27, we're just
- 16 going to be spending additional capital on the 46kV
- 17 system potentially in the substations and the 4kV system,
- 18 all investment that would be better spent on this
- 19 project.
- 20 MEMBER GOLD: Understood.
- 21 And if I remember when we carried to it
- 22 extreme, people can die if we don't get power there and
- 23 an emergency happens.
- Now, if you're going to spend -- now, let's
- 25 assume this project doesn't happen, and you're forced to

- 1 spend a ton of extra money, who pays for it? The
- 2 ratepayers? The taxpayers? TEP?
- 3 Who pays for it?
- 4 MR. LINDSEY: So it would go through our
- 5 normal system reinforcement-type process where we would
- 6 need to -- this scenario you're presenting, Member Gold,
- 7 is kind of a restart for us. So we would be back to the
- 8 beginning planning phases.
- 9 MS. GRABEL: Mr. Lindsey, I think the
- 10 question is if we were required to spend the money on
- 11 rebuilding our 46kV system, we would just pursue it
- 12 through a normal ratemaking process, wouldn't we?
- 13 MR. LINDSEY: That's correct. Yes.
- 14 MS. GRABEL: So ratepayers would pay for
- 15 it; correct?
- MR. LINDSEY: Yes.
- 17 MEMBER GOLD: So the rate -- it would cost,
- 18 and it wouldn't cost TEP, it would cost ratepayers.
- 19 Okay. Pretty much you've answered the
- 20 first set of questions that I had.
- 21 Mr. Chairman, back to you.
- 22 CHMN STAFFORD: All right. I think Member
- 23 Richins has a question.
- 24 MEMBER SOMERS: Mr. Chairman.
- 25 CHMN STAFFORD: Member Somers.

- 1 MEMBER SOMERS: Just a short question.
- We talked a little bit and heard testimony
- 3 about an exception process through the City.
- 4 Would that process be open to discussions
- 5 from the applicant on if -- if the transmission line went
- 6 through an area where it was supposed to be undergrounded
- 7 but the cost or technical reasons didn't really allow for
- 8 that, could the applicant make an approach to the City to
- 9 reach an exemption --
- 10 MS. GRABEL: Mr. Bryner.
- 11 MEMBER SOMERS: -- to be able to put them
- 12 overhead?
- 13 Thank you.
- MS. GRABEL: Mr. Bryner.
- 15 CHMN STAFFORD: All right. Mr. Bryner, I
- 16 believe, can answer that question. I seem to recall a
- 17 slide that had the criteria for the special exceptions.
- 18 MR. BRYNER: That was one of the City's
- 19 exhibits.
- I don't know, Mr. Lusk, if you recall what
- 21 that is.
- 22 MR. LUSK: I believe it's COT-8.
- MR. BRYNER: So if we could go to COT-8.
- I don't remember which slide number it is.
- MR. LUSK: I apologize. It's about eight

- 1 or nine slides in, I think.
- 2 CHMN STAFFORD: That was the witness
- 3 presentation. Yeah.
- 4 MEMBER SOMERS: That is an excellent
- 5 memory. I have vague recollections of it. And you can
- 6 tell me it's eight or nine slides in, so you're winning.
- 7 MR. LUSK: That's right. That's it
- 8 exactly.
- 9 CHMN STAFFORD: Can you see that, Member
- 10 Somers?
- 11 MEMBER SOMERS: Yes, I can.
- MR. BRYNER: Okay. So in trying to answer
- 13 your question -- actually, Member Somers, can you restate
- 14 your question for me one more time?
- 15 MEMBER SOMERS: So this process -- let
- 16 me -- let me paraphrase it.
- 17 If you find an economic or technical reason
- 18 where you couldn't do an undergrounding through an area
- 19 that would require it by the ordinance, is there a relief
- 20 process to go through the City to get a waiver for that?
- MR. BRYNER: So, yes, I believe there are.
- So we have the one, two, three, four, five
- 23 six, seven, eight -- sorry, eight different criteria that
- 24 are under this special exception. And the -- under F it
- 25 says, "The transmission lines are proposed in an area

- 1 where there is the existence of railroad, highway, or
- 2 bridge crossing or underground installation would
- 3 interfere with other existing underground facilities."
- 4 MEMBER SOMERS: Okay.
- 5 MR. BRYNER: So I think that might be
- 6 somewhere where you can seek an exception. But if you --
- 7 and that's one where you just need to meet one of the
- 8 criteria.
- 9 I know in drafting this with the City that
- 10 was intended for, like, along Kino Parkway where it
- 11 crosses over Aviation and a couple of bridges. I'm sure
- 12 that wasn't the only thought in mind, but that was the
- 13 specific thought because that presented challenges to
- 14 undergrounding.
- 15 CHMN STAFFORD: But I would note that cost
- 16 is not called out in this.
- 17 MEMBER SOMERS: That was my follow-up
- 18 question, is cost included in this?
- 19 Thank you, Chair.
- 20 CHMN STAFFORD: Yeah. No, specifically
- 21 cost is not a factor of this.
- MR. LUSK: Can I follow up with that,
- 23 Mr. Bryner?
- 24 CHMN STAFFORD: Please, Mr. Lusk.
- MR. LUSK: Or with Mr. Bryner. Sorry.

- So as it relates to discussion earlier,
- 2 Mr. Bryner, about perpendicular crossings, is there
- 3 criteria associated with that?
- 4 MR. BRYNER: Yes, there is.
- 5 MR. LUSK: And what is that?
- 6 MR. BRYNER: It's criteria D. "The relief
- 7 is requested for a segment that perpendicularly crosses a
- 8 Gateway Corridor Zone."
- 9 MR. LUSK: And your understanding of these
- 10 criteria, these are criteria that allow the applicant to
- 11 apply for this special exception?
- 12 MR. BRYNER: So, yes, this doesn't list
- 13 everything.
- 14 MR. LUSK: Right.
- 15 And there are other concerns that can be
- 16 brought out during a public hearing?
- 17 MR. BRYNER: I assume during a public
- 18 hearing, but also just in applying one of our -- one of
- 19 our concerns as the company -- and I was really hoping
- 20 that we could get more definitive answers yesterday from
- 21 your witness, and I understand why -- why he couldn't
- 22 provide those.
- But there's so many components of the
- 24 language -- both within this and references to other
- 25 portions of the code that you have to meet in order to be

- 1 granted a special exception, there's so many pieces of
- 2 language that are subject to interpretation, and we've
- 3 not been able to get a clear definition from the City on
- 4 the definition of those, nor from your witness.
- 5 And so it leaves us in a position where we
- 6 don't know how that will be interpreted. And so we don't
- 7 have great confidence that we would be granted a special
- 8 exception.
- 9 MR. LUSK: Well, that seems different from
- 10 your testimony earlier where you were confident that you
- 11 would be able to get a special exception for a
- 12 perpendicular crossing.
- MS. GRABEL: Mr. Bryner, let me follow up
- 14 on that.
- 15 There's the one portion of the line --
- 16 MR. LUSK: Can you answer the question
- 17 first?
- 18 CHMN STAFFORD: What was the question?
- 19 MR. LUSK: The question is that his
- 20 testimony appears to have changed from being confident to
- 21 getting a perpendicular special exception to not being
- 22 confident now.
- MR. BRYNER: So I'll agree that that may be
- 24 inconsistent with some of my testimony.
- 25 But can I qualify that?

- 1 MR. LUSK: Sure.
- 2 MR. BRYNER: So there's one place where I'm
- 3 a little worried about it, and that's on our preferred
- 4 Route 4 where it crosses Broadway. And that has to do
- 5 with where does the University Area Plan begin, where
- 6 does it end, because that's in the code under the special
- 7 exception, it sites 3.4.5 --
- 8 MR. LUSK: Correct.
- 9 MR. BRYNER: -- if I'm recollecting
- 10 correctly, which states that it needs to be consistent
- 11 with any specific plans.
- 12 MR. LUSK: So if you were able to get
- 13 clarification for that, you would be even more confident
- 14 in your earlier testimony?
- 15 MR. BRYNER: If we could get clarification
- 16 on that as well as clarification on the language within
- 17 the University Area Plan that states where possible.
- 18 MR. LUSK: Well --
- 19 MEMBER SOMERS: Mr. Chair.
- 20 CHMN STAFFORD: Yes, Member Somers.
- 21 MEMBER SOMERS: There's something else I
- 22 would like some clarity on as we're discussing this
- 23 because I apparently pulled a pin out of a grenade here,
- 24 Member Gold. Member Gold ought to like that analogy.
- 25 What I'm seeing on several of these items,

- 1 D, E, F, G, especially the ones -- F I think is the one
- 2 we're referring to, there are ellipses at the end of the
- 3 sentences, clearly a truncated report version on the
- 4 slide.
- 5 I would like to see in code or ordinance
- 6 from the City of Tucson before we begin our deliberations
- 7 whether cost is indeed a factor that can be brought to
- 8 whatever committee that would -- that would meet on
- 9 deciding a special exemption.
- 10 MR. LUSK: Thank you, Member Somers.
- If I might answer, Mr. Chair.
- 12 CHMN STAFFORD: Yes. Certainly, Mr. Lusk.
- 13 And I guess what he's asking to see is if
- 14 you could provide --
- 15 MR. LUSK: The full code section?
- 16 CHMN STAFFORD: -- the full exception --
- 17 the full set of exceptions so that we can see the full
- 18 criteria.
- 19 And then we'll see if the word "cost" is in
- 20 there anywhere.
- MR. LUSK: Sure. Member Somers, we can
- 22 provide that.
- I can tell you at this point that the
- 24 ellipses don't remove any substantiative provisions. It
- 25 was just to get it on the slide. I apologize about that.

- 1 But we can provide the full code section
- 2 for you.
- 3 MEMBER SOMERS: Yeah, I have no complaint
- 4 about that. You have to make the space. But I would
- 5 like to see what else is in there so we -- I agree with
- 6 the Chair if we could see that full code so we can have
- 7 that for our deliberation.
- 8 MR. LUSK: We can absolutely provide it.
- 9 MEMBER SOMERS: Also, could we get this
- 10 slide down so I can see faces?
- 11 MEMBER RICHINS: Chairman.
- 12 MEMBER LITTLE: Mr. Chairman.
- 13 MEMBER SOMERS: I always like to see
- 14 expressions.
- 15 CHMN STAFFORD: Wait one second. Okay.
- 16 There you go.
- 17 Is that better, Member Somers?
- 18 MEMBER SOMERS: Perfect. Thank you, sir.
- 19 CHMN STAFFORD: Now, so, Mr. Lusk, how big
- 20 is the section?
- 21 This is part of the UDC or is this for --
- 22 where -- this language here, the relief in the GCZ
- 23 underground requirement, what exactly is that from?
- MR. LUSK: So that's in Section 4.9 of the
- 25 code section. It's related to the utility use group.

- 1 The special exception process was added in
- 2 there as the ability to grant -- grant relief
- 3 specifically for transmission lines as, of course,
- 4 written with TEP's input.
- 5 CHMN STAFFORD: Is that in the UDC?
- 6 MR. LUSK: It is in the UDC, correct.
- 7 CHMN STAFFORD: The UDC is, what, some
- 8 500 pages or something, isn't it?
- 9 MR. LUSK: I've never had a chance to --
- 10 CHMN STAFFORD: I believe it's --
- 11 MR. LUSK: I don't think it's 500 pages,
- 12 but it's pretty -- it's rather relatively lengthy, yes.
- 13 CHMN STAFFORD: Well, was the UDC already
- 14 admitted as an exhibit is my question?
- 15 MR. LUSK: The entire UDC has not been
- 16 admitted as an exhibit. I could provide an exhibit of
- 17 applicable -- what we believe are applicable UDC
- 18 provisions if that would --
- 19 CHMN STAFFORD: I'm just -- I thought a
- 20 good portion of it was already in the record. I'd have
- 21 to go back and look through the --
- 22 MR. LUSK: Whether it's in the record or
- 23 not you said?
- 24 CHMN STAFFORD: Yeah.
- Didn't -- Mr. Dempsey, did you attach a

- 1 chunk of that?
- Okay. Then I'm trying to recall. I
- 3 thought there was a portion of it in there already.
- 4 MR. DEMPSEY: I had read -- I just had the
- 5 Arizona Revised Statutes.
- 6 CHMN STAFFORD: Okay.
- 7 MS. HILL: So, Chairman Stafford, one of
- 8 the things that might help is that we could bring it up.
- 9 It's a publicly available document. It's an ordinance.
- 10 You could take administrative or judicial notice of it.
- 11 And then we could pull it up and discuss it.
- 12 CHMN STAFFORD: Then I will take
- 13 administrative/official notice of it, and we can pull
- 14 that section up for Member Somers right now, couldn't we?
- MS. GRABEL: We can.
- 16 MS. HILL: I will allow Mr. Lusk to do
- 17 that.
- 18 CHMN STAFFORD: All right.
- 19 MS. GRABEL: I think Mr. Ancharski is doing
- 20 it.
- 21 CHMN STAFFORD: All right. As we'll
- 22 work -- so we'll work on that for now, Member Somers.
- I believe other members have questions
- 24 while that's pending.
- 25 MEMBER HILL: Mr. Chair.

- 1 CHMN STAFFORD: Did you have -- unless you
- 2 had another question before you saw the code.
- 3 MEMBER SOMERS: I'm sorry, are you
- 4 referring to me, Chair?
- 5 CHMN STAFFORD: Yes. Yes. I want to make
- 6 sure you were done asking questions while -- so we can
- 7 move on to other member questions while they're pulling
- 8 the code up so you can see exactly what the wording is
- 9 that's missing.
- 10 MEMBER SOMERS: Yeah. I am -- yeah, that's
- 11 it for my question. Thank you.
- 12 CHMN STAFFORD: Okay. All right. Member
- 13 Hill.
- 14 MEMBER HILL: I just had a suggestion for
- 15 Member Little and Member Somers. If Grace could drop the
- 16 link into the chat so that particularly Member Somers
- 17 could review that. That might be helpful so that he --
- 18 they can take a closer look.
- 19 MEMBER LITTLE: Mr. Chairman.
- 20 CHMN STAFFORD: That maybe easier than
- 21 getting it on screen.
- 22 Member Little.
- 23 MEMBER LITTLE: I have a question that --
- 24 just kind of a follow-up question.
- 25 Did the recent superior court ruling

- 1 address any of the issues that are listed in that slide
- 2 that we were just looking at, that section of the UDC, or
- 3 did the ruling just talk about general compliance?
- 4 CHMN STAFFORD: I'll let Mr. Lusk and
- 5 Ms. Grabel address that unless Ms. Hill would prefer to
- 6 do it.
- 7 MS. HILL: I'll take it.
- 8 MS. GRABEL: We'll let Ms. Hill address
- 9 that.
- 10 MR. LUSK: So from the City's perspective,
- 11 what the superior court did was affirm our ability to
- 12 require undergrounding within the Gateway Corridor Zone
- 13 and affirm our zoning administrator's determination that
- 14 it is -- that it is required -- utilities are required to
- 15 underground within the Gateway Corridor Zone.
- 16 MS. HILL: And just as a caveat to that.
- 17 So while I will agree generally with Mr. Lusk's
- 18 assessment of it. So there are two things. The
- 19 appellant time line -- the time to file notice of appeal
- 20 is not yet at this point. The company does not concede
- 21 that that ruling is going to not go -- we're not ready to
- 22 say that's not going to go up on appeal, number one.
- But, number two, one of the findings in
- 24 that appeal -- or in that specific action was certainly
- 25 that this is not an upgrade. That is what Judge Bryson

- 1 found that this was not, in fact, an upgrade, which I do
- 2 think is relevant to the special exceptions process.
- 3 There were some other issues too. There
- 4 were summary judgment issues on a couple of other things
- 5 that we're also considering very strongly.
- 6 And so but for the purposes of this -- we
- 7 have always maintained this. For the purposes of this
- 8 finding that we are asking for, this Committee had to
- 9 always assume that the gateway applied and that -- that
- 10 the Gateway Corridor Zone, that the UDC applied because
- 11 otherwise if it didn't apply there would be no reason for
- 12 us to ask for the finding.
- 13 And so I don't think that it changes this
- 14 Committee's analysis of that.
- 15 CHMN STAFFORD: Right. I think -- so
- 16 the -- basically the finding of fact that the ruling
- 17 relied on was that going from the 46kV to 138kV is not an
- 18 upgrade.
- 19 MS. HILL: Particularly, too, it is a
- 20 highly fact-specific finding. And the factual record
- 21 itself is, of course, something that we're considering.
- 22 But this was a very factual finding based
- 23 upon this particular project.
- 24 And so -- and we've always maintained that
- 25 this Committee for its purposes and its jurisdiction has

- 1 to assume it does apply.
- 2 MR. LUSK: And I would agree with that.
- 3 MEMBER LITTLE: Thank you.
- 4 MR. LUSK: Oh, go ahead, Member --
- 5 MEMBER LITTLE: That's very, very helpful.
- 6 CHMN STAFFORD: Okay. Thank you, Member
- 7 Little.
- 8 MR. LUSK: Mr. Chair, and I just want to
- 9 for the record there's no 46kV in the Gateway Corridor
- 10 Zone on Campbell.
- 11 CHMN STAFFORD: Right. Right.
- MS. HILL: We agree.
- 13 CHMN STAFFORD: But what's -- what is --
- 14 what is on Campbell?
- 15 MS. HILL: It's distribution.
- 16 MR. LUSK: A distribution line.
- 17 MS. GRABEL: Let's let -- let's let the
- 18 fact witness answer the questions.
- 19 CHMN STAFFORD: Mr. -- yeah. Mr. Bryner,
- 20 because, like, I have several questions about different
- 21 sections of the route, and one of them is there are
- 22 utility poles along Campbell Avenue as we speak now.
- What voltage are those lines?
- 24 Is that the 4kV? 14kV?
- What is that?

- 1 MR. BRYNER: Yes, Chairman Stafford, happy
- 2 to answer that question.
- 3 So we do not have any 46kV in any portion
- 4 of Campbell Avenue within the Gateway Corridor today.
- 5 If you'll recall that little portion of
- 6 Campbell Avenue where we were -- where we visited the old
- 7 substation site, there is 46kV on that, but that's
- 8 outside of the Gateway Corridor Zone.
- 9 The remainder of the poles that you saw on
- 10 Campbell Avenue as we were on the tour, those are -- I
- 11 believe they're all 4kV.
- 12 Do you know?
- 13 MR. LINDSEY: Chairman Stafford, so we do
- 14 have a mix of distribution of 4 and 14kV in this area.
- 15 Further down south near the Kino area most
- 16 of that's been upgraded to 14.
- 17 The poles that were I have a feeling we're
- 18 talking about along Campbell I'll say north of Broadway,
- 19 that's our old 4kV system, but it is distribution.
- 20 CHMN STAFFORD: All right. Yeah. So,
- 21 yeah, I knew we'd seen poles between Broadway and -- was
- 22 it Ring Road or so, yeah.
- MR. BRYNER: Correct.
- 24 CHMN STAFFORD: But those are the
- 25 distribution poles.

- Okay. And so but the issue in the court
- 2 was -- was it going from 4kV to 138kV, not 46kV to 138kV?
- 3 MR. LUSK: I think the argument that TEP
- 4 made in the -- before the superior court is that
- 5 replacement of poles from a distribution to a
- 6 transmission line is an upgrade.
- 7 CHMN STAFFORD: Well, that's a heck of an
- 8 upgrade.
- 9 MS. HILL: I'm going to say that I think
- 10 that there are some nuances there.
- 11 You know, I'm not going to speak for what
- 12 the City argued in the superior court proceeding. And I
- 13 think our arguments speak for themselves. And there are
- 14 transcripts we can enter into the record.
- 15 But, you know, the argue -- it was not
- 16 specific to that. Our -- I think this Committee has
- 17 heard that what we are doing in our perspective is an
- 18 upgrade from a 46kV distribution -- or a 46kV system to a
- 19 138kV looped system and that the 46kV substation that is
- 20 immediately adjacent -- and it's actually smack in
- 21 between the University of Arizona's existing substation
- 22 that they own and the site for the Vine Substation -- is
- 23 going to be retired.
- 24 To us that's an upgrade. To the superior
- 25 court it was not.

- 1 CHMN STAFFORD: Right. Po-tay-to,
- 2 po-tah-to. But I think -- so let me just clarify,
- 3 Mr. Bryner.
- 4 So the existing substation on Vine that's
- 5 the university's substation, that is going to retire?
- 6 MR. BRYNER: So our -- our U of A medical
- 7 substation, that will be retired along with seven other
- 8 substations.
- 9 CHMN STAFFORD: Okay. All right. But I
- 10 seem to recall some testimony about the wall would be
- 11 made to match that -- the existing substation.
- 12 MR. BRYNER: Yeah. Chairman Stafford, so
- 13 the wall that's around -- again, there's two substations
- 14 there. The wall that's around the university-owned GIS
- 15 substation that's kind of a red brick wall, our proposal
- 16 was to match that wall for the wall around the Vine
- 17 Substation.
- 18 CHMN STAFFORD: Okay. But the university
- 19 substation will be retired, then?
- 20 MR. LINDSEY: Chairman Stafford, so what
- 21 we're looking at if you recall the tour, we stopped at
- 22 the proposed Vine Substation several times.
- 23 Due south of that is our U of A medical
- 24 substation. TEP owned and operated that. That will be
- 25 retired.

- 1 CHMN STAFFORD: Okay.
- 2 MR. LINDSEY: Then due south of that
- 3 substation is a substation owned and operated by the
- 4 University of Arizona. Parts of that substation will be
- 5 retired.
- 6 So today we serve the U of A at 46kV. Once
- 7 this project is complete, we'll serve the U of A at
- 8 13.8kV.
- 9 So the substation will remain in -- from a
- 10 perspective that that's how we'll connect to the
- 11 university, but their transformers will be removed from
- 12 that substation.
- 13 So I would consider it a partial
- 14 retirement, but the footprint of that facility will
- 15 remain.
- 16 CHMN STAFFORD: Okay. So it's getting
- 17 downsized.
- 18 I guess Member Richins has a question.
- 19 MEMBER RICHINS: For a long time. I've
- 20 been waiting so patient.
- 21 The finding of fact on this undergrounding
- 22 issue, what is the reason for that finding of fact?
- 23 Can you restate that, why you want us to
- 24 take that action?
- MS. GRABEL: Certainly. I'm happy to, to

- 1 restate that.
- If you recall, we could go down the special
- 3 exception process, but you remember the City's testimony
- 4 yesterday. We are not comfortable that we would be
- 5 granted a special exception. And there's a couple of
- 6 reasons for that.
- 7 The first is that one of the perpendicular
- 8 crossings, as Mr. Bryner mentioned, crosses through what
- 9 we believe is in the University Area Plan. The fact
- 10 finder, in granting a special exception, has to make an
- 11 additional finding before even being allowed to grant a
- 12 special exception that we're not in violation of any
- 13 applicable neighborhood or area plans.
- 14 When I asked the City's witness on the
- 15 stand yesterday whether that finding could be made, he
- 16 have unable to give us an answer.
- 17 And so if the UAP applies and the Gateway
- 18 Corridor applies, we're concerned that the City could
- 19 require us to underground all of the areas that run
- 20 through the preferred route that conflict or they believe
- 21 conflict with the University Area Plan.
- 22 I believe our concern was exacerbated
- 23 yesterday when we saw the City of Tucson's Exhibits 8 and
- 24 9 where they started raising other issues such as the
- 25 location of the Vine Substation and wanting to go back to

- 1 the drawing board.
- And as you see, there's been ample
- 3 testimony, time is really of the essence here. And we've
- 4 exhausted the routes. We've exhausted the ability to
- 5 have that conversation. So that's why we need a finding.
- 6 MEMBER RICHINS: What I'm trying to get is
- 7 what is your reason for concern of not -- I mean, I get
- 8 that you're worried, the business risk, the uncertainty
- 9 around the process.
- 10 Why are you seeking it in the first place?
- 11 Why are you seeking that --
- MS. GRABEL: Certain costs.
- 13 MEMBER RICHINS: Okay. Okay. So going
- 14 back to the franchise agreement -- this is what I'm
- 15 trying to reconcile.
- 16 The franchise agreement has been
- 17 established as the governing document of the relationship
- 18 between TEP and the City of Tucson. If you go to page 3,
- 19 Section 21 "Undergrounding," it says in there in Section
- 20 (a) that the City if they require that has to bear some
- 21 of that cost.
- 22 Am I missing -- "The City may require the
- 23 company to place lines underground if the city pays the
- 24 difference between the cost of placing such lines
- 25 underground and the cost of placing them aerially."

- 1 Section A -- Section 21(a) of your franchise agreement.
- 2 Mr. Lusk, please hold your question.
- 3 MR. LUSK: Sure.
- 4 MEMBER RICHINS: The other -- in Section
- 5 (c) "Exception to Undergrounding," "The company shall be
- 6 required to place new aerial transmission or distribution
- 7 lines" -- and I believe we've established these are new
- 8 lines, new construction -- "new aerial transmission or
- 9 distribution lines underground only when such placement
- 10 is feasible for technical or system reasons. Such
- 11 reasons cannot include the monetary cost of the proposed
- 12 undergrounding project."
- 13 I don't see how this Committee can
- 14 supercede a franchise agreement that's very clear that
- 15 costs cannot be the factor.
- 16 MS. GRABEL: So Ms. Hill is the queen of
- 17 the franchise agreement, so I will let her address your
- 18 question.
- 19 MS. HILL: Well, so actually I'm going to
- 20 let Mr. Lusk -- Mr. Lusk and I have actually spoken about
- 21 this. And so I'm going to let him start with the City's
- 22 discussion of that.
- I believe in our conversations Mr. Lusk
- 24 believes that this Committee has the authority to make
- 25 the finding.

- 1 CHMN STAFFORD: Mr. Lusk.
- 2 MEMBER SOMERS: Mr. Chairman.
- 3 MS. HILL: Let me -- let me just -- I just
- 4 so --
- 5 CHMN STAFFORD: One second. There's a
- 6 question to Mr. Lusk. Mr. Lusk will answer. And then
- 7 we'll hear the next person. But for now Mr. Lusk is
- 8 going to answer the question.
- 9 MR. LUSK: As to the last question that
- 10 Ms. Hill posed, which is the members of this Committee do
- 11 have the authority under state law to make the finding
- 12 that we're discussing.
- 13 As to how that gets paid for and related to
- 14 costs going to your question, Member Richins, the first
- 15 part of that sentence in (a) says where -- "in any area
- 16 where the company is not already required pursuant to
- 17 federal, state, or local law." That's where Section 21
- 18 applies.
- 19 So in this case what the assumption is and
- 20 what the applicant has to and the members have to assume
- 21 is that they're already required by under local law to be
- 22 undergrounded. So that Section 21 doesn't necessarily
- 23 address where those costs lie, if that makes sense, other
- 24 than the fact they don't rely with the City.
- MS. HILL: And if I may.

- 1 CHMN STAFFORD: So you're -- wait -- and
- 2 then -- wait -- let me get the City's perspective -- or,
- 3 I mean, the utility's perspective, and then you can ask
- 4 another question, right?
- 5 MS. HILL: And so what we -- what we
- 6 believe -- and these conversations have occurred -- like,
- 7 when we say we've been doing this since 2019, we're
- 8 really not kidding. We've been working through this.
- 9 And it's part of the reason that the franchise was
- 10 another possibility like additional fees.
- 11 We believe, and I think this is agreed
- 12 upon, that section (c) modifies only the portion of where
- 13 we are otherwise required -- it only -- it only modifies
- 14 that little section. It doesn't -- it doesn't speak to
- 15 this Committee's authority, because if you -- I'm having
- 16 a hard time explaining it here.
- 17 So --
- 18 MR. LUSK: If I --
- MS. HILL: Go ahead.
- 20 MR. LUSK: If I may, I think what the
- 21 applicant and the City both agree on is that the
- 22 franchise and this Committee's authority are separate.
- 23 So they don't necessary -- one doesn't trump the other.
- MS. HILL: Correct, in this situation.
- 25 MEMBER RICHINS: And I believe that makes

- 1 sense, which is why I'm struggling with this particular
- 2 finding.
- 3 It just doesn't seem to be sitting -- I
- 4 feel like you put the Line Siting Committee between the
- 5 relationship between TEP and the City of Tucson to
- 6 specifically have somebody to blame in court, and it
- 7 feels very uncomfortable. And I don't really want to be
- 8 in that position.
- 9 And I know I'm making an outlandish
- 10 accusation at you, I get it, but I'm doing that for
- 11 specific purposes. I want us to understand that your
- 12 relationship between the two of you so transcends what
- 13 we're doing here in this Committee and that your work on
- 14 the franchise agreement that you're going to have to
- 15 complete here very quickly is an opportunity, and you
- 16 know that. I know you both know that.
- 17 And I'm not going to save Tucson from
- 18 itself. And I'm not going to save TEP from making claims
- 19 about costs which I don't think have been fully proven
- 20 here. So the cost claims have been all over the place.
- 21 So I think what we really need to get down
- 22 to is -- is establishing what our route parameters are,
- 23 and then you guys will probably have to duke it out after
- 24 that, but I don't feel comfortable whatsoever providing a
- 25 finding in that instance.

- 1 But this is a very specific instance. This
- 2 isn't a broad authority that we would yield as the
- 3 Committee. It's very specific because Tucson has very
- 4 specific rules. You have a very specific franchise
- 5 agreement. This is a unique situation that we need to
- 6 govern through.
- 7 MS. HILL: So, if I may, Member Richins.
- 8 May I refer back to Section 21?
- 9 And I would note in response to your
- 10 concern look how long the applicant waited to get here,
- 11 to get to this Committee. Five years. Five years. We
- 12 spent five years working through this, and I just would
- 13 like -- I understand what you are saying. But this is
- 14 the forum afforded by Arizona state law.
- 15 MEMBER HILL: So you're asking us to
- 16 mediate between the City and TEP?
- 17 MS. HILL: What we are asking you to do is
- 18 exercise your authority under state law. It's -- the
- 19 City and TEP, I agree, there are going to always be
- 20 things that we have to work out. But this Committee has
- 21 the authority under state law, and we are asking you to
- 22 exercise that authority in a very specific circumstance.
- 23 And in those circumstances, our preferred
- 24 route is asking for a very, very limited section where
- 25 you would have to make a finding. Very limited.

- 1 Now, Member Richins, can I point you back
- 2 to Section 21? Because I would like to walk through that
- 3 with you, if I can.
- 4 Okay. So if you take a look at with
- 5 section (a), start with (a), it says, "Subject to
- 6 Subsection (c), in any area where this company is not
- 7 already required pursuant to federal, state, or local law
- 8 or agreement, to place its transmission or distribution
- 9 lines underground, in any new construction or relocation
- 10 of aerial transmission or distribution lines, the City
- 11 may require the company to place such lines underground
- 12 if the City pays the difference between the cost of
- 13 placing such lines underground and the cost of placing
- 14 them aerially."
- 15 If the City's position is that the UAP does
- 16 not require the undergrounding of these, which I keep
- 17 hearing may be the position, then I believe that
- 18 Section 21 requires the City to pay for that.
- Now, if they want to?
- 20 MEMBER RICHINS: "Subject to Subsection
- 21 (c)."
- MS. HILL: "Subject to Subsection (c)," but
- 23 I believe that the City is required to pay for that.
- Now, if, however, the University Area Plan
- 25 is determined to be some sort of enforceable local law,

- 1 which I'm not sure it is, but the City has yet to take a
- 2 position on that, then --
- 3 MR. LUSK: I'd like to respond to that
- 4 specifically because it --
- 5 CHMN STAFFORD: Wait until she finishes her
- 6 answer, please.
- 7 MR. LUSK: Okay.
- 8 MS. HILL: -- then subsection (c) kicks in.
- 9 Because where the local -- if the City -- it says here,
- 10 the City may -- so (a) says that if there's no local law,
- 11 then the City -- and they want us to underground it, the
- 12 City has to pay the difference, right? That's what (a)
- 13 says.
- 14 What (c) says is that, "The company shall
- 15 be required to place new aerial transmission lines or
- 16 distributions underground only when such placement is
- 17 feasible for technical or system reasons. Such reasons
- 18 cannot include the monetary cost of the proposed
- 19 undergrounding project."
- 20 We believe that subsection (c) applies when
- 21 we are required under local law to do so.
- 22 And so as a result, Member Richins, I hear
- 23 what you're saying. You can apply it as you see fit.
- 24 MEMBER RICHINS: Yeah. I think we have a
- 25 different -- because I believe the UDC is the local law

- 1 that's in place to do that. So, yes, there is a local
- 2 law in place.
- 3 MS. HILL: Right. So let me then go a
- 4 little further down there and say that we're not arguing
- 5 that the UDC isn't a local law. We're not going to say
- 6 that, right? That would be --
- 7 MEMBER RICHINS: Yeah. And we're not
- 8 arguing that we don't have the authority to grant you a
- 9 finding.
- 10 MS. HILL: Correct.
- 11 MS. GRABEL: If I may add to the
- 12 application of subsection (c).
- 13 The way that I believe we interpret it is
- 14 that if (a) requires us to underground, we can do so
- 15 unless we believe it's not feasible. And for the limited
- 16 purpose of the franchise the exception only applies if
- 17 we're not -- we don't have to underground if it's not
- 18 feasible, and for that limited purpose it can include
- 19 cost.
- 20 That doesn't mean that cost can be a
- 21 consideration in the statutory interpretation that we're
- 22 asking this Committee to make. The franchise cannot
- 23 interpret a state law.
- MS. HILL: That's correct. And it can --
- 25 and so just one other thing too.

- 1 To build on that, not only can the
- 2 franchise not interpret a state law, it cannot -- it
- 3 cannot define the meaning of feasible under state law.
- 4 This Committee can also determine on its own accord that
- 5 there are other issues of technical feasibility, which
- 6 may include timing.
- MEMBER RICHINS: I understand that. And I
- 8 appreciate what you are saying. I don't think you've
- 9 established that there's a technological impossibility of
- 10 being able to underground and that it's infeasible. And
- 11 so it seems like we -- it knocks us down to that.
- 12 And I agree that the franchise isn't the
- 13 force of law like the UDC is or the University Area
- 14 Plans, whether they are or not, but it governs your
- 15 relationships on how you guys are going to handle these
- 16 kinds of transactions.
- 17 And now it feels like the parties are
- 18 warring over a 20-year-old franchise agreement that they
- 19 couldn't get the new one past the voters a couple years
- 20 ago. And I'm being asked to arbitrate that.
- 21 And it just -- it is a very unique
- 22 circumstance. And we will not yield our authority to
- 23 grant such a finding as you're requesting here. I just
- 24 am trying to find a reason to do that, and I haven't
- 25 received one yet. And so I'm just struggling through

- 1 that.
- 2 CHMN STAFFORD: Let's let -- I think Mr.
- 3 Lusk has been waiting patiently to give his response.
- 4 Please do so, Mr. Lusk.
- 5 MR. LUSK: Thank you, Mr. Chair.
- 6 Member Richins, I think the City would
- 7 ultimately agree with you on most of what you said.
- 8 And what we're asking for is only that we
- 9 be allowed to engage in that relationship as you
- 10 described it here locally with our already available
- 11 processes that we have actually worked cooperatively to
- 12 create.
- 13 So in making that finding -- and, again, we
- 14 don't know what -- and I agree with you we're not quite
- 15 sure exactly what that finding even means going forward
- 16 because, you know, it doesn't necessarily say that just
- 17 because you grant a route doesn't mean we can't regulate
- 18 how it goes there. So there's some nuance there.
- 19 The other thing that I think would be
- 20 helpful I think maybe for the Committee is to sort of
- 21 distinguish between the two -- because there's actually
- 22 two findings that have to be made here. One is the
- 23 finding for what Mr. Bryner discussed about the
- 24 University Area Plan, but there's also the finding as to
- 25 the Gateway Corridor Zone itself and its requirements.

- 1 And I don't know -- and I don't know that
- 2 that -- you know, I'm not going to tell you what the --
- 3 at this point make a closing argument as to what we think
- 4 the record shows about that, but those are two separate
- 5 things.
- 6 And the testimony yesterday was as it
- 7 relates to the area plans and the neighborhood plans
- 8 while it wasn't specific to any particular plan, it
- 9 was -- Mr. Castro did testify that there's a difference
- 10 between policy and regulation.
- 11 MEMBER RICHINS: Chairman, just -- just
- 12 quick. I mean, can a finding be related to the parties
- 13 in the franchise agreement to -- I mean, this goes to a
- 14 core issue with Tucson. You guys are very bad for
- 15 business. You're very difficult.
- 16 And I'm making an editorial comment. I
- 17 realize that. But Tucson is not a business-friendly
- 18 place, which is why TEP finds itself in this situation.
- 19 They don't have certainty, and they're
- 20 terrified of that. And I don't blame them one bit
- 21 because I've watched Tucson operate over the years. You
- 22 guys need to get your act together to be able to
- 23 negotiate this franchise agreement and solve this issue.
- 24 And I just -- so my question is -- final
- 25 question here -- and then I'll shut up -- is is there a

- 1 possibility of a finding that talks about or refers to
- 2 the franchise agreement and the desire of the Committee
- 3 to see the parties work that out?
- 4 CHMN STAFFORD: Well, I mean, it's worth
- 5 noting that the finding does not apply to franchising.
- 6 In the first part of the statute it says that any
- 7 certificate the Committee grants has to be conditioned on
- 8 compliance with all applicable ordinances, master plans,
- 9 regulations, state -- yada, yada -- except that the
- 10 Committee may grant a certificate notwithstanding any
- 11 such ordinance, master plan, or regulation exclusive of
- 12 franchises if the Committee finds the fact that
- 13 compliance of such ordinance, master plan, or
- 14 regulation...
- 15 So we're talking about ordinance, master
- 16 plan, or regulation. If we find that one of those is
- 17 unreasonably restrictive and compliance is not feasible
- 18 due to technology available, we can issue the CEC not
- 19 mandating compliance with that.
- 20 And I think we need to be specific which
- 21 ordinance, master plan, or regulation we're talking
- 22 about. And there's a list of potential ones in the
- 23 application that I attempted to ask the City about
- 24 yesterday, but they didn't have a -- they couldn't give
- 25 an opinion on it whether it would require undergrounding

- 1 or not.
- 2 And I believe that was what the applicant
- 3 was going to address in their latest CEC -- updated
- 4 proposed CEC. I haven't had a chance to look at it yet.
- 5 Has it been filed?
- 6 MS. GRABEL: Yes. I believe it's been
- 7 filed. Mr. -- yes, it has been. And Mr. Ancharski can
- 8 pass out a copy.
- I mean, I think what you'll see in the
- 10 findings that we propose is we're asking for the finding
- 11 to be made on Gateway Corridor Zone and the University
- 12 Area Plan.
- 13 If Mr. Lusk's research reveals that a
- 14 historic district overlay does require it, we'll ask for
- 15 it to be applied to that too.
- 16 And let me quickly address Member Richins's
- 17 question. We are not asking you to arbitrate. We've
- 18 been at the table with the City that has all of the
- 19 political power here for five years.
- 20 What your finding would do is give us some
- 21 leverage. As Ms. Hill already said, we intend to go
- 22 through the special exceptions process, but we're at the
- 23 burden of the City in this regard. And so that finding
- 24 would be very helpful as we go through that process.
- We'll only have to use the finding if the

- 1 City proves to be unwilling to cooperate with us. I
- 2 think that that's our position at present.
- 3 CHMN STAFFORD: And that's going to -- I
- 4 think that's how I kind of perceive the situation is that
- 5 the City and the utility are at an impasse, and they're
- 6 looking for the Committee with this finding to tip the
- 7 scales to break that impasse.
- 8 MEMBER RICHINS: And, Chairman, you gave a
- 9 comment earlier about condemnation authority.
- 10 How is -- is condemnation authority for the
- 11 utility governed under state law, the franchise
- 12 agreement, local law?
- I actually don't know.
- 14 CHMN STAFFORD: It's state law. I couldn't
- 15 cite the statute, but I'm 100 percent sure it's state
- 16 law.
- 17 MS. GRABEL: 12-1111.
- 18 MEMBER RICHINS: Okay. Thank you.
- 19 MEMBER SOMERS: Mr. Chair.
- 20 CHMN STAFFORD: Yes, Member Somers.
- 21 MEMBER SOMERS: I'm going to try to turn my
- 22 camera on, but every time I do I seem to lose you, so I
- 23 hope I don't.
- 24 Before we give the poor court reporter a
- 25 break, because I think she's been going at a 100 miles an

- 1 hour, I received a link for a utilities use group, which
- 2 is an ordinance for the City of Tucson, I believe.
- 3 So Section 4.9.11, under A, "Distribution
- 4 System," if you go to Item 13 on the third paragraph, I
- 5 think that it answers potentially a little bit of the
- 6 question I had earlier about whether cost of the system
- 7 could be included in asking for a special exception.
- 8 This starts with -- the paragraph starts
- 9 with "A special exception request to relieve the
- 10 requirement to underground transmission must meet the
- 11 required findings of UDC section 3.4.5."
- 12 CHMN STAFFORD: Member Somers -- Member
- 13 Somers, you're breaking up. We can't hear the words that
- 14 you're saying.
- 15 Maybe you should turn your camera off
- 16 because I think --
- 17 MEMBER SOMERS: Hold on a sec. Yep. Is
- 18 that any better, Mr. Chair?
- 19 CHMN STAFFORD: Yes. Yes. The court
- 20 reporter is nodding her head. She can understand what
- 21 you're saying now.
- 22 MEMBER SOMERS: -- I apologize for that.
- 23 CHMN STAFFORD: Okay.
- 24 MEMBER SOMERS: Okay. I'll try to speak up
- 25 too to make sure, but if we -- so the section is No.

- 1 11 -- I'm sorry, 13. So I'm going to go back. "4.9.11,
- 2 Utilities Use Group, "Section "A, Distribution System."
- 3 Item No. 13. And it would go down to the third
- 4 paragraph. And the sentence starts, "A special exception
- 5 request to relieve the requirement to underground
- 6 transmission lines must meet the required findings of UDC
- 7 section 3.4.5."
- 8 You go down a little bit further a couple
- 9 more lines, it specifically calls out as an example "the
- 10 Gateway/Scenic route." And after the comma it says,
- 11 "unless it is technologically impossible and/or clearly
- 12 financially cost prohibitive."
- 13 So would I interpret it correctly to say
- 14 that if they hit a technological issue or if it is
- 15 clearly cost prohibitive, then a special exception could
- 16 be signed off by the City of Tucson?
- 17 CHMN STAFFORD: Thank you. That was
- 18 helpful.
- 19 Member Richins, did you have a question?
- 20 MEMBER SOMERS: Mr. Chair, does it -- this
- 21 is --
- 22 CHMN STAFFORD: And this is from what?
- 23 MEMBER SOMERS: Does this have to be
- 24 entered as an --
- 25 CHMN STAFFORD: You're reading from the

- 1 UDC?
- 2 MS. GRABEL: I believe Mr. --
- 3 MEMBER SOMERS: Yeah. The link that was
- 4 sent to me for --
- 5 CHMN STAFFORD: Right. And that is the
- 6 UDC.
- 7 We can take official administrative notice
- 8 with the UDC as --
- 9 MEMBER SOMERS: UDC. Yes. I do see that.
- 10 CHMN STAFFORD: All right. We do not need
- 11 to enter that as a specific exhibit.
- 12 Mr. Lusk: Mr. Chairman, I -- may I for --
- 13 MEMBER SOMERS: Okay. Thank you very much.
- 14 CHMN STAFFORD: Thank you, Member Somers.
- 15 All right. Mr. Lusk.
- 16 MR. LUSK: Sorry. For specificity it's UDC
- 17 4.9.11.A.13.
- 18 CHMN STAFFORD: Thank you for that
- 19 clarification.
- 20 MEMBER SOMERS: Thank you, Mr. Lusk.
- 21 Mr. Lusk: You're welcome.
- 22 CHMN STAFFORD: All right. Member Somers,
- 23 is there anything further?
- 24 Because I think we're -- as you mentioned,
- 25 we're at the close to 90-minute mark, and the court

- 1 reporter is ready for a break, as are we all.
- 2 MEMBER SOMERS: I think we should give our
- 3 court reporter a break.
- 4 MS. GRABEL: Mr. Chairman, before we
- 5 adjourn, I'd just like to ask this prior to adjourning.
- 6 CHMN STAFFORD: We're not going to adjourn.
- 7 MS. GRABEL: Oh, recessing, not adjourning.
- 8 I heard Member Richins say that he has not
- 9 been -- he does not believe there's sufficient evidence
- 10 in the record to make the finding that it's cost
- 11 prohibitive or something to that effect.
- 12 Perhaps I'm putting words in Member
- 13 Richins's mouth. But what I -- okay. I'll ask you to
- 14 clarify what you said.
- 15 And we have the fact panel here. And so if
- 16 you have any concerns with the testimony that's
- 17 presented, I'd ask that you ask those types of clarifying
- 18 questions now while you have the opportunity to do so.
- 19 MEMBER RICHINS: In response, thank you.
- 20 I don't think that sufficient evidence has
- 21 been presented by -- there's been a lot of evidence
- 22 presented by all of the parties that have really muddled
- 23 the waters on what the cost calculators are. It's gone
- 24 everywhere from the applicant saying 14 to 22 percent.
- 25 Others have presented evidence that have shown it at 14

- 1 to 22 times more expensive. Others have presented
- 2 evidence that has shown it to two, three, four, five
- 3 times more expensive.
- 4 So that's what I'm talking about is that
- 5 there's just a lot of -- I don't think a solid convincing
- 6 case has been presented on what that cost escalator
- 7 actually is.
- 8 CHMN STAFFORD: All right. I think -- so
- 9 there's a lot of conflicting evidence that needs to be
- 10 weighed.
- 11 But, I guess, what I'm hearing from Member
- 12 Richins is that in weighing it he hasn't found that the
- 13 applicant has met its burden to show that the cost is as
- 14 excessive as it claims.
- 15 Is that correct a summation?
- 16 Okay. All right. Well, when we come back,
- 17 we'll be -- I think we should talk to the fact witnesses
- 18 more and the lawyers less and, you know, talk about the
- 19 specific costs, the specific sections of the route, some
- 20 of the specific issues with different sections and try to
- 21 come up with a route that -- for this project.
- 22 Because I think it's clear that the need is
- 23 there. I don't think anybody disputes that there is a
- 24 need and that need is urgent, that they need to get
- 25 this -- their system improved to maintain reliability.

- 1 And so I think it's just a question of where we put it.
- 2 And then the undergrounding issue's going
- 3 to be does it have to go underground. If it does, who
- 4 pays. And at the end of the day who ends up paying for
- 5 it is really beyond the scope of what this Committee will
- 6 do.
- 7 Obviously, we'll have to take it into
- 8 account when we make our decision under the statute
- 9 because it says we have to look at the cost of what the
- 10 applicant has proposed compared to what we end up
- 11 ordering it to do.
- 12 And if we order them to follow the city
- 13 ordinances and it requires them to incur, say, an
- 14 additional -- and I'm just throwing a random number out
- 15 there -- an additional \$50 million cost that will be
- 16 borne by ratepayers, that's something we do need to
- 17 consider in making our decision, especially between
- 18 routes, if you have one route that doesn't require an
- 19 undergrounding and one that would, I think that, you
- 20 know, the cost is certainly a very relevant factor to
- 21 consider in making our decision of where that line should
- 22 go. I think we can all agree that that line needs to go
- 23 somewhere.
- So with that let's take our recess. We'll
- 25 be back in about 15, 20 minutes.

- 1 (Recess from 10:34 a.m. to 11:02 a.m.)
- 2 CHMN STAFFORD: Let's go back on the
- 3 record.
- We have the cleanup panel. I think the
- 5 members and I have questions about the routes.
- 6 MEMBER GOLD: Mr. Chairman.
- 7 CHMN STAFFORD: Yes, Member Gold.
- 8 MEMBER GOLD: Okay. I'm going to direct
- 9 this to the -- to all of you, but I'm going to say this
- 10 has been going on for approximately seven years. Am I
- 11 correct in that assumption?
- 12 MR. LUSK: I think it's five.
- MS. GRABEL: Five.
- 14 MEMBER GOLD: Five years?
- MR. LUSK: Yes.
- 16 MEMBER GOLD: Okay. So for five years
- 17 we've been trying to do this and we need the thing done
- 18 by 2027. I understand the reasons why we need it done.
- 19 I guess the reasoning may be more urgent now with the
- 20 weather changes that we're seeing.
- I see TEP has done due diligence. You've
- 22 gone over and above with your routes and everything else.
- 23 Mr. Dempsey with the Underground Arizona,
- 24 you've gone above board with giving us a lot of examples
- 25 of what other communities have done.

- 1 Ms. De Blasi, I understand where you're
- 2 coming from. You're looking out for the best for Banner
- 3 Hospital. I don't see a university person present, but
- 4 I'm sure -- who's the university?
- 5 MS. GRABEL: Sorry. I was thinking Banner.
- 6 No one.
- 7 MEMBER GOLD: No, I don't see anybody at
- 8 U of A. We've got letters from representatives who
- 9 represent the public. We had a slew of people here
- 10 giving their opinions, mostly not in my backyard. And
- 11 you should underground things.
- 12 And we've seen a good deal of testimony
- 13 from that side over there that says undergrounding is a
- 14 bear in this area, it's something that has a whole bunch
- 15 of constraints including time constraints.
- 16 The bottom line is -- well, the one thing I
- 17 haven't picked on at the City of Tucson, and I don't know
- 18 why more of your people aren't here. But, you know, I
- 19 don't know the answer.
- 20 I will say that this should have been
- 21 resolved years ago and this should have been resolved
- 22 without all the bureaucracy but it wasn't. End result:
- 23 Dave Richins says, you know, you're throwing it to us and
- 24 the answer is the buck's got to stop somewhere.
- 25 So this Committee I would recommend would

- 1 make decisions where the buck stops from our perspective.
- 2 It's then going to go to the corporation council and then
- 3 it may go to the courts, you know, but it behooves
- 4 everybody involved to say if we got to get this done by
- 5 2027 let's take a look.
- 6 We just had a situation where I got a call
- 7 this morning, 14 power lines went down on Ina Road.
- 8 Roofs were blown off buildings. Air conditioning isn't
- 9 working. A whole bunch of stuff isn't working and we're
- 10 going to see people who are going to be suffering. If
- 11 you can multiply that in five years from now or ten years
- 12 from now, where we're going to have worse weather, more
- 13 population, inflation, god knows what else is going to go
- 14 on, this has to be done.
- 15 So I would say at this point in time, there
- 16 is a solution, and I believe before this Committee
- 17 adjourns that we will come up with a solution. It may
- 18 not be the best solution but we're going to give the
- 19 corporation council options.
- 20 And I want to thank you for all the work
- 21 you've done. And I want to chastise the bureaucrats who
- 22 you work for, Mr. Lusk, for not giving you the ammunition
- 23 and the wherewithal so you could have accomplished this
- 24 two years ago or three years ago. But at this point in
- 25 time, I just want to say thank you all, thanks for your

- 1 expertise. Thanks for your patience. Thanks for giving
- 2 us a ton of information, sometimes even your personal
- 3 opinions which I'm sure that's something that wouldn't
- 4 have been appreciated by the bureaucrats.
- 5 But I want to thank you and we're going to
- 6 persevere. We'll get this done. We will get this done.
- 7 Thank you, Mr. Chairman.
- 8 CHMN STAFFORD: Thank you.
- 9 MEMBER SOMERS: Mr. Chairman.
- 10 CHMN STAFFORD: Yes, Member Somers.
- 11 MEMBER SOMERS: Thank you. I can hear --
- 12 I'm reverberating in the background, I think. I'll try
- 13 to make this quick.
- 14 I'd be very careful with where the buck
- 15 stops because it's probably not going to be on this
- 16 Committee depending how we proceed with our
- 17 deliberations. Ultimately we have -- whether that's the
- 18 right --
- 19 MEMBER GOLD: You're breaking up too much.
- 20 MEMBER SOMERS: -- we're going to talk
- 21 about that in a little bit.
- 22 CHMN STAFFORD: Could you say that last
- 23 part again? You were breaking up.
- 24 MEMBER SOMERS: Thank you, Member Gold.
- 25 I'm not responsible for the tech.

- 1 CHMN STAFFORD: Could you make your comment
- 2 again, the last part of you comment again, Member Somers.
- 3 MEMBER SOMERS: It's probably interference
- 4 from the power lines.
- 5 MEMBER KRYDER: How many gauss out there?
- 6 MEMBER SOMERS: Can we hear me now?
- 7 CHMN STAFFORD: Yes.
- 8 MEMBER SOMERS: Okay. We'll try this.
- 9 Ultimately, this decision's going to be,
- 10 has to be, like Member Richins said, has to be hashed out
- 11 between the leadership of the City and TEC, you know, at
- 12 the end of the day it's not all one party's fault. There
- 13 is a bureaucratic process, and I understand those can be
- 14 hectic, but we've heard testimony that the City kept
- 15 asking for a route and that route wasn't provided because
- 16 the route wasn't decided by this Committee yet.
- 17 So some of this delay doesn't fall -- all
- 18 this delay doesn't fall on the City. And ultimately if
- 19 we make a ruling and it's not liked and this ends up in
- 20 court on whether we have the right to do that, we can
- 21 kiss that 2027 deadline goodbye. We're not going to fix
- 22 anything. The City and the electric company have to fix
- 23 this.
- 24 To -- I had a brief --
- MR. LUSK: We lost him completely.

- 1 CHMN STAFFORD: All right. Member Little,
- 2 are you still there?
- 3 MEMBER SOMERS: I know my Internet works.
- 4 I'm here again. Thank you to the staffer who's been
- 5 sitting over the button to make sure he puts me back on
- 6 the meeting.
- 7 I have the CEC, the draft CEC, from the
- 8 applicant. I just received it in e-mail.
- 9 My question for the City is does the City
- 10 have its response to those items and requests? Have they
- 11 reviewed it, made comment, and filed that with this
- 12 Committee yet?
- 13 MR. LUSK: Member Somers, we received it
- 14 this morning so, no, we have not done that. We can do
- 15 that, of course.
- 16 MEMBER SOMERS: Yeah, if you would -- I
- 17 would like to review the City's position before making
- 18 decisions.
- 19 CHMN STAFFORD: Yes, the City could also
- 20 file its own proposed CEC. The applicant is required to
- 21 file one. Intervenors may. It seems like that would be
- 22 a good thing for the City to do, especially given Member
- 23 Somers' comments.
- 24 All right. Well, I have some specific
- 25 questions for the cleanup panel here about the routes in

- 1 question.
- 2 So let's start with Route A. And the first
- 3 portion of the route from the DeMoss Petrie Substation
- 4 till at least surface Stone, they all share the same
- 5 route, and that looks like the whole stretch of Grant
- 6 Road is not a problem with anybody, and there seems the
- 7 existing poles from an upgrade that was already done that
- 8 would accommodate the 138kV line? Yes? Correct,
- 9 Mr. Bryner?
- 10 MR. BRYNER: The poles that were done from
- 11 a previous upgrade are primarily from Stone to the east.
- 12 West of Stone there are existing poles; some of those
- 13 would be the 46kV poles on the north side of the road,
- 14 would be collocated -- sorry, the 46kV lines on the north
- 15 side of the road would be collocated on the same poles as
- 16 our 138kV line. The distribution that's currently on
- 17 that would be placed underground.
- 18 CHMN STAFFORD: Okay. And then the --
- 19 eventually the 46kV system would be taken off and
- 20 retired, because it's being replaced by the 138kV system;
- 21 correct?
- MR. BRYNER: So that would be our long-term
- 23 goal. Some of those 46kV lines would not be affected by
- 24 this project because they still serve other 46kV
- 25 substations that would not be affected.

- 1 CHMN STAFFORD: And those are the ones that
- 2 I'm presuming would be north of Grant Road.
- 3 MR. BRYNER: Correct. North of Grant Road
- 4 and west of Stone, the lines, the 46kV lines east of
- 5 Stone and hopefully I'm getting my directions right here,
- 6 those are the ones that could be retired as part of this
- 7 project. And we'd try to make use of those structures.
- 8 CHMN STAFFORD: Okay. Now looking at
- 9 between routes A and B, they both go all the way to at
- 10 least Park. And then I recall from the tour that Park
- 11 Avenue already has significant poles for the 46kV system
- 12 along the entire length of Park from Grant to -- I
- 13 can't -- from the placement I can't see the other one. I
- 14 think it's --
- MR. BRYNER: Adams.
- 16 CHMN STAFFORD: -- Adams. But then there,
- 17 I didn't see any poles on Adams between Park and Vine.
- 18 So you'd have to add those. Now, were you looking to add
- 19 those to the north or south side of the street? I'm
- 20 pretty sure you want to do one or the other, you wouldn't
- 21 want to go back and forth at least across that, like you
- 22 had talked about on Campbell potentially.
- MR. BRYNER: That's correct.
- 24 MEMBER LITTLE: Mr. Chairman.
- 25 CHMN STAFFORD: Yes, Member Little.

- 1 MEMBER LITTLE: Are you talking about Route
- 2 A or Route B?
- 3 CHMN STAFFORD: Both, because they share --
- 4 they're exact -- they're the same corridor until you get
- 5 to Park Avenue.
- 6 MEMBER HILL: They don't -- they don't
- 7 share Park, though, so that's why I was asking the same
- 8 question.
- 9 CHMN STAFFORD: Right. Because Route B
- 10 goes south on Park whereas Route A proceeds west --
- 11 proceeds east until it gets to Vine.
- 12 Which seems to be the most direct approach
- 13 to the substation, but currently Vine doesn't -- well,
- 14 north of the substation doesn't have any poles running
- 15 along it. You see the distribution lines crossing it
- 16 through the alleys periodically, but there's no line
- 17 running down Vine itself.
- 18 MEMBER HILL: So your line of questioning
- 19 is really about comparing Route A and B. When you
- 20 started the line of questioning you said I want to talk
- 21 about Route A first, and so that was my point of
- 22 confusion. That's all.
- 23 CHMN STAFFORD: Okay. Yeah. Well, I'm
- 24 talking about A and B and then we'll get to C and D. But
- 25 I think I'm just going to have specific questions about,

- 1 you know, the physicality of the route. What's there,
- 2 what's the -- where the lines would go. I mean, they've
- 3 done a -- their Exhibit 32, they cleared up the corridor
- 4 to make it more narrow, and in line with what they're
- 5 actually going to build, because I remember when we
- 6 watched the virtual tour it was like 400 feet wide and
- 7 went into the neighboring streets, which is a little more
- 8 of a corridor than we wanted to give them.
- 9 So, but I'm just looking at -- so I'm going
- 10 to assume that B is preferred to A because you make use
- 11 of Park, which has a bunch of existing poles whereas Vine
- 12 does not.
- 13 MEMBER HILL: Are you asking the Committee?
- 14 CHMN STAFFORD: I'm asking Mr. Bryner.
- 15 MEMBER HILL: Okay.
- 16 MR. BRYNER: So, yes, that's one of the
- 17 primary factors why B is referred over A.
- 18 CHMN STAFFORD: Okay. And then with the
- 19 location of the substation that's -- it's being placed
- 20 next to an existing substation, so I'm assuming that
- 21 there was not -- I mean, we talk about routes but no
- 22 one's talked about putting the Vine Substation any other
- 23 location; correct?
- MR. BRYNER: So that's where -- yes, that's
- 25 correct. But as I testified to I think it was day one,

- 1 maybe day two, you know, we looked at 22 different sites
- 2 to try to identify is there another location for this
- 3 substation that might be more compatible with existing
- 4 land uses, might be further away from residential areas?
- 5 And ultimately what we found was we really only had that
- 6 option.
- 7 CHMN STAFFORD: Right. So the substation,
- 8 the Vine Substation location, that's not really up for
- 9 debate for us. It's going to be -- that location is just
- 10 a question of where the lines come in and go out of it.
- 11 MR. BRYNER: That's correct.
- 12 CHMN STAFFORD: All right. And that's
- 13 because that's on the edge of the residential
- 14 neighborhood. I forget which one it is to the north.
- 15 MR. BRYNER: Jefferson Park is just to the
- 16 north. It's within North University.
- 17 CHMN STAFFORD: Right. Okay. And so --
- 18 and then B is the preferred route.
- 19 So I think on Adams, which side of the
- 20 street were you looking to put the poles on for Adams?
- 21 MR. BRYNER: So, again, our corridor would
- 22 allow for either side. Our preliminary engineering
- 23 located it on the south side. Again, that's because for
- 24 about half of that stretch on Adams you have parking lots
- 25 on the south side.

- 1 CHMN STAFFORD: Right. Okay. And I recall
- 2 that there's streetlights on that street as well. Would
- 3 they have -- would they be collocated with the poles?
- 4 Because I seem to see that you've had streetlights put on
- 5 distribution poles. Or that there would be additional
- 6 structures for the power line in addition to the
- 7 streetlights, they have to work around those. Those
- 8 remain where they are.
- 9 MR. BRYNER: That would be our typical
- 10 practice is not to attach streetlights to our
- 11 transmission lines to our transmission poles.
- 12 CHMN STAFFORD: Okay.
- 13 MR. BRYNER: So I would say we would work
- 14 around them.
- 15 CHMN STAFFORD: Yeah, but it's my
- 16 recollection of Adams is there's not a lot of room to
- 17 work on the other side of that street.
- 18 MR. BRYNER: That's a good recollection.
- 19 CHMN STAFFORD: Okay. And so the other
- 20 route is -- let's look at Route C.
- 21 MEMBER LITTLE: Mr. Chairman.
- 22 CHMN STAFFORD: Yes, Member Little.
- MEMBER LITTLE: Could we, as long as we're
- 24 looking at A and B could we ask questions about A and B
- 25 before we move on to another route?

- 1 CHMN STAFFORD: Yeah, sure. I'm just -- I
- 2 have some concerns. I want to kind of ask questions
- 3 about, I was going to work through different sections of
- 4 the route. And if any member has a question that's
- 5 relevant to that portion, just ask the chair and I'll let
- 6 you ask your question. So Member Little, if you have a
- 7 question about --
- 8 MEMBER LITTLE: I do, Mr. Chairman. Thank
- 9 you.
- 10 CHMN STAFFORD: Please proceed.
- 11 MEMBER LITTLE: Was there any consideration
- 12 placed to underground smaller sections of any of the
- 13 routes, notably A is the one I'm thinking about, or
- 14 perhaps B along Adams through neighborhoods? Just in
- 15 short sections?
- 16 MR. BRYNER: So the problem with
- 17 undergrounding -- sorry, Member Little. The problem
- 18 with undergrounding any section of the line, short or
- 19 long, is how do you pay for that cost differential.
- 20 So Proposition 412 just looked at areas
- 21 that were required by the Gateway Corridor Zone that
- 22 would need to be undergrounded.
- 23 So within the neighborhood themselves, that
- 24 wasn't within a Gateway Corridor Zone, so it wasn't
- 25 looked at under that circumstance. And we didn't

- 1 consider it in any other circumstance undergrounding, you
- 2 know, even a short section.
- 3 MEMBER LITTLE: Okay. And what is the
- 4 width of Vine compared to the width of Park? I
- 5 understand Park has existing circuits on it, and Vine
- 6 does not. But how about the road width? Do you have any
- 7 idea?
- 8 MR. BRYNER: Give me a second, I can
- 9 measure it. I know what we were requesting for a
- 10 corridor was 120 on Park and 100 on Vine, but I would say
- 11 the actual right-of-way width and I'm just totally
- 12 guessing, if you want me to get a real number we can grab
- 13 that in just a minute. But I would say Park is probably
- 14 around 80 and Vine is probably around 60 or 70.
- 15 MEMBER LITTLE: Okay. I think those are my
- 16 only questions right now on A and B. Thank you,
- 17 Mr. Chairman.
- 18 MEMBER GOLD: Mr. Chairman.
- 19 CHMN STAFFORD: Yes, Member Gold.
- 20 MEMBER GOLD: Again to Mr. Bryner. Route A
- 21 and Route B differ between Park and Adams. Route B goes
- 22 south on Park. Route A goes south on, is that Adams or
- 23 Vine?
- 24 CHMN STAFFORD: Vine. Adams is east-west.
- 25 MEMBER GOLD: Gotcha. That seems to be,

- 1 the length seems to be the same. The difference is that
- 2 there are already power lines on Park but there are none
- 3 on Vine; is that correct?
- 4 MR. BRYNER: That's correct.
- 5 MEMBER GOLD: Okay. Thank you.
- 6 MEMBER LITTLE: Mr. Chairman, one more
- 7 question.
- 8 CHMN STAFFORD: Yes, Member Little.
- 9 MEMBER LITTLE: How about the road width of
- 10 Adams? I know that seemed really constrained.
- 11 MR. BRYNER: So let's see. We're working
- 12 on some numbers. It's probably 60 or 70, it's similar to
- 13 Vine. Those are residential streets. But I can get a
- 14 real number for you in just a minute.
- 15 CHMN STAFFORD: Right, with the parking
- 16 lots on the south side of Adams; right?
- 17 MR. BRYNER: Correct.
- 18 CHMN STAFFORD: Okay. All right. Let's,
- 19 looking at --
- 20 MEMBER HILL: Mr. Bryner?
- 21 CHMN STAFFORD: Yes, Member Hill.
- 22 MEMBER HILL: I apologize. I have a
- 23 question.
- 24 The length of overhead transmission in line
- 25 A and line B, are they the same length?

- 1 MR. BRYNER: They're very similar. The one
- 2 distinguishing factor is going to be that -- so Route B
- 3 technically overshoots the substation a little bit coming
- 4 south on Park, so then it has to cut back. So the
- 5 difference is that overshoot and the coming back. So
- 6 they're -- what are they on the place, 3 -- 3.2 and 3.5,
- 7 so there's .3 miles difference.
- 8 MEMBER HILL: And between -- between
- 9 alternative A and B, which one is less expensive?
- 10 MR. BRYNER: A is I would say substantially
- 11 less expensive. And it's primarily due to not the
- 12 construction of the transmission line. It's because of
- 13 the existing overhead utilities and what we would do to
- 14 relocate those underground.
- 15 MEMBER HILL: Okay. Thank you.
- 16 CHMN STAFFORD: Right. I guess that could
- 17 be seen as a disadvantage to the neighborhood of going
- 18 with A. In addition to adding poles to a street that
- 19 currently doesn't have any, the 46kV would remain on
- 20 Park.
- 21 So you'd have poles, I guess the new poles
- 22 would be slightly bigger, but you'd have poles on both
- 23 those residential streets as opposed to just one;
- 24 correct?
- 25 MR. BRYNER: That is partially correct. We

- 1 will remove the 46kV as part of this project, but you
- 2 would have distribution poles remaining on Park.
- 3 CHMN STAFFORD: Right. And the 46kV would
- 4 be there for -- you said it would all be gone by
- 5 10 years, I believe.
- 6 MR. BRYNER: Within 10 years is when we
- 7 expect all of our distribution work to be done. We
- 8 would -- that would be one of the places where we'd be
- 9 able to retire it quickest.
- 10 We're going to make the cut over from the
- 11 U of A medical substation. Well, that'll be one of the
- 12 first things that happens, and those 46kV lines source
- 13 that substation.
- 14 CHMN STAFFORD: Okay. So that -- so it
- 15 seems that there's -- so for that one it's kind of a --
- 16 it's one street benefits to the detriment of another
- 17 street.
- 18 MR. BRYNER: I think that's fair.
- 19 MEMBER HILL: Mr. Chair.
- 20 CHMN STAFFORD: Yes, Member Little.
- 21 MEMBER HILL: So perhaps the costs for the
- 22 Route A and B are actually more comparable. Because
- 23 you've put in costs on Park Avenue for retiring the 46kV
- 24 and undergrounding the distribution, but you're probably
- 25 going to retire the 46kV anyway?

- 1 MR. BRYNER: So the cost, we didn't
- 2 actually include the costs to retire the 46kV on any of
- 3 these.
- 4 MEMBER HILL: Okay. That's helpful. Thank
- 5 you.
- 6 MEMBER GOLD: Mr. Chairman.
- 7 CHMN STAFFORD: Yes, Member Gold.
- 8 MEMBER GOLD: For Mr. Bryner or Mr. Jocham,
- 9 you have 4kV, 14kV, 46kV, 131kV poles, some of which are
- 10 distribution, some of which are transmission. What's the
- 11 height of each of these poles?
- 12 MR. BRYNER: So we're talking 4kV, 14kV,
- 13 46kV, 138kV?
- 14 MEMBER GOLD: Yes. Did I leave anything
- 15 out?
- 16 MR. BRYNER: We could throw a few more in
- 17 there just for fun.
- 18 CHMN STAFFORD: Anything above 138 you left
- 19 out. But we don't need to go there.
- 20 MR. BRYNER: It varies, but I'll just share
- 21 a ballpark figure that I usually share with members of
- 22 public.
- So our older 4kV wooden poles are going to
- 24 be between 30 and 35 feet tall.
- 25 Some of our newer 14kV poles are going to

- 1 be usually 35, 40 feet tall.
- 2 Our older 46kV poles are going to be
- 3 between 45 and 55 feet tall.
- 4 Our newer 46kV poles are built to the same
- 5 standard as our 138kV poles, and so they'll be identical.
- 6 And they're, you know, typically in that 75 to 85-foot
- 7 range. But they top out even higher if we've got to
- 8 cross over something.
- 9 MEMBER GOLD: Okay. So basically if we're
- 10 replacing 4kV with 14kV, would that be something you
- 11 would consider doing?
- MR. BRYNER: 4kV to 14kV?
- 13 MEMBER GOLD: Yeah.
- 14 MR. BRYNER: That is part of our project.
- 15 MEMBER GOLD: Gotcha.
- 16 MR. BRYNER: To upgrade the 4kV.
- 17 MEMBER GOLD: And then you would raise 46kV
- 18 to 132kV?
- 19 MR. BRYNER: So, again we're saying that
- 20 we're upgrading our 46kV, this portion of our 46kV system
- 21 to 138kV.
- MEMBER GOLD: 138. Okay.
- MR. BRYNER: But it's not necessarily pole
- 24 for pole or location for location. We have much more
- 25 46kV in this area than we will have 138 once we're able

- 1 to retire that.
- 2 MEMBER GOLD: So the only ones we're really
- 3 losing are the 4kV poles which are the wood poles? Those
- 4 are the ones you're trying to get rid of?
- 5 MR. BRYNER: So the 4kV and the 14kV -- let
- 6 me -- Mr. Jocham is kind of correcting me a little bit
- 7 here.
- 8 But where we're planning to underground
- 9 distribution, that's 4kV or 14kV, whatever it is, it will
- 10 go underground if it's, you know, on our route that we're
- 11 proposing.
- 12 The remainder of the 4kV or -- and/or 14kV
- 13 that we plan to upgrade, so it will all be 14kV, that
- 14 would remain in whatever state it's in today. If it's
- 15 underground, it will be underground. If it's overhead,
- 16 it will be overhead.
- 17 MEMBER GOLD: So we're looking at a
- 18 situation where existing poles on Broadway -- on Campbell
- 19 are 46kV or 14kV?
- 20 MR. BRYNER: Mostly, I think in the area
- 21 you're talking about north of Broadway probably, those
- 22 are primarily 4kV. And for our purposes of your
- 23 discussion I would just call them distribution poles.
- 24 4kV and 14kV are virtually the same.
- 25 CHMN STAFFORD: Those are the 35-foot ones,

- 1 35 to 40?
- 2 MR. BRYNER: Correct. If we replace a 4kV
- 3 pole today it's going to be the 35 to 40-foot pole
- 4 because that's just our standard.
- 5 MEMBER GOLD: Gotcha. So that means on
- 6 Campbell just -- I'm jumping ahead, forgive me,
- 7 Mr. Chairman, I'm jumping ahead to Campbell.
- 8 The poles, if we use that route, would go
- 9 from 35 to 45-foot to 75 to 85-foot but they would be
- 10 spaced wider apart.
- 11 MR. BRYNER: That's basically -- I only
- 12 hesitate -- sorry -- because all our poles are different
- 13 heights and on that stretch of Broadway, I believe the
- 14 existing distribution poles are taller than that.
- 15 MEMBER GOLD: Well, how tall do you think
- 16 they are, or Mr. Jocham, if you know?
- 17 MR. JOCHAM: It's a standard.
- 18 MR. BRYNER: Okay. Probably about 40-foot.
- 19 So they're standard poles.
- 20 MEMBER GOLD: So they're 40 feet. And if
- 21 you choose the Campbell route, they'd go to 75 or
- 22 80 feet.
- MR. BRYNER: Correct.
- 24 MEMBER GOLD: But they would be spaced
- 25 instead of every 200 feet they'd be spaced every

- 1 400 feet?
- MR. BRYNER: Every probably 6 to 800
- 3 hundred feet.
- 4 MEMBER GOLD: 6 to 800 feet.
- 5 And how far apart from 14kV poles?
- 6 MR. BRYNER: Same as the 4kV, again it's
- 7 the same --
- 8 MEMBER GOLD: No, compared to the 46.
- 9 MR. BRYNER: The 46 poles are primarily the
- 10 same space as the 4kV and 14kV because they have those on
- 11 the underbuild. So the spacing is really dictated by
- 12 what the wire can support as well as, you know, we've got
- 13 services and other things coming off of those. And so
- 14 they're basically those 200ish-foot spans.
- 15 MEMBER GOLD: So the 14 is a 200ish?
- 16 MR. BRYNER: So 4kV, 14kV and 46kV I think
- 17 you could say they're all the same spans.
- 18 MEMBER GOLD: So they're 200ish. What's
- 19 the 600 to 800?
- 20 MR. BRYNER: Transmission. 138.
- 21 MEMBER GOLD: Ah, so that's 600 to 800.
- 22 So if you did Campbell Avenue north of
- 23 Broadway, you would be moving -- you would be changing
- 24 14kV poles about 40 feet in height, 200 feet apart to
- 25 138kV poles. That's 80 feet in height, 600 to 800 feet

- 1 apart.
- 2 MR. BRYNER: Correct.
- 3 MEMBER GOLD: Thank you.
- 4 MS. GRABEL: Mr. Bryner, Member Gold might
- 5 be interested in the data that we have about how many
- 6 poles would be relocated or lost for every one that's
- 7 constructed on a 138kV.
- 8 MR. BRYNER: Give me just a second.
- 9 CHMN STAFFORD: All right. If we could get
- 10 Exhibit TEP-31 up on the left screen, please. The first
- 11 slide, with all the segments on it -- there we go -- is
- 12 looking at the cost comparison between routes A and B.
- 13 We already covered that B is .3 miles longer because it
- 14 goes down, it goes south of Adams, south of the Vine
- 15 Substation to Adams, and comes back up.
- 16 You have -- there's no difference in cost
- 17 because it doesn't -- between overhead as proposed and
- 18 undergrounding, because of the Gateway Corridor, because
- 19 the Gateway Corridor is not implicated.
- 20 However, you have a significantly different
- 21 cost for the University Area Plan. Which section of the
- 22 route under the University -- or potentially I guess
- 23 under the University Area Plan because we haven't
- 24 established whether that requires undergrounding.
- MS. GRABEL: I think the asterisk is

- 1 important here, Chairman Stafford, and I'll let
- 2 Mr. Bryner address that.
- 3 MR. BRYNER: So, yeah. So within the
- 4 University Area Plan, I'm going to point up to the map on
- 5 Slide 43, so we made the assumption, and I think in this
- 6 case it's a good assumption, that along Grant Road, so
- 7 the University Area Plan goes from Stone over to Country
- 8 Club, Grant down to Broadway.
- 9 So we made the assumption that it would not
- 10 apply along Grant in between Stone and Park, and again we
- 11 have those existing poles there that we'd be able to
- 12 reuse, so I think we're safe there.
- But then we did assume from Park, Adams and
- 14 into Vine for Route B that those would all be within the
- 15 University Area Plan and under that scenario would
- 16 require the underground.
- 17 CHMN STAFFORD: So along Park and Adams,
- 18 then.
- MR. BRYNER: Basically, yep.
- 20 CHMN STAFFORD: Okay. That's what I want
- 21 to get. So those are the main -- the main -- that's
- 22 where the potential implication for the University Area
- 23 Plan is for Park and Adams.
- 24 And then what about Vine Road? Is that
- 25 considered part -- that would also be considered part of

- 1 the University Area Plan? That's why the A route jumps
- 2 up by approximately eight -- 12 million bucks?
- 3 MR. BRYNER: That's correct.
- 4 CHMN STAFFORD: Okay. And then let's see.
- 5 So now C, that comes down, again goes along Grant Road.
- 6 Now, is it the existing poles between that
- 7 are west of Stone, along Grant? Or is that between Stone
- 8 and Vine where the new poles are up on Grant that you'd
- 9 use?
- 10 MR. BRYNER: The new poles are between
- 11 Stone and Park.
- 12 CHMN STAFFORD: Okay. So then for that
- 13 one, again, it's not in a Gateway Corridor, but the cost
- 14 for that one increased significantly because I'm assuming
- 15 in addition to Park Avenue you have to -- you'd have to
- 16 put them underground on Park, Speedway and Stone Avenue?
- 17 MR. BRYNER: Let me just look at my data
- 18 here really fast. So that was -- that was not for
- 19 undergrounding on Stone. We assumed that Stone was
- 20 outside of the University Area Plan.
- 21 CHMN STAFFORD: Okay.
- MR. BRYNER: But we did -- we did assume
- 23 that on Speedway, up Park, down Adams and into Vine was
- 24 all in the University Area Plan.
- 25 CHMN STAFFORD: Okay. Now, Ring Road,

- 1 where does Ring begin and Elm begin, because I couldn't
- 2 tell by looking at it exactly what was what.
- 3 MR. BRYNER: I'm not exact, but I call it
- 4 at Campbell. It's Elm to the east. It's Ring Road to
- 5 the west.
- 6 CHMN STAFFORD: Of Campbell?
- 7 MR. BRYNER: Of Campbell.
- 8 CHMN STAFFORD: Because I'd swear I saw a
- 9 street sign that had a crossroad between Ring and Elm
- 10 that was east of Campbell.
- 11 MR. BRYNER: East -- oh, well, so there
- 12 is -- so east of Campbell when we were on Tucson --
- 13 actually no, we weren't -- we never drove there. So Elm
- 14 does exist.
- 15 CHMN STAFFORD: West of Campbell, excuse
- 16 me, no, it's --
- 17 MR. BRYNER: And Elm exists -- I'm talking
- 18 over you.
- 19 CHMN STAFFORD: Because if you look -- if
- 20 you look at the -- I'm looking at Slide 9 of Banner's
- 21 Exhibit 2, if you look -- can you pull that up on the
- 22 right real quick? I guess either one, I guess the left
- 23 would be fine because we're not going to talk about
- 24 numbers while we're looking at --
- 25 MR. BRYNER: I'd definitely defer to

- 1 Banner's knowledge of the roads around the hospital.
- MS. DE BLASI: Mr. Chairman, I can answer
- 3 that if you'd like me to.
- 4 CHMN STAFFORD: Great. If they can pull
- 5 the slide up so we can point to it. I think it's Slide 9
- 6 of Banner 2.
- 7 MS. DE BLASI: Correct.
- 8 CHMN STAFFORD: It's the presentation.
- 9 MEMBER SOMERS: Mr. Chairman.
- 10 CHMN STAFFORD: Yes, Member Somers.
- 11 MEMBER SOMERS: Okay. I just wanted to
- 12 make sure, I'm seeing a map and I'm hearing some
- 13 whispering.
- 14 CHMN STAFFORD: Yeah, we're getting the
- 15 slide queued up so we can talk about it.
- 16 MEMBER SOMERS: So, okay. I just wanted to
- 17 make sure -- thank you, sir.
- 18 CHMN STAFFORD: Certainly. All right.
- 19 Now, you see the where it says "Storm water detention,"
- 20 the red arrow that points to that area. That
- 21 intersection to the left of that, I seem to recall
- 22 there's a sign that says that's an intersection of Elm
- 23 and Ring Road. So I'm --
- MS. DE BLASI: Mr. Chairman, I can clarify
- 25 if that helps.

- 1 CHMN STAFFORD: Yes.
- MS. DE BLASI: I don't have the pointer so
- 3 Mr. Bryner, if you can maybe ventriloquist for me.
- 4 So you see to the right, and Mr. Barkenbush
- 5 testified to this during his direct, just sort of
- 6 orienting the Committee. But to the right running along
- 7 parallel to the picture is Campbell Road.
- 8 CHMN STAFFORD: Right.
- 9 MS. DE BLASI: And to the other side of
- 10 that road my understanding is that is where the Elm
- 11 alignment is. To the west, where the pointer is, where
- 12 Mr. Bryner's pointer is right now, that is Ring Road
- 13 because it's a Ring that goes around the campus. And it
- 14 is a privately owned road by Banner.
- 15 CHMN STAFFORD: So where does Ring Road end
- 16 and Elm begin?
- 17 MS. DE BLASI: I believe the Ring picks up
- 18 right there to the west of Campbell, and I believe Elm is
- 19 on the other side of Campbell to the east. And to the
- 20 west of the medical center.
- 21 CHMN STAFFORD: So, okay. So there's
- 22 actually no Elm to the east -- to the west of Campbell?
- MS. DE BLASI: That's my understanding.
- 24 And what you see on that photograph there is a private
- 25 road called Ring Road that is on the Banner campus.

- 1 CHMN STAFFORD: Okay. All right. And now,
- 2 so the City doesn't have any franchise or rights to
- 3 occupy space along that road; correct, Mr. Bryner?
- 4 MR. BRYNER: That's correct.
- 5 CHMN STAFFORD: All right. I believe it
- 6 was testified that if the line were to go on that route,
- 7 then it would have to be condemned.
- 8 MR. BRYNER: I think that's the position of
- 9 Banner, but I can let them speak for themselves.
- 10 CHMN STAFFORD: Right. That's what they
- 11 said. I specifically recall that. Confirming that's
- 12 your recollection as well.
- 13 MR. BRYNER: That's correct.
- 14 CHMN STAFFORD: Okay. And so those costs
- 15 are not reflected in the costs here for routes 1 or D;
- 16 correct? Or Route 6.
- 17 MR. BRYNER: Are you asking if condemnation
- 18 costs --
- 19 CHMN STAFFORD: I'm confirming that they're
- 20 not, because my assumption is they are not. I'm just
- 21 making sure that my understanding is correct.
- 22 MR. BRYNER: That's correct. And the same
- 23 holds true throughout, we just placed in the fair market
- 24 value to secure that right-of-way. No legal fees to go
- 25 through condemnation.

- 1 CHMN STAFFORD: Right. Okay.
- 2 MEMBER KRYDER: Mr. Chairman.
- 3 CHMN STAFFORD: Yes, Member Kryder.
- 4 MEMBER KRYDER: Was not the proposed route
- 5 for D where it comes from -- from Campbell going west,
- 6 not on Ring Road but on the city street to the north
- 7 whose name I don't remember?
- 8 CHMN STAFFORD: Lester. That is Lester
- 9 Street. That was -- you're kind of segueing to my next
- 10 set of questions, Member Kryder.
- 11 MEMBER KRYDER: Okay. I'll stop, then.
- 12 And you go ahead, Mr. Chairman.
- 13 CHMN STAFFORD: Thank you. Thank you.
- 14 So I recall that the original right-of-way,
- 15 the corridor request was quite broad and it actually did
- 16 include Lester to the north.
- 17 MR. BRYNER: Yes, that's correct.
- 18 CHMN STAFFORD: Okay. So for Route 1 or
- 19 Route D, Lester would be a potential route; correct?
- 20 MR. BRYNER: So if Route 1 or D or 6 were
- 21 on the table, then we would focus our 100-foot-wide
- 22 corridor width that we'd request on Lester as opposed to
- 23 Ring based on the testimony we've heard.
- 24 CHMN STAFFORD: I seem to recall that
- 25 between Lester and somewhere west of Campbell, and there

- 1 is -- there's like a retention area there. It's not
- 2 the -- it's not that storm water detention area. It's
- 3 north of that. It doesn't look like it's reflected in
- 4 this picture. Because I can't even see Lester Street
- 5 here.
- 6 MR. BRYNER: It's in this area right here.
- 7 And Lester Street is just north of it.
- 8 CHMN STAFFORD: Right. Right. Let's go
- 9 back, let's get rid of the -- I think we don't need the
- 10 aerial map of the Banner Health anymore. Let's go back
- 11 to the other map.
- 12 So Lester is just above that, and that's a
- 13 residential street and that's -- my recollection it's
- 14 pretty narrow.
- 15 MR. BRYNER: That's correct. It would be a
- 16 similar width to the other residential streets in the
- 17 area.
- 18 CHMN STAFFORD: Now, the corridor I think
- 19 you originally proposed was broad enough to -- there's
- 20 that space area between Campbell, and then it goes, I
- 21 forget how many hundred yards, maybe. And then you have
- 22 another -- then you have houses and then you have a --
- 23 and in between Ring and Lester there's another Park area,
- 24 it's a water retention place that has a path going
- 25 through it.

- 1 Is -- are those potential sites for a line
- 2 as well? I mean, there's -- there's kind of two areas,
- 3 there's an area to the west, another one to the east. I
- 4 think it's a house somewhere in the middle. Is there --
- 5 are those potential sites for the poles for the line?
- 6 MR. BRYNER: So as, again, as the utility,
- 7 not the property owner, our thoughts were asking for that
- 8 corridor between Lester and Ring, so that we could place
- 9 them, again, on either road or potentially in that green
- 10 space. I believe Banner calls it the North Green.
- 11 Through that area, because you're only
- 12 going to have a couple of poles between that area and the
- 13 substation, and so you could -- you could put those
- 14 poles, you know, either in some -- the retention basin
- 15 isn't continuous throughout there. There are some upland
- 16 areas, placing those poles on those areas.
- 17 CHMN STAFFORD: But you've have to
- 18 eventually put some on Lester Street or Avenue, whatever
- 19 it is, Lester, to get all the way up to Vine.
- 20 MR. BRYNER: So eventually you'd have to go
- 21 to work your way down to Ring because the entryway into
- 22 Vine would be on the Ring Road alignment as opposed to
- 23 the Lester Road -- Lester Street alignment. But you
- 24 could locate on either one of them and cut over.
- 25 CHMN STAFFORD: Okay. And then, again, any

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- 1 location on Ring Road is going to have additional costs.
- 2 MR. BRYNER: Correct.
- 3 CHMN STAFFORD: Not reflected in the
- 4 estimates in Exhibit TEP-31.
- 5 MEMBER KRYDER: Specifically what --
- 6 Mr. Chairman, what extras are you talking about?
- 7 CHMN STAFFORD: Condemnation. Because if
- 8 any of the routes that would have to traverse Ring Road,
- 9 that Banner Health has indicated that it is -- would not
- 10 cooperate with putting the line there, the utility would
- 11 be forced to seek condemnation to put -- to locate the
- 12 line there which would result in additional costs and
- 13 delays.
- 14 MEMBER KRYDER: Okay.
- 15 CHMN STAFFORD: And those costs are not
- 16 reflected on slide -- I guess it's the first slide -- or
- 17 the -- yeah, second slide. The second slide of TEP-31.
- 18 And these are the numbers that include -- this is the
- 19 apples-to-apples comparison, Slide 31, that has the costs
- 20 of what you proposed including the undergrounding of the
- 21 relevant distribution systems with the placement of the
- 22 transmission line. Correct?
- MR. BRYNER: Yes.
- 24 CHMN STAFFORD: Okay.
- 25 MEMBER LITTLE: Mr. Chairman.

- 1 CHMN STAFFORD: Yes, Member Little.
- 2 MEMBER LITTLE: Do we have any KOPs that
- 3 show that particular area? I was looking through what I
- 4 have and you guys know the KOPs better than I do, along
- 5 Ring or Lester?
- 6 MR. BRYNER: Yes, we've got two. Let me
- 7 tell you what those numbers are.
- 8 MS. DE BLASI: Mr. Chair.
- 9 CHMN STAFFORD: Yes, Ms. De Blasi.
- 10 MS. DE BLASI: Can I just add also a
- 11 suggestion, there's a -- we didn't use it because we were
- 12 trying to limit the number of things that TEP had to put
- 13 up on the screen, but there is a shot that TEP
- 14 includes -- it's -- I believe, Mr. Bryner, it's a page
- 15 before your KOP number 29 that shows the actual viewshed
- 16 from an overhead of the KOP 29. I think it's like a page
- 17 before that in the application. I think it was 757.
- 18 MR. BRYNER: Showing the location of the
- 19 key observation point.
- 20 MS. DE BLASI: Exactly. That might be
- 21 helpful to the Committee if you're asking about that,
- 22 Member Little.
- 23 MEMBER LITTLE: Thank you.
- 24 MR. BRYNER: And we do have three KOPs in
- 25 that vicinity, 27, 28, and 29. And they also have

- 1 that -- roughly that same index map. If anybody wanted
- 2 to see them, we could pull them up on the screen.
- 3 MEMBER KRYDER: Yes, would you, please?
- 4 MR. BRYNER: I think 28's probably the --
- 5 hold on. Let me look at it before I say something I
- 6 shouldn't.
- 7 MEMBER LITTLE: As an aside, you guys
- 8 should see my office. I've got stuff spread out all over
- 9 the place.
- 10 MS. HILL: Member Little, you should see
- 11 ours.
- 12 MEMBER HILL: And the Chairman's, he's got
- 13 three seats behind him with binders posted on them, so.
- 14 MR. BRYNER: Grace, could we go to page 753
- 15 of the application. And if you could make the bottom
- 16 part of the page as large as you can.
- 17 So this is going to be a key observation
- 18 point 28, which is looking across the North Green between
- 19 Ring Roads -- Ring and Lester.
- 20 CHMN STAFFORD: So Lester is to the right
- 21 in this picture?
- MR. BRYNER: Yes, that's correct.
- 23 CHMN STAFFORD: And this looks like this
- 24 line is a line off of -- looks it's between Ring and --
- 25 it sits between Ring and Lester. Is that --

- 1 MR. BRYNER: So we actually put the line in
- 2 the simulation within the road right-of-way of Lester, so
- 3 it's fully on that road.
- 4 CHMN STAFFORD: Okay. And then what you're
- 5 probably seeing in the -- at the pole -- let's see if --
- 6 maybe this doesn't work on PDFs.
- 7 The farthest left pole you're seeing,
- 8 that's sort of that cut over from Lester down to Ring so
- 9 that we can drop into the substation. Okay.
- 10 MEMBER KRYDER: And would there be land
- 11 that needed to be condemned or right-of-way that needed
- 12 to be condemned there, Clark?
- MR. BRYNER: I can't speak for Banner, but
- 14 I think that's past the area of their concern.
- 15 MEMBER KRYDER: Okay. I was trying to
- 16 address the comment that the Chairman made a moment ago
- 17 of additional potential cost here, using alternative D
- 18 coming down Lester Road off Campbell, and then swinging
- 19 down through, I believe this is called north retaining
- 20 pool or whatever that's called.
- Is there going to be, using this potential
- 22 path, land that TEP would have to condemn or would have
- 23 to get agreement with Banner?
- MR. BRYNER: We would certainly need to get
- 25 agreement with Banner.

- 1 As to the question of condemnation, I don't
- 2 know. We could even face that -- we could face that on
- 3 any route where we need to get private easement.
- 4 MEMBER KRYDER: Okay. Thank you.
- 5 CHMN STAFFORD: All right. Are we done
- 6 looking at the KOPs?
- 7 MEMBER LITTLE: Yes. Thank you.
- 8 CHMN STAFFORD: Okay. Wasn't there -- was
- 9 there an aerial shot that I believe Ms. De Blasi
- 10 mentioned?
- 11 MR. BRYNER: Can you go to the page before,
- 12 Grace. If you can zoom in on the -- maybe it's the -- if
- 13 you can zoom in on that lower map. I don't know if
- 14 Ms. De Blasi wanted to explain something here.
- 15 MS. DE BLASI: I was going to say there's
- 16 an additional one that's from 29. I don't know,
- 17 Mr. Bryner, if you're planning to go through all three,
- 18 but it might be helpful to the Committee.
- 19 MR. BRYNER: If you all would like -- I
- 20 think actually Member Kryder had wanted to ask a question
- 21 about 29.
- 22 MEMBER KRYDER: Yes. That is correct.
- 23 Could we get to that one, please?
- MR. BRYNER: Grace, can you go to -- I
- 25 think it is going to be page 757 for our weathering steel

- 1 simulation.
- 2 MS. DE BLASI: And, Chairman, if I might
- 3 just for a point of clarification since it's being asked,
- 4 Banner's testimony was that any siting along Ring Road on
- 5 the private property would go through a condemnation,
- 6 because any of these routes impacting that north viewshed
- 7 would have a significant impact, and so we would -- we
- 8 would be forced into that condemnation regardless of
- 9 where it was. And that's litigation.
- 10 CHMN STAFFORD: Okay. Fair enough.
- 11 MEMBER KRYDER: Thank you very much,
- 12 Mr. Chairman. Speaking of the screen in front of us
- 13 there, I think we all saw this and the testimony that
- 14 Ms. De Blasi gave a couple of days ago of the pole
- 15 standing right in view of the cafeteria and some of the
- 16 high-volume windows in the Banner building.
- 17 And my question was to you, Clark, would it
- 18 be possible in this simulation to imagine that pole moved
- 19 to the right, and it runs left to right, moved clear to
- 20 the right of that picture, and then an additional pole
- 21 perhaps put clear to the left of the picture, so that
- 22 essentially what this view would give us would be
- 23 pictures of wires rather than of poles.
- Do I make myself clear as to the question?
- MR. BRYNER: Yes, Member Kryder. I

- 1 understand your question. And the simple answer is yes,
- 2 we can move the poles one way or the other. But the more
- 3 complex question is then that's going to change the view
- 4 and perspective from somewhere else, so if you have a
- 5 very specific view you're trying somebody, somebodies, is
- 6 trying to protect, then we can move the poles around to
- 7 ensure that view is protected.
- 8 But one way or another there will be a view
- 9 that is changed.
- 10 MEMBER KRYDER: Could you tell me
- 11 approximate distance from that pole as simulated there
- 12 over to Campbell? Is this -- I understood the poles were
- 13 going to be somewhere in the six to 800 feet. Did I have
- 14 that right?
- MR. BRYNER: That's correct.
- 16 MEMBER KRYDER: Okay. So if we went to the
- 17 right from that pole that's there six to 800 feet, would
- 18 that take us out to Campbell?
- 19 MR. BRYNER: Just making a rough guess, but
- 20 I would say probably. It looks -- it looks like it might
- 21 be a little shorter span there, and I'm not sure what's
- 22 going into that.
- 23 MEMBER KRYDER: Okay. So if it could be
- 24 moved over close to -- I'm not sure -- adjacent to
- 25 Campbell and come across Lester, and then as you said

- 1 somebody's view gets to see a pole.
- But if this is the view, it's a magnificent
- 3 one of the mountains there, from the second, third or
- 4 fourth floor of the Banner facility, this came off of the
- 5 parking lot as I recall the testimony, but from the
- 6 facility, what -- nobody is going to be on the parking
- 7 lot and get cranky about this, I hope. It would be more
- 8 the people on the second, third and fourth floor of the
- 9 facility.
- 10 What would that look like? Do we have any
- 11 idea? Would they still be seeing -- perhaps,
- 12 Ms. De Blasi, you can help me with this.
- MS. DE BLASI: Mr. Chair, if we might see
- 14 applicant page 756, I think that will help Member
- 15 Kryder's question. Because that's -- yeah. So that's
- 16 showing -- well, I'll let Mr. Bryner explain what it's
- 17 showing.
- 18 MEMBER KRYDER: Looking at this, then, if
- 19 that pole on the right-hand vector from the observation
- 20 point was moved clear to the right on Campbell virtually,
- 21 and I don't know what 600 feet from there would be, but
- 22 does that clear out the view of the poles from the
- 23 second, third, or fourth floor of the Banner facility?
- 24 Or does it not?
- MR. BRYNER: I think we would have a hard

- 1 time avoiding any pole being in that viewscape. We could
- 2 move things a bit, but I think we would have a hard time
- 3 removing anything.
- 4 MEMBER KRYDER: Okay. Thank you.
- 5 That's -- so the short version is you can move it one
- 6 way, you can move it the other way, but somebody gets to
- 7 look at it.
- 8 MR. BRYNER: I think that's about it.
- 9 MEMBER KRYDER: Okay. Thank you very much.
- 10 CHMN STAFFORD: We can go back to the map
- 11 on the left screen.
- 12 And Mr. Bryner, looking back at TEP-31, it
- 13 says, "Assumes the City of Tucson will grant special
- 14 exception for building overhead and crossing a Gateway
- 15 Corridor that overlaps with the University Area Plan."
- 16 So for that one if you're looking at --
- 17 there's no -- for routes A, B, and C, they don't -- they
- 18 don't cross -- they don't run along a Gateway Corridor;
- 19 correct?
- 20 MR. BRYNER: That's correct.
- 21 CHMN STAFFORD: Okay. All right.
- 22 MEMBER RICHINS: Chairman?
- 23 CHMN STAFFORD: Hang on a second.
- But then the next column over it says,
- 25 Total cost to undergrounding Gateway Corridor in

- 1 University Area Plan. That's the marginal cost there
- between, say, looking, for example, A, the 7603817
- 3 compared to the 19826068. That cost difference is the
- 4 undergrounding costs related to the University Area Plan
- 5 alone; correct?
- 6 MR. BRYNER: That's correct.
- 7 CHMN STAFFORD: Because that number assumes
- 8 that you -- is it the same thing as in the prior column
- 9 that you're getting a special exception for any Gateway
- 10 Corridor crossing; right?
- MR. BRYNER: Correct.
- 12 CHMN STAFFORD: They don't have a Gateway
- 13 Corridor crossing.
- 14 MR. BRYNER: A, B and C do all have a
- 15 Gateway Corridor crossing at Oracle.
- 16 CHMN STAFFORD: Oracle. Okay. And where's
- 17 Oracle?
- 18 MR. BRYNER: It's --
- 19 CHMN STAFFORD: Can you pull up the map
- 20 that has the Gateway Corridors on it? I think that would
- 21 be the most helpful.
- 22 MEMBER RICHINS: Chairman, I just wanted to
- 23 confirm that the A and 4 in the last column, and the 1
- 24 are correlated with each other, because it says, the
- 25 footnote is 1, assumes the City of Tucson. The only

- 1 other place I see a footnote is the A next to the 52
- 2 million number. Is that supposed to be referring to each
- 3 other?
- 4 MR. BRYNER: So, yes. So the one area as
- 5 we're having the conversation earlier, the real concern
- 6 that we have on our perpendicular crossings is on the
- 7 preferred route on Euclid where it crosses Broadway.
- 8 Which Broadway is a Gateway Corridor and so that's
- 9 assuming that we would be granted that special exception.
- 10 MEMBER RICHINS: No, that's fine. I just
- 11 wanted to have footnote correlation, the A and the 1 were
- 12 referring to the same thing in that spreadsheet, because
- 13 I don't see an A as a footnote and I don't see a 1 as a
- 14 notation.
- 15 MR. BRYNER: Member Richins, if you go to
- 16 the prior sheet it actually has it correct. I think on
- 17 this sheet it's a typo.
- 18 MEMBER RICHINS: Okay. I just need, I just
- 19 want to make sure we're all on the same --
- MR. JOCHAM: Confirmed.
- 21 CHMN STAFFORD: If you look at the prior
- 22 page, it has the A there, but on this page it has 1 for
- 23 some reason.
- MR. BRYNER: Initially I used a 1, and then
- 25 I was like, that 1 doesn't really fit in well with the

- 1 number, I should use an alphabetical denoter, so thanks
- 2 for pointing that out.
- 3 CHMN STAFFORD: Okay. All right. There
- 4 you go. So we're at the Gateway Corridor Zones now.
- 5 So it looks like the big cost driver,
- 6 because you're assuming that you'll be able to get the
- 7 special exception to cross the Gateway Corridor, but the
- 8 big cost driver for the undergrounding is the University
- 9 Area Plan; correct?
- 10 MR. BRYNER: Sorry. Which route are we
- 11 talking about right now?
- 12 CHMN STAFFORD: A, B and C.
- MR. BRYNER: Yes.
- 14 CHMN STAFFORD: Because you're assuming
- 15 you'll get the special exception. That's what the
- 16 footnote tells us for all those routes; correct?
- 17 MR. BRYNER: Correct.
- 18 MS. GRABEL: Well, Mr. Bryner, if I may
- 19 step in, Mr. Chairman, this is where that's not
- 20 necessarily true, because of the finding of fact that I
- 21 mentioned earlier that would need to be made, and
- 22 that's -- is this for B?
- MR. BRYNER: A, B and C.
- MS. GRABEL: Okay. Sorry. I'll step in --
- 25 that's actually for 4 that I'm talking about, so

- 1 continue, Mr. Bryner.
- 2 CHMN STAFFORD: You almost got me confused.
- 3 MS. GRABEL: Sorry about that. Yeah.
- 4 CHMN STAFFORD: Right. So I'm just -- one
- 5 of the things that I'm looking at too, I think, let me
- 6 see, which D is -- now, D you also have -- you have
- 7 additional cost for the Gateway Corridor because it would
- 8 run parallel to Campbell Road.
- 9 MR. BRYNER: Yes, that is correct.
- 10 CHMN STAFFORD: Okay. So that's why
- 11 that -- but it has, I guess it's implicated less by the
- 12 University Area Plan.
- 13 MR. BRYNER: So it's -- I'd say it's about
- 14 the same. It's about a half a mile that's Gateway and
- 15 University Area Plan, and about a half a mile that's just
- 16 University Area Plan.
- 17 CHMN STAFFORD: Okay. Because I'm looking
- 18 at the numbers, the biggest cost difference I'm looking
- 19 is between, you know, if they have to underground due to
- 20 the University Area Plan is between C and D. It's a
- 21 significant -- well, I guess it's between A and C.
- MR. BRYNER: Correct. So it's less than A,
- 23 B and C due to just the University Area Plan. Those ones
- 24 travel a greater distance.
- 25 CHMN STAFFORD: Okay. And C because it's

- 1 got the -- because you've got -- wait. Right. Because C
- 2 has got, because Stone -- no, Stone wouldn't be -- but it
- 3 would be, because you have Speedway, Adams, and Park for
- 4 C. Correct? That's why it's got the most cost.
- 5 MR. BRYNER: Correct, yeah. We have, for C
- 6 it has 1.8 miles that would be underground, whereas D has
- 7 .8 miles. And that's assuming University Area Plan and
- 8 gateway.
- 9 CHMN STAFFORD: Okay. And then so -- and
- 10 then turning our attention now to I think it's Route 2.
- 11 MEMBER HILL: Mr. Chair, before we leave
- 12 the numbered routes.
- 13 CHMN STAFFORD: The lettered routes?
- 14 MEMBER HILL: Or the lettered routes.
- 15 Before we go to the numbered routes, that's what I meant
- 16 to say.
- 17 So in terms of routes A through D, A and B
- 18 are the most direct and least expensive routes; is that
- 19 correct?
- MR. BRYNER: Correct.
- 21 MEMBER HILL: Thank you.
- 22 CHMN STAFFORD: Unless you have to
- 23 underground pursuant to the University Area Plan.
- MR. BRYNER: Hold on. Yeah. Sorry. I'm
- 25 looking at the numbers. B is the second most expensive.

- 1 A and D are the least expensive.
- 2 CHMN STAFFORD: If you have to underground
- 3 due to the University Area Plan. Without, if you get --
- 4 if, say, the Committee gives you the finding that the
- 5 University Area Plan is unduly restrictive, and then --
- 6 and I guess they could do the same thing for the Gateway
- 7 Corridor for you get the special exception for it, A is
- 8 the cheapest route and then B is the second cheapest. Or
- 9 not, A --
- 10 MR. BRYNER: B would be the cheapest.
- 11 CHMN STAFFORD: D is -- okay. And then D
- 12 is, okay. Yes, but then D has a problem because you have
- 13 to go to the -- you'd have to have the Gateway Corridor
- 14 also because that one travels along Campbell and you have
- 15 to go down Ring Road, so D has its own challenges.
- 16 MR. BRYNER: Sure, and their possible
- 17 condemnation, or likely.
- 18 CHMN STAFFORD: All right. Does any other
- 19 members have questions about the lettered section?
- 20 Member Little?
- 21 MEMBER LITTLE: I don't believe so.
- 22 CHMN STAFFORD: Member Somers?
- 23 (No response.)
- 24 CHMN STAFFORD: All right. Looking at the
- 25 numbered routes. 5 and 6, they have the challenge of

- 1 having to get permissions from the railroad to run
- 2 parallel to the tracks; is that correct? Is my
- 3 recollection of that accurate?
- 4 MR. BRYNER: Sorry, Chairman. Could you
- 5 repeat yourself?
- 6 CHMN STAFFORD: Routes 5 and 6, they
- 7 present the unique challenge of having to get special
- 8 permissions from the railroad because of the proximity
- 9 they run parallel to the tracks. Is my recollection
- 10 correct?
- 11 MR. BRYNER: Yes, you're correct.
- 12 CHMN STAFFORD: Okay. And I seem to recall
- 13 that they kind of ghosted you. You've been calling and
- 14 leaving messages and haven't got a response. Is that
- 15 also accurate?
- 16 MR. BRYNER: I don't know if they've said
- 17 ghosted. They said it's going to take a couple years
- 18 once you submit your application to get a response from
- 19 us.
- 20 CHMN STAFFORD: Okay. Well, couple years.
- 21 I mean, I guess some people consider that ghosting, but I
- 22 guess if you actually ever respond it's technically not.
- 23 Two years to wait for a response from the
- 24 railroad. If you submitted the request today would that
- 25 allow you to complete the line and energize it in '27

- 1 which you anticipate needing to have it energized?
- 2 MR. BRYNER: So we would have to take on
- 3 the risk to do all the engineering, procure the poles, so
- 4 that we could hope we would be granted it as we had
- 5 designed it and everything. So then we could then build
- 6 them once they granted that. So there would be
- 7 substantial risk and no guarantee.
- 8 CHMN STAFFORD: Right. And I quess you
- 9 wouldn't begin construction at any part of 5 or 6 until
- 10 you got that permission. Otherwise you could be really
- 11 wasting money and time then; correct?
- MR. BRYNER: I don't see why we would, no.
- 13 Or yes.
- 14 CHMN STAFFORD: But, however, you could say
- 15 you could begin construction on the lettered portion
- 16 because that's going to be -- that would be, I guess it
- 17 depends which one it is, would be independent of what the
- 18 numbered section would be; correct?
- 19 MR. BRYNER: Yes, that's correct.
- 20 CHMN STAFFORD: Okay. All right.
- 21 MS. GRABEL: And Mr. Chairman, if I may
- 22 jump in. Mr. Bryner, isn't it the case we're asking the
- 23 Committee if they do choose 5 or 6 to also grant an
- 24 alternative, just in case?
- MR. BRYNER: That's correct. We don't want

- 1 to have to come back here and ask you for a different
- 2 route.
- 3 CHMN STAFFORD: Right. That whole approach
- 4 seems problematic, and so the members can make their own
- 5 decision, but for me, I think routes 5 and 6 are out of
- 6 consideration, really, just for that fact.
- 7 I mean, if we're going to -- I think you'll
- 8 want to pick the route that has the highest chance of
- 9 success is the primary one, and an alternate one to
- 10 address some specific issue with the first one.
- 11 But, yeah, I think I'm inclined to not
- 12 consider 5 or 6.
- 13 MEMBER KRYDER: Mr. Chairman.
- 14 CHMN STAFFORD: Yes, Member Kryder.
- 15 MEMBER KRYDER: I concur with your
- 16 analysis.
- 17 CHMN STAFFORD: All right. And then so
- 18 it's back to the numbered ones.
- 19 We have number 1, which is the most direct
- 20 route. But it also has additional costs imposed by
- 21 undergrounding for both the Gateway Corridor because it
- 22 runs along Campbell, and for the University Area Plan.
- 23 Correct?
- MR. BRYNER: Correct.
- 25 CHMN STAFFORD: But absent those

- 1 requirements, is the cheapest alternative; correct?
- 2 MR. BRYNER: Correct.
- 3 CHMN STAFFORD: All right. Now looking at
- 4 Route 2. Where it exits the Vine Substation, it seems to
- 5 present a better route because it wouldn't have to deal
- 6 with Ring Road or the hospital.
- 7 But I'm assuming that it's the gateway area
- 8 plan that would require that to be undergrounded for that
- 9 stretch between Vine Substation and Speedway.
- 10 MR. BRYNER: The University Area Plan.
- 11 CHMN STAFFORD: What did I say?
- MR. BRYNER: Gateway.
- 13 CHMN STAFFORD: Oh, yeah, yeah. The
- 14 Gateway Corridor Zone. It's the University Area Plan.
- 15 All right. I seem to recall there's
- 16 existing distribution poles in that section.
- 17 MR. BRYNER: There are existing
- 18 distribution poles for a section just south of the Vine
- 19 Substation.
- 20 CHMN STAFFORD: Are there any other
- 21 physical constraints that would prohibit using
- 22 aboveground transmission lines along that section of
- 23 Route 2 other than the University Area Plan?
- 24 For example, I know we talked about how APS
- 25 has a significant amount of lines undergrounded downtown,

- 1 because there's no place to put an aboveground line
- 2 because of the height of the buildings and the length of
- 3 setback from the street, so they're undergrounded.
- 4 Are those physical requirements present for
- 5 that section of line 2? Or is the driving force for
- 6 undergrounding the University Area Plan?
- 7 MR. BRYNER: The driving force is the
- 8 University Area Plan.
- 9 CHMN STAFFORD: So there's no physical
- 10 reason why they could not be placed aboveground?
- 11 MR. BRYNER: Based on the buildings that
- 12 exist today, there is no problem. I'm not sure what the
- 13 university's future plans are in that area.
- 14 MEMBER HILL: Mr. Chair.
- 15 CHMN STAFFORD: Yes, Member Hill.
- 16 MEMBER HILL: I just have a comment. I
- 17 think that route -- it's related to Route 1 and 2.
- 18 Route 1 is definitely the most direct, but based on the
- 19 superior court finding, I think there's more concern that
- 20 that would require undergrounding along Campbell.
- 21 I do think that if we're considering
- 22 Route 1 that it would be also perhaps prudent to consider
- 23 adding in the first portion of Route 2 to reduce the
- 24 frontage on Campbell, is just what I want to suggest.
- 25 I'm suggesting kind of a hybrid of Route 1

- 1 and 2 as a possible corridor for consideration. Because
- 2 we might have more flexibility with the University Area
- 3 Plan.
- 4 And it also feels more direct than going
- 5 back through some of the neighborhoods. So I like trying
- 6 to stick to kind of more commercial corridors. So I just
- 7 want to offer that as an opinion.
- 8 CHMN STAFFORD: Thank you. And then --
- 9 MS. GRABEL: Chairman Stafford. Member
- 10 Hill, can you clarify what exactly you mean would be the
- 11 hybrid portion?
- 12 MR. BRYNER: I can trace it. I'm following
- 13 you. Yeah. So we'd go from Kino, follow Route 1 all the
- 14 way down Campbell. Instead of following past Speedway,
- 15 we'd turn on Speedway and go up Cherry, Mabel, and then
- 16 Vine into the Vine Substation.
- 17 MEMBER HILL: I like avoiding Banner. I
- 18 like reducing frontage on Campbell. But it still feels
- 19 more direct than going back through the neighborhoods in
- 20 that area.
- 21 CHMN STAFFORD: And it wouldn't have -- you
- 22 wouldn't have -- and assuming you wouldn't have a
- 23 collocated 138kV to Vine Substation.
- 24 MEMBER HILL: On residential neighborhood
- 25 roads.

- 1 CHMN STAFFORD: Residential neighborhoods.
- 2 Or down the middle of Ring Road either.
- 3 MR. BRYNER: That's correct.
- 4 CHMN STAFFORD: Okay.
- 5 MEMBER HILL: It's Cherry Avenue, what --
- 6 my colleague just asked what street it is. It's Cherry
- 7 Avenue; correct?
- 8 MR. BRYNER: Cherry is where we would turn.
- 9 I lost my pointer. Cherry is where we would turn north
- 10 off of Speedway.
- 11 CHMN STAFFORD: Then you take Mabel over to
- 12 Vine.
- 13 MR. BRYNER: Correct. Mabel. For just
- 14 like a couple hundred feet, yeah.
- 15 CHMN STAFFORD: Right. All right. Thank
- 16 you.
- 17 And then, let's see -- yeah, and then
- 18 Campbell, that's where the distribution lines that are
- 19 already on Campbell, that's between Broadway and
- 20 Speedway; correct?
- MR. BRYNER: Correct.
- 22 CHMN STAFFORD: All right. But they're not
- 23 north of Speedway.
- MR. BRYNER: There are some north of
- 25 Speedway, but for the most part the entire stretch

- 1 between Speedway and Broadway has lines.
- 2 CHMN STAFFORD: I remember seeing at least
- 3 a dozen of them, I think. So. All right.
- I haven't had a chance to look at the
- 5 amended CEC. But I'm going to assume that both the
- 6 Gateway Corridor and the University Area Plan are the
- 7 primary regulations, ordinances that you would be asking
- 8 for the Committee to find that they are unduly
- 9 burdensome.
- 10 MS. GRABEL: As well as depending on
- 11 Mr. Lusk's findings with respect to historic overlay zone
- 12 if the City takes a position that also requires
- 13 undergrounding, we'd want a finding to be applied there
- 14 as well.
- 15 CHMN STAFFORD: Okay. Because it's in the
- 16 application, I have it behind me here. But there's a
- 17 number, I think there's at least four or five different
- 18 potential neighborhood plans that could be implicated for
- 19 requiring undergrounding.
- 20 MS. GRABEL: I think the Sam Hughes
- 21 Neighborhood Plan is the one that's most at issue with
- 22 the routes that we have here.
- 23 Mr. Bryner can clarify that for me. And if
- 24 there's a specific historic overlay zone, I suppose
- 25 Mr. Bryner can clarify that as well.

- 1 CHMN STAFFORD: Before you do, Mr. Bryner,
- 2 the Sam Hughes neighborhood is east of Campbell; correct?
- 3 MR. BRYNER: Correct.
- 4 CHMN STAFFORD: So if we don't take Route 2
- 5 which goes east of Campbell and down to Tucson, would you
- 6 even implicate the Sam Hughes neighborhood at all?
- 7 MR. BRYNER: We would not.
- 8 MS. GRABEL: That's why we didn't ask for a
- 9 finding for that neighborhood.
- 10 CHMN STAFFORD: Okay. Because I think,
- 11 frankly, Route 2 with going way out of the way over to
- 12 Tucson and back up just to avoid that stretch of
- 13 Campbell, I mean, that seems -- seems kind of wasteful to
- 14 me.
- 15 So other than that chunk of line 2 from the
- 16 Vine Substation to Speedway, I'm inclined to not consider
- 17 the rest of Route 2 either.
- 18 Just letting the members know where I'm
- 19 coming from.
- 20 All right. And then, now, the preferred
- 21 route. The Gateway Corridor Zone is the biggest, you
- 22 have to deal with that crossing Broadway. That's the
- 23 only implication for the Gateway Corridor Zone. Oh, yes,
- 24 and Kino Parkway into the Kino Substation. There's two
- 25 crossing of Gateway Corridors; correct?

- 1 MR. BRYNER: Correct.
- 2 CHMN STAFFORD: Okay. And so let me look
- 3 at the numbers here. That's right. You assume that they
- 4 would be able to get those granted, but then the big
- 5 implication is the, wow, really, an extra \$40 million.
- 6 And that is for undergrounding all along Euclid; correct?
- 7 MR. BRYNER: Yeah, all along Euclid,
- 8 Speedway, Park, Adams, and Vine.
- 9 CHMN STAFFORD: Okay. Due to the
- 10 University Area Plan.
- 11 MR. BRYNER: Correct.
- 12 CHMN STAFFORD: Okay.
- 13 MEMBER RICHINS: Chairman, confirming that
- 14 that Route 1 idea that my colleague just advanced does
- 15 not have a railroad negotiation issue associated with it.
- 16 MR. BRYNER: No railroad negotiation on
- 17 that.
- 18 MEMBER RICHINS: Thank you.
- 19 CHMN STAFFORD: That's just 5 and 6. And 6
- 20 is the one that goes -- that's got a whole lot of extra
- 21 length in it, too, to get to -- get to Vine. So that one
- 22 seems overly long. Yeah, seven -- six miles.
- Okay. I think my questions are all pretty
- 24 much based on the assumption of the accuracy in the
- 25 numbers provided in TEP-31.

- 1 Member Richins, you had expressed doubts as
- 2 to the actual cost figures. Now is the time to grill the
- 3 panel to find out, to drill down on the numbers to see if
- 4 you -- what your perception of their accuracy is.
- 5 MEMBER RICHINS: Thank you.
- 6 MEMBER LITTLE: Mr. Chairman.
- 7 CHMN STAFFORD: Oh, one second. Member
- 8 Little.
- 9 MEMBER LITTLE: Yes, before you go on, I
- 10 did not hear you address Route 3. Did I just miss it?
- 11 CHMN STAFFORD: Yeah, I think so. I
- 12 didn't -- Route 3. Which one is -- let's see. Yeah,
- 13 that -- I didn't really have any questions about Route 3.
- 14 You're more than welcome to ask it if you have them.
- 15 MEMBER LITTLE: No.
- 16 MR. BRYNER: And Chairman Stafford, one
- 17 other question that Member Little asked before was about
- 18 right-of-way, where -- road right-of-way widths, and I
- 19 actually do have those, so I can give the real numbers.
- 20 So Park is variable between 58-foot on the
- 21 low end to 85-foot on the high end.
- 22 Adams, also variable between 52-foot on the
- 23 lower end, 55-foot on the high end.
- 24 And Vine, variable too. 57-foot on the low
- 25 end, 60-foot on the high end. So those are the -- the

- 1 real numbers so you can strike my old numbers.
- 2 MEMBER LITTLE: Thank you.
- 3 MEMBER HILL: Mr. Bryner, so Vine actually
- 4 has a wider right-of-way than Adams Street. It doesn't
- 5 feel like that when you're on those streets, but Vine has
- 6 more right-of-way?
- 7 MR. BRYNER: That's correct. I know some
- 8 roads can be deceiving because you don't know how much of
- 9 the setback is due to the road and how much is just
- 10 setback.
- 11 MEMBER HILL: Okay.
- 12 CHMN STAFFORD: Okay. All right. Any
- 13 other questions? Member Richins, did you want to start
- 14 your line of questioning on the costs, the undergrounding
- 15 costs?
- 16 MEMBER RICHINS: No, I just needed to
- 17 reconcile some of the numbers that Underground Arizona
- 18 presented in testimony, and then some of the -- because
- 19 they were in dispute with each other.
- 20 CHMN STAFFORD: Right.
- 21 MEMBER RICHINS: And it didn't feel like it
- 22 ever got fully settled. I mean, I know that outside
- 23 counsel, you worked to discredit his credibility on any
- 24 of those issue.
- 25 He presented some compelling studies and

- 1 papers that are very interesting and then some other
- 2 calculated numbers given his experience as a business
- 3 analyst.
- I thought his -- his relevant experience
- 5 was fairly credible and so it just seemed like there was
- 6 a huge disparity. It wasn't a small, it was like two or
- 7 three, four times versus 14 to 22. And so could we get
- 8 closer? You know, is there something that really, you
- 9 know --
- 10 MS. GRABEL: And Chairman Stafford, Member
- 11 Richins, one thing that I talked about with doing with
- 12 this panel, and I don't know if you want to do it now or
- 13 after lunch, is kind of ignoring the multipliers, because
- 14 I agree that that kind of does muddy the waters.
- 15 And just sticking to hard figures that
- 16 demonstrate why it costs more to underground transmission
- 17 versus distribution. And then allowing Mr. Bryner to
- 18 talk about the length of the -- basically the cost
- 19 figures in Exhibit 31.
- 20 CHMN STAFFORD: That's why I focused on 31,
- 21 because the percentage is -- I didn't consider that to be
- 22 really meaningful to my analysis. I was looking at
- 23 bottom line, out-of-pocket expense to get the project
- 24 installed. And that's what -- that's the number that's
- 25 going to end up going into the rate base for the -- for

- 1 the cost of construction new or that's going to get added
- 2 to the rates at some point.
- 4 CHMN STAFFORD: Once you get -- did you
- 5 guys get a -- one of those adjusters that let you put
- 6 projects in before, outside of a rate case, or do you
- 7 still have to do the -- not yet?
- 8 MS. HILL: Not for TEP. We have one for
- 9 generation projects for UNS Electric, but we are -- we do
- 10 not have one for TEP.
- 11 CHMN STAFFORD: I don't think anyone has
- 12 one for transmission projects yet, do they? It's all
- 13 generation, or is APS' more nebulous?
- 14 MS. HILL: I'm not sure what APS'
- 15 encompasses. I think it's just generation, but I don't
- 16 know.
- 17 CHMN STAFFORD: So transmission has to get
- 18 rate based the hard way, then.
- 19 MEMBER RICHINS: So is that -- Chairman, is
- 20 that then done at the conclusion of the project with
- 21 actual costs, or is that done with -- okay. Thank you.
- 22 Thanks for confirming that.
- 23 MS. HILL: It has to be used and useful.
- 24 MEMBER KRYDER: Into your microphone a
- 25 little more.

- 1 MS. HILL: Oh, I'm sorry. It has to be
- 2 used and useful before we can put it into rate base. And
- 3 there are sometimes some arguments if it actually goes
- 4 into service outside of the test year, there are
- 5 sometimes some arguments from intervenors about whether
- 6 we can go ahead and put it into rate base, even though
- 7 it's outside of the test year, which means we have to
- 8 wait another three years or two years to put it -- I
- 9 mean, it's a complicated process, but it has to be in
- 10 service and actual cost before we can rate base it.
- 11 MEMBER RICHINS: Understood.
- 12 CHMN STAFFORD: They'll let -- typically I
- 13 think they've been doing 12 months, sometimes I think six
- 14 months, but typically it's 12 months of post test year
- 15 plant they'll allow into rate base, as long as it's in
- 16 use by the time the rate case is done.
- 17 MS. GRABEL: And deemed prudent.
- 18 CHMN STAFFORD: Right. I remember it came
- 19 up with your -- with your RICE units in a couple rate
- 20 cases ago, that the first batch had been constructed and
- 21 the second one still wasn't done, and they -- I think
- 22 this is right when COVID happened, and they had to have
- 23 Staff, they continued the hearing for several months
- 24 until Staff could go out and confirm that all ten units
- 25 were up and functional. And they were allowed a post

- 1 test year plant into rate base.
- 2 MEMBER RICHINS: Chairman, Ms. Grabel. I
- 3 think we can narrow that discussion a little bit. I
- 4 don't think there's any dispute that undergrounding costs
- 5 more, so I don't think we need to do anything to
- 6 establish an increased cost.
- 7 I think it would be helpful to, if probably
- 8 after we've had a discussion on which line, look at the
- 9 costs of your estimate and then maybe go to Mr. Dempsey
- 10 and see, he had some -- some numbers he was throwing out
- 11 there and so we can compare those, that route, so I don't
- 12 think we need to belabor whether or not it costs more. I
- 13 think that's well established. Let's just go right to
- 14 what's your number, what's your number, and see what we
- 15 could do to reconcile those.
- 16 Obviously, TEP has vastly more experience
- 17 in estimating these costs, although it's been stated in
- 18 testimony by Mr. Robinson that TEP has not ever
- 19 undergrounded the 138kV lines. So that's part of the
- 20 problem here is that I'm getting estimates and you have a
- 21 company, and I mean, I know you have a reliable
- 22 consultant, but you've never done it before, so it's like
- 23 we're really kind of shooting in the dark here.
- MS. GRABEL: Certainly. So TEP has never
- 25 done it, but Sargent & Lundy certainly has. And Sargent

- 1 & Lundy is the entity that was providing cost estimates
- 2 with real vendor quotes.
- 3 MEMBER RICHINS: Understood.
- 4 MS. GRABEL: Okay.
- 5 CHMN STAFFORD: And I seem to recall that
- 6 Sargent & Lundy had actual engineering and project
- 7 supervision experience for undergrounding high-voltage
- 8 transmission, even though they're not the construction
- 9 company, they do oversee the engineering and the
- 10 procurement of materials or something like that.
- 11 MR. JOCHAM: Correct.
- 12 CHMN STAFFORD: Okay. Just making sure my
- 13 recollection's okay. This seems like a great
- 14 conversation to have after lunch.
- 15 MR. DEMPSEY: May I make a quick comment?
- 16 CHMN STAFFORD: Oh, yes, sure, Mr. Dempsey.
- MR. DEMPSEY: So that's actually why I used
- 18 actual cost from actual projects.
- 19 MR. LUSK: Mr. Chair, just briefly, and I
- 20 don't know if it would be helpful for Member Richins,
- 21 would the -- once we get to a line would it be helpful to
- 22 sort of disentangle the undergrounding for the Gateway
- 23 Corridor versus the University Area Plan?
- 24 CHMN STAFFORD: It may, but I think the
- 25 Exhibit 31 that I'm looking at doesn't -- it assumes

- 1 additional -- zero marginal cost for the Gateway Corridor
- 2 for most of the routes except -- obviously except for D
- 3 because it would run parallel, but the ones that just
- 4 merely cross it, it assumes that they'll get a special
- 5 exception.
- 6 MS. GRABEL: With the exception,
- 7 Mr. Chairman, of Route 4, because there is that finding
- 8 of fact that has to be paid that the crossing complies
- 9 with all area plans, which is why the fourth -- fifth
- 10 column bringing in the cost of the University Area Plan
- 11 might be sucked into the cost of the Gateway Corridor.
- 12 CHMN STAFFORD: Okay. Because I'm confused
- 13 because 4, the total cost of overhead as proposed is the
- 14 same number as the total cost underground in Gateway
- 15 Corridor.
- 16 MS. GRABEL: And then you see the asterisk,
- 17 and it says, "Assumes City of Tucson will grant special
- 18 exception for building overhead when crossing a Gateway
- 19 Corridor that overlaps with the University Area Plan."
- 20 If it doesn't, because a finding of fact
- 21 needs to be made on that crossing down Euclid, which
- 22 overlaps with the University Area Plan, if the fact
- 23 finder determines that the crossing doesn't comply with
- 24 the University Area Plan because it's not undergrounded,
- 25 that could bring in the University Area Plan to the

- 1 entirety of the route. That's our concern and why we're
- 2 asking for a finding to be made.
- 3 CHMN STAFFORD: Okay.
- 4 MR. LUSK: So, and in response that,
- 5 Chairman, that might be the spot where it might be
- 6 helpful to talk about what the additional undergrounding
- 7 cost is for if the special exception wasn't granted.
- 8 CHMN STAFFORD: Okay. Excellent. Well,
- 9 that sounds like where we should take up after the lunch
- 10 break. It has been going for almost 90 minutes, and it's
- 11 12:25. I know I'm getting hungry, I'm sure everyone else
- 12 is, so let's take our lunch break and come back around
- 13 1:30. We stand in recess.
- 14 (Recess from 12:25 p.m. to 1:33 p.m.)
- 15 CHMN STAFFORD: All right. Let's go back
- 16 on the record.
- 17 I believe the applicant's witness has the
- 18 answers to Member Mercer's questions about the
- 19 differences in what it takes to underground distribution
- 20 compared to transmission.
- 21 MS. HILL: Yes. Thank you, Chairman
- 22 Stafford, Member Mercer.
- So I've asked Mr. Lindsey to describe that
- 24 for you. And, of course, feel free to just break in
- 25 during his presentation and ask him additional things.

- 1 But so I'll just start with a basic
- 2 question and then try to move it along as quickly as we
- 3 can. And let us know when you've had it.
- 4 MEMBER MERCER: I just want to understand
- 5 the difference between the two.
- 6 MS. HILL: All right. So, Mr. Lindsey,
- 7 then, knowing that, could you first describe the basic
- 8 size differences between what is required for a trench or
- 9 an opening for distribution versus transmission.
- 10 MR. LINDSEY: Sure. So starting with
- 11 distribution, our standard trench for a distribution line
- 12 is one foot wide. So pretty skinny from that
- 13 perspective. And bottom of trench we say or the depth of
- 14 that would be four feet. So the conduit would be placed
- 15 above that four foot. So we're talking one foot wide,
- 16 four feet deep.
- 17 And I kind of want to stand up and do this,
- 18 but, you know, stepping away from the microphone. So
- 19 that's a distribution trench. So typically that's what
- 20 we're looking at installing for this project and standard
- 21 for within the system, within the field that we -- that
- 22 we toured.
- MS. HILL: And, Mr. Lindsey, let me just
- 24 break in for a second. I have two questions.
- So, number one, just to clarify, the

- 1 distribution doesn't require PVC pipe or anything the way
- 2 the transmission does; correct?
- 3 MR. LINDSEY: Ms. Hill, it does. So for
- 4 distribution circuits, we -- our standard is a six-inch
- 5 conduit. But in the field we're not typically looking at
- 6 any special backfill or concrete within that trench. So
- 7 from a construction time frame it's a pretty quick thing
- 8 to do. It's a small trench to dig, not a lot of special
- 9 backfill.
- 10 So as Mr. Jocham has spoken about, when you
- 11 start to compare that to transmission, there's a bunch of
- 12 different factors that we start taking into account.
- 13 So to do that comparison from a dimensional
- 14 perspective, again, distribution is one foot minimum.
- 15 What we're talking about for this transmission project is
- 16 five and a half. So I'm not that big of a person, right?
- 17 I'm not that big of a guy.
- 18 So roughly this width is minimum. We could
- 19 run into some instances where it gets wider for certain
- 20 reasons. But that's a good comparison going one foot to
- 21 five and a half for this transmission project.
- 22 From a depth perspective, again, four foot
- 23 down to five for the transmission line, there's a couple
- 24 things that Mr. Jocham talked about that would increase
- 25 the depth. One, it's additional conduits. So we're

- 1 going from one conduit to 10. And we're also -- we're
- 2 also using concrete backfill, engineered backfill.
- 3 The other big difference I think that's
- 4 worth noting in this comparison, not just the size of the
- 5 trench, there's -- when you talk about constructing
- 6 distribution, there's a lot of flexibility that we have
- 7 when it comes to placing distribution underground.
- 8 What I mean by that is when you run into
- 9 constraints underground that we're concerned about here,
- 10 we just don't know all the details. We may be able to
- 11 modify the distribution system pretty easily. Whether
- 12 that's an easy enough turn to miss, say, sewer or water
- 13 and other underground utility, or we have the capability
- 14 to install equipment to make turns or junction cabinets
- 15 we call them at the surface, we could even look at
- 16 placing that distribution circuit somewhere else. It
- 17 just has such a small impact from a footprint perspective
- 18 when we compare it to the transmission.
- 19 So when we look at -- and, you know, this
- 20 comparison we're talking about, when we look at and
- 21 compare that to transmission, all of these utilities that
- 22 are underground that we know of in this area are likely
- 23 going to create some conflict for us, right?
- 24 So there aren't easy ways to intercept or
- 25 turn the transmission line underground, so what we'll be

- 1 looking at is likely moving the other utilities.
- 2 So two big things to compare, one, just the
- 3 footprint is much smaller for distribution, and it's also
- 4 a lot -- we have a lot more flexibility in how we install
- 5 it, where we put it, how we can connect it. The
- 6 transmission is point A to point B, and it's big. And so
- 7 whatever is in its way is probably easier to move, is
- 8 just a general comparison.
- 9 MS. HILL: And, Mr. Lindsey, one of the
- 10 Committee members -- I'm sorry, I can't remember which
- 11 one -- at one point asked a question about does that
- 12 distribution trench get bigger or cause problems if the
- 13 other utilities like the underbuild, like the
- 14 communications underbuild, or that sort of thing join you
- 15 in the trench? Could you explain that.
- 16 MR. LINDSEY: So the answer is yes. I
- 17 mean, it's going to get bigger to some extent to
- 18 accommodate additional conduits. But to compare the two,
- 19 again, which is what we're trying to do here, is the
- 20 transmission is looking at 10 eight-inch conduits, so a
- 21 huge footprint compared to our one six-inch for
- 22 distribution.
- When you start looking at communications or
- 24 gas lines or water lines in this area, they're going to
- 25 be in the same scale of what we're talking about for our

- 1 distribution system. And it's pretty commonplace for us
- 2 to collocate those utilities. And so if we are looking
- 3 at any relocations from an overhead perspective or even
- 4 conflicts underground, there's a long history of that
- 5 collocation work that we have with other underground
- 6 utilities even.
- 7 From a transmission perspective, this would
- 8 be such a critical piece of our system and infrastructure
- 9 that that collocation I don't think is part of our
- 10 thought process right now. It would need to be its own
- 11 trench, its own facility.
- 12 If communications or other utilities are
- 13 looking at undergrounding in the area for some reason,
- 14 it's going to be another trench, where it's pretty common
- 15 for us to collocate like I'm talking about for
- 16 distribution. It's just a very typical thing that's done
- 17 compared to -- I mean, it's -- clear, atypical for
- 18 transmission. We've never buried 138kV. And, again,
- 19 it's really critical infrastructure.
- 20 MS. HILL: And, Mr. Lindsey, in fact, would
- 21 TEP as a matter of course if we had a 138kV underground
- 22 line allow other utilities in their same trench while the
- 23 line was energized?
- Like, so say somebody had to make a repair
- 25 on their communications line, would we allow somebody to

- 1 do that while the 138kV was energized for safety reasons?
- 2 MR. LINDSEY: So, Ms. Hill, I think that's
- 3 one of the reasons why we'd want those utilities located
- 4 elsewhere.
- 5 MS. HILL: Okay. Thank you.
- 6 And then just as a point, I mean, if you
- 7 encountered a major issue with the transmission line
- 8 route -- and we're asking for a fairly narrow corridor
- 9 here now -- we would have to return to the ACC or this
- 10 Committee to have a significant adjustment in the route
- 11 to avoid things; isn't that correct?
- MR. LINDSEY: So, Ms. Hill, for underground
- 13 or for overhead?
- 14 MS. HILL: For, you know, anything really
- 15 when we're dealing with transmission lines.
- 16 MR. LINDSEY: That's my understanding,
- 17 yeah, from an overhead perspective.
- 18 MS. HILL: From an overhead perspective,
- 19 right.
- 20 And then so when it comes to distribution
- 21 lines, then, our service -- when I -- sorry, I used the
- 22 first person and it threw me off -- TEP can do the work
- 23 on the distribution lines; is that correct?
- MR. LINDSEY: Ms. Hill, that's correct.
- We typically -- well, almost always will

- 1 subcontract out what we call the civil work, so the
- 2 installation of the duct. So the trenching, the
- 3 installation of the duct, the PVC conduit we're talking
- 4 about here, that would be subcontracted out.
- 5 But the design work for the installation
- 6 would be done in-house. The installation of the
- 7 distribution network, so the cables, the switches, any
- 8 sort of junction cabinets, that's all done in-house with
- 9 standard equipment we have in the warehouse today.
- 10 So it's nothing special for us. It's
- 11 really just equipment that we stock and that we design on
- 12 a regular basis.
- MS. HILL: Okay. Thank you.
- 14 Member Mercer, does that answer your
- 15 questions?
- 16 MEMBER MERCER: Yes. Thank you.
- 17 MEMBER GOLD: Mr. Chairman.
- 18 CHMN STAFFORD: Yes, Member Gold.
- 19 MEMBER GOLD: I have a question for
- 20 Mr. Lindsey.
- I see overhead transmission lines, and when
- 22 they go to distribution lines, you have transformers.
- When you do underground transmission lines,
- 24 where do you put the transformers?
- MR. LINDSEY: Member Gold, underground

- 1 distribution lines?
- 2 MEMBER GOLD: No. Underground transmission
- 3 lines.
- 4 If you were to have to go with underground
- 5 transmission lines, you would have to use transformers to
- 6 go to the distribution side of it, so where do they go?
- 7 MR. LINDSEY: So, Member Gold, in that
- 8 scenario, the transformers would be located in the
- 9 substations we're talking about here, so Kino Sub, Vine
- 10 Substation, DeMoss Petrie because that's where we would
- 11 transform from the transmission voltage, the 138kV we're
- 12 talking about, to 13.8kV.
- 13 So along the route you wouldn't have any
- 14 transformers from a transmission perspective. It's
- 15 really located at the substations.
- 16 MEMBER GOLD: Okay. So if you underground
- 17 transmission lines, none of the quote/unquote power lines
- 18 or telephone poles are going to have those big barrels
- 19 that are our transformers?
- MR. LINDSEY: So, Member Gold,
- 21 clarification.
- 22 The distribution that's along these routes
- 23 would stay overhead, and you're talking about the white
- 24 we call them pots transformers that's a distribution
- 25 piece of equipment that would remain.

- 1 To do a quick comparison, if we were to
- 2 underground the distribution, not transmission,
- 3 distribution, we have what we call pad-mounted
- 4 transformers. So all the green boxes you see around
- 5 town, when they're new they're green, those are new.
- 6 MEMBER GOLD: Oh, those --
- 7 MR. LINDSEY: Yeah. That's -- some of
- 8 those are transformers and serve the same purpose to
- 9 transform from the 13.8kV down to whatever typical houses
- 10 120, 240, so that's the smaller transformers.
- 11 MEMBER GOLD: So those are the ones that
- 12 hum?
- 13 Wait a second. Are they supposed to hum?
- 14 MR. LINDSEY: There's a -- if -- Member
- 15 Gold, yeah, there's going to be some noise made from a
- 16 transformer.
- 17 The things we're talking about in the field
- 18 are very small, and you may hear them if you're standing
- 19 up right next to something, but the sound dissipates very
- 20 quickly.
- 21 Within a substation, much larger piece of
- 22 equipment from a transformer perspective, it's going to
- 23 make more noise. But, again, a big reason why we build
- 24 these big fancy block walls around them that helps
- 25 dissipate the sound. It's going to hum, but we do try to

- 1 mitigate that.
- 2 MEMBER GOLD: Okay. Thank you.
- 3 MEMBER HILL: I have a question.
- 4 CHMN STAFFORD: Member Hill.
- 5 MEMBER HILL: Just to follow up on Member
- 6 Mercer's set of questions.
- We didn't talk about it in detail
- 8 yesterday, but I speculated a little bit about some
- 9 right-of-way things, so I thought maybe this would be
- 10 time to talk about it because we're talking about the
- 11 width and depth of underground distribution versus
- 12 transmission.
- 13 With the underground of distribution, are
- 14 you more likely to see that kind of construction in the
- 15 roadbed along a sidewalk, in a front yard?
- 16 And then kind of similar question for
- 17 transmission. Especially in those residential areas
- 18 where you really maybe only have 80 or 90 feet of road
- 19 right-of-way how do you engineer that and plan for that
- 20 and what are kind of your sideboards on how you approach
- 21 that?
- MR. LINDSEY: Sure, Member Hill.
- 23 So it kind of goes back to from a
- 24 high-level perspective why undergrounding distribution
- 25 isn't that big of a challenge or concern for us.

- 1 The footprint, the impact is much smaller,
- 2 and so the flexibility that we have to make that
- 3 installation underground is much greater. So just
- 4 because of the size -- and, like I mentioned earlier,
- 5 flexibility of where we put it.
- 6 So on some of these routes we're talking
- 7 about undergrounding distribution. That doesn't mean we
- 8 have to put it right below where it's at. It could mean
- 9 we underground it on the other side of the street, we
- 10 underground it in another location and make the same
- 11 distribution connection.
- 12 So the distribution network is much more
- 13 vast than the transmission. A lot of different places to
- 14 make the connections. So from that perspective there's a
- 15 lot of flexibility where we can put it.
- 16 I think in this case we would strive to --
- 17 and I'm going to look at Mr. Bryner, but from a
- 18 conceptual perspective, we would be putting that
- 19 distribution in road right-of-way, right? We would not
- 20 want to be acquiring easement or private land for such a
- 21 small facility.
- 22 From a transmission perspective, I know
- 23 you've got more -- you've spent more time looking at
- 24 this, but that's another concern. It's huge, right? I'm
- 25 not exaggerating when I do this, because that's five and

- 1 a half feet. We say five feet deep, which, you know, if
- 2 I stood up, I'm just a little bit taller than that. But
- 3 it could be up to 15 to miss other things, that's the
- 4 height of this roof, right, or the ceiling.
- 5 So that is a significant footprint wherever
- 6 we're talking about, even if it's not in the neighborhood
- 7 street.
- 8 So that's another factor in -- or another
- 9 concern we have of just actually getting this thing done.
- 10 So I know cost is talked a lot about.
- 11 Feasibility. We can buy the cable; we can do these
- 12 things. But when you think about just the concept of
- 13 putting this type of facility underground, it's
- 14 tremendous.
- 15 And so that's a big unknown. I don't think
- 16 we can give you a clear answer. Our goal is to put it in
- 17 right-of-way, but that doesn't mean that will happen,
- 18 right? There could be some private easements that we're
- 19 going to need to purchase. Because we can't turn on a
- 20 dime, we can't -- we just don't have much to work with.
- 21 It's huge, and it's got to go from point A to point B.
- 22 There's really no breaking that path.
- 23 MEMBER HILL: Thank you.
- 24 CHMN STAFFORD: I have a follow-up
- 25 question.

- 1 Looking at the routes, it looks like you're
- 2 going to have to make some 90-degree turns. How do you
- 3 do that underground?
- 4 MR. JOCHAM: Yeah, so I'll take that
- 5 question. This is Mr. Jocham.
- 6 So you can turn 90 degrees with an
- 7 underground transmission line, but you're going to do
- 8 that over a wide radius. These cables can only bend so
- 9 much, so you're looking at, you know, 30, 50, 60, 70-foot
- 10 radiuses.
- 11 So you may start on the far side of an
- 12 intersection to make a 90-degree turn and end at the
- 13 outside of the road that you're turning onto. You're not
- 14 going to be able to -- like Mr. Lindsey stated, you're
- 15 not going to be able to turn on a dime.
- 16 So you're going to have to thoughtfully
- 17 kind of guide that -- that curve. And so you may start
- 18 in an outside lane and end in an outside lane to
- 19 accommodate that 90-degree bend.
- 20 CHMN STAFFORD: All right. Because I'm
- 21 just looking at the map here. And if you look at Route
- 22 C, I think you got -- you get several 90-degree turns.
- 23 For example, the one from Park onto Adams, neither of
- 24 those streets are particularly wide.
- 25 Is it even physically capable of making

- 1 that 90-degree turn --
- 2 MR. JOCHAM: Yes.
- 3 CHMN STAFFORD: -- for that street to the
- 4 other street?
- 5 MR. JOCHAM: Sorry. Yeah. So you could
- 6 make that turn. The tighter that you make the radius the
- 7 more pressure it puts on the sidewall of the cable and
- 8 the more tension it requires to pull that cable in. And
- 9 so that would more than likely increase the amount of
- 10 vaults that you have to put in to make sure that you
- 11 could effectively install that cable.
- 12 CHMN STAFFORD: Do you ever have to install
- 13 a vault to make a turn if it's too tight of a radius you
- 14 can't --
- 15 MR. JOCHAM: That is a really good
- 16 question. At the transmission-line level, I would say I
- 17 haven't seen that yet. But I have seen us increase the
- 18 vault -- or narrow the vault distances due to sidewall
- 19 pressures on cable.
- 20 CHMN STAFFORD: Okay. All right. Thank
- 21 you.
- 22 MEMBER GOLD: Mr. Chairman.
- 23 CHMN STAFFORD: Yes, Member Gold.
- 24 MEMBER GOLD: Mr. Jocham, transmission
- 25 lines that are undergrounded, I have seen them being put

- 1 in on major streets. I've never seen them being put in
- 2 on small residential streets, have you?
- 3 MR. JOCHAM: So S & L has been involved in
- 4 projects where we've gone down side streets in major
- 5 urban environments. It just increases the complexity in
- 6 the sense that you're probably not just restricting
- 7 access in those areas, but you're probably closing them
- 8 down entirely.
- 9 MEMBER GOLD: I was referring to going down
- 10 a side street and then making a right angle bend. Of
- 11 course, it's not a sharp right angle. It's a radius as
- 12 you were saying. I don't think some of those streets are
- 13 wide enough. There's a reason trucks don't make turns on
- 14 tiny residential streets.
- 15 MR. JOCHAM: Down like such as Vine is a
- 16 good example.
- 17 MEMBER GOLD: Exactly.
- 18 MR. JOCHAM: Yeah, it would -- it would add
- 19 a large amount of complication. That definitely is a
- 20 detailed engineering problem.
- 21 I'm not saying that it's completely
- 22 impossible, but it would definitely add to the
- 23 complication during the engineering phase to try to limit
- 24 the amount of disturbance and disruption to the community
- 25 and not entirely shut down that road. I can't promise

- 1 that you wouldn't be able to do it.
- 2 MEMBER GOLD: What I'm saying is I know
- 3 there's ways to do it.
- 4 Instead of going horizontal at say a
- 5 45-degree curve, you could go down vertically as well. I
- 6 mean, that would mean tremendous of excavation, but it's
- 7 less expensive than condemning property.
- 8 MR. JOCHAM: True.
- 9 MEMBER GOLD: Thank you.
- 10 MR. DEMPSEY: I have some information if
- 11 I'm allowed.
- 12 CHMN STAFFORD: Yes. Mr. Dempsey, please.
- MR. DEMPSEY: So Mr. Jocham might be able
- 14 to confirm this, but the Chandler project, the Intel HIP
- 15 project, goes through neighborhood -- goes through some
- 16 neighborhoods. And I believe they go some neighborhoods
- 17 with two duct banks, not just one.
- 18 MR. JOCHAM: Yeah, that is true. They do
- 19 go down.
- 20 But those are honestly larger streets.
- 21 They have two -- a lane in each direction and a true
- 22 center turn lane versus something like Vine. But there
- 23 are --
- MR. DEMPSEY: There are two, right, two
- 25 duct banks?

- 1 MR. JOCHAM: There are -- there's a duct
- 2 bank for the current design from my understanding and a
- 3 future, yes.
- 4 MR. DEMPSEY: Right.
- 5 MEMBER GOLD: Mr. Chairman.
- 6 CHMN STAFFORD: Yes.
- 7 MEMBER GOLD: And in Chandler the streets
- 8 are much wider --
- 9 MR. DEMPSEY: Yeah.
- 10 MEMBER GOLD: -- than they are on Vine.
- 11 And on Chandler you mentioned two duct
- 12 banks. Are they vertical one on top of the other or are
- 13 they side by side?
- 14 MR. DEMPSEY: I think they're side by side.
- 15 MEMBER GOLD: Now, why would they put them
- 16 side by side instead of vertical to take up less space?
- 17 MR. DEMPSEY: I don't know.
- 18 Maybe it's harder to go deeper. I don't
- 19 know.
- 20 MEMBER GOLD: Would that be heat
- 21 dissipation?
- MR. DEMPSEY: Oh, maybe.
- MR. JOCHAM: I don't know configuration as
- 24 built. I apologize.
- 25 MEMBER GOLD: I would just say the

- 1 footprint of putting them side by side, which Chandler
- 2 chose, is a much wider footprint than doing it vertically
- 3 like someone proposed earlier. And if they didn't do it,
- 4 there's got to be a reason why they didn't do it. I'm
- 5 just guessing there's a good reason.
- 6 MR. JOCHAM: Yeah. I'm not sure the final
- 7 configuration that it is truly side by side, but there
- 8 are positives and negatives to both options.
- 9 CHMN STAFFORD: Member Richins, I believe
- 10 you had some questions to ask about the undergrounding
- 11 costs.
- 12 MEMBER RICHINS: I do. So just trying to
- 13 get -- if we could pull up I think it was 31, Slide 31 of
- 14 the presentation.
- 15 And then, Mr. Dempsey, let's use your
- 16 UAZ-62.
- 17 MS. GRABEL: Chairman Stafford, Member
- 18 Richins, I actually do have kind of a direct examination
- 19 that guides my team through Mr. Dempsey's presentation.
- 20 I wonder if we could do that, and then you could ask any
- 21 follow-up questions?
- 22 CHMN STAFFORD: What's your preference,
- 23 Member Richins? Did you want to ask --
- 24 MEMBER RICHINS: She just wants to do all
- 25 the talking. I have all this great stuff to say.

- 1 Let's do that. That's okay.
- 2 MS. GRABEL: I appreciate it. Thank you.
- 3 So if we could please pull up first, and
- 4 then we'll get to our Exhibit 31 as well and obviously
- 5 interrupt at any time.
- 6 So first we're going to pull up UAZ
- 7 Exhibit 62, which is Underground Arizona's presentation.
- 8 And if we could begin on Slide 16.
- 9 Thank you very much.
- 10 So, Mr. Jocham, I'm going to direct these
- 11 initial questions at you.
- 12 So were you here yesterday during
- 13 Mr. Dempsey's testimony regarding this slide?
- 14 MR. JOCHAM: I was.
- 15 MS. GRABEL: And Mr. Dempsey testified
- 16 regarding the cost of construction per mile using
- 17 Route 1, correct, which is the numbers highlighted in
- 18 green?
- MR. JOCHAM: Correct.
- 20 MS. GRABEL: Now, that is not our preferred
- 21 route; correct?
- MR. JOCHAM: Correct.
- 23 MS. GRABEL: But we'll look at that route
- 24 because it's the analysis that Mr. Dempsey performed.
- 25 So he estimated total cost of \$11.8 million

- 1 to construct the line aboveground; is that correct?
- 2 MR. JOCHAM: Correct. That matches the
- 3 place.
- 4 MS. GRABEL: Okay. So that's where he got
- 5 that figure is the place number?
- 6 MR. JOCHAM: Correct.
- 7 MS. GRABEL: And what was included?
- 8 What costs were included in the figure on
- 9 the place to reach that \$11.8 million?
- 10 MR. JOCHAM: Yeah. So that \$11.8 million
- 11 includes the installation of the new overhead
- 12 transmission line at 138kV, the relocation of
- 13 distribution underground where applicable, and the
- 14 right-of-way costs.
- MS. GRABEL: Okay. Thank you.
- 16 And he then includes a route length of
- 17 2.9 miles; is that correct?
- 18 MR. JOCHAM: That is correct.
- 19 MS. GRABEL: Is that the correct distance
- 20 for Route 1?
- 21 MR. JOCHAM: That is not. It is a typo.
- MS. GRABEL: Okay. And if you look at your
- 23 placemats, the correct distance is 4.1 miles; is that
- 24 correct?
- 25 MR. JOCHAM: Correct. I'll refer to

- 1 Mr. Bryner to clarify that, but I believe that's correct.
- 2 MR. BRYNER: If I could just explain --
- 3 sorry.
- 4 MEMBER RICHINS: Yeah. I just -- my
- 5 understanding in testimony was that was the underground
- 6 portion of that route from Campbell north.
- 7 MS. GRABEL: This is the TEP overhead cost.
- 8 MEMBER RICHINS: Okay.
- 9 MR. BRYNER: Yeah. So Mr. -- oh, sorry.
- 10 So Mr. Dempsey clearly he took these costs,
- 11 these estimates from our presentation TEP Exhibit 8 from
- 12 page -- or Slide 201 on that where we did reflect a route
- 13 length of 2.9 miles for Route 1. But that was -- as
- 14 Mr. Jocham pointed out, that was a typo on our part. The
- 15 place has it correct at 4.1 miles, the application has it
- 16 correct at 4.1 miles. It's physically impossible to --
- 17 if you draw a straight line between Kino and Vine, it's
- 18 going to be further than 2.9.
- 19 4.1 miles is the correct distance, and we
- 20 just -- we made a mistake -- I made a mistake on that
- 21 slide.
- MS. GRABEL: So what is the correct cost
- 23 per mile for Route 1 when the right-of-ways and
- 24 undergrounding existing distribution facilities is used
- 25 with the 4.1-mile route length?

- 1 MR. JOCHAM: It's approximately
- 2 \$2.9 million per mile.
- 3 MS. GRABEL: Okay. And if you can turn to
- 4 the next slide, Slide 17.
- 5 So here we're talking about the underground
- 6 cost estimates that Mr. Dempsey used in his analysis;
- 7 correct?
- 8 MR. JOCHAM: Yes. Columns do have the
- 9 underground cost estimate.
- 10 MS. GRABEL: Okay. And he begins with the
- 11 base cost per mile in revision zero of Sargent & Lundy's
- 12 report that was published in February 2020.
- 13 Is that figure an accurate figure to use to
- 14 determine the costs today?
- 15 MR. JOCHAM: No. It is not.
- MS. GRABEL: And why not?
- 17 MR. JOCHAM: There's multiple reasons.
- 18 I think the largest reason is, as I
- 19 identified in my previous testimony, this original rev 0
- 20 was -- no CYMCAP runs were performed, so it was using an
- 21 idealized cable ampacity, which is not capable for this
- 22 project.
- 23 So that's a single 6,000-kcmil cable per
- 24 phase based off of the ideal cable capacity provided by
- 25 the vendor. After running CYMCAP models and doing some

- 1 preliminary engineering that's when we determined that
- 2 two cables per phase were needed.
- In addition, as I previously testified, the
- 4 copper costs and subsequently the cable cost for
- 5 underground transmission has done -- the copper cost has
- 6 gone from 2.2 million -- or \$2.2 per foot to over \$4.2
- 7 per foot increasing the cable costs from \$120 a foot to
- 8 \$245 a foot.
- 9 And then in addition to that as prior also
- 10 general inflation costs of 21 percent since that date.
- 11 MS. GRABEL: Thank you. And to get the
- 12 next plot on Mr. Dempsey's linear trend line, he goes to
- 13 a different figure. If you'll advance to Slide 18, he
- 14 looks at --
- 15 MEMBER LITTLE: Mr. Chairman.
- 16 CHMN STAFFORD: Yes, Member Little.
- 17 MEMBER LITTLE: I'm sorry to interrupt you.
- 18 But I'm curious if you go down to the
- 19 revision of Sargent & Lundy estimates for June of '24,
- 20 the base cost is \$16.85 million per mile and the
- 21 underground total cost is that -- oh, I see that's times
- 22 the number of miles. I get it. Never mind.
- MS. GRABEL: Well, actually, Member Little,
- 24 you're going to exactly where we're about to get.
- 25 So we're walking through the figures that

- 1 Mr. Dempsey used in his analysis. And the second one was
- 2 a September of 2020 report which resulted in a base cost
- 3 per mile of \$8.24.
- 4 Why is that figure appropriate to use for
- 5 today's purposes?
- 6 MR. JOCHAM: So it utilizes the same math
- 7 as rev 0. The difference between rev 0 and rev 1 was to
- 8 remove the jack and bore costs or the trenchless
- 9 installation costs through the intersections to show at
- 10 the time what would have been the Committee for Kino to
- 11 DMP the lowest installed cost possible.
- 12 MS. GRABEL: Okay. And all of the same
- 13 factors with respect to increased cost of the copper, the
- 14 bigger cables, and inflation, those all apply to rev 1;
- 15 correct?
- MR. JOCHAM: Absolutely.
- 17 MS. GRABEL: Okay. And then he has a line
- 18 called 8, which is the date of the current Sargent
- 19 & Lundy report -- if we could advance to Slide 19, Grace,
- 20 that would be great -- with a base cost per mile of
- 21 \$17.85.
- 22 Is that figure contained anywhere in the
- 23 Sargent & Lundy report?
- MR. JOCHAM: It is not.
- 25 MS. GRABEL: Okay. What figure is

- 1 contained in the Sargent & Lundy report?
- 2 MR. JOCHAM: The figures identified in 8-1
- 3 and 8-3 are contained in the Sargent & Lundy report.
- 4 MS. GRABEL: Okay. So let's take the 16.85
- 5 base cost per mile.
- 6 Do you agree that the underground total
- 7 cost in the Sargent & Lundy report is the \$30.33
- 8 estimated on the slide?
- 9 MR. JOCHAM: 30 million --
- MS. GRABEL: Sorry.
- 11 MR. JOCHAM: Yeah, yeah. \$30.33 million
- 12 per mile. Yes. That is accurate to S & L's report.
- MS. GRABEL: Okay. Thank you.
- 14 And what costs are included to get to that
- 15 30 million -- \$30.33 million total project cost?
- 16 MR. JOCHAM: That is just engineering,
- 17 procurement of materials and construction costs.
- 18 MS. GRABEL: All right. Thank you.
- 19 So do you --
- 20 MEMBER LITTLE: Mr. Chairman.
- 21 CHMN STAFFORD: Yes, Member Little.
- 22 I'm assuming that means the right-of-way
- 23 costs are not included?
- 24 MR. JOCHAM: Correct. Right-of-way costs
- 25 or -- or burying of any existing distribution are not

- included in that underground cost.
- 2 CHMN STAFFORD: Okay. Member Little.
- 3 MEMBER LITTLE: Then what is base cost?
- 4 MR. JOCHAM: The base cost in Sargent & --
- 5 or the base cost in this table?
- 6 MEMBER LITTLE: Uh-huh. What does it not
- 7 include that the \$30.33 million does include?
- 8 MR. JOCHAM: So the base cost at
- 9 16.85 million is a per mile cost. And then if you
- 10 multiply that by the 1.8 that is where you get
- 11 30.33 million.
- 12 MEMBER LITTLE: Okay. So the 30.33 is not
- 13 million dollars per mile, it's million dollars for the --
- 14 MR. JOCHAM: Project.
- 15 MEMBER LITTLE: -- 1.8 miles?
- 16 MR. JOCHAM: Yes. For the undergrounding.
- 17 Yes. I apologize if I misspoke.
- 18 MEMBER LITTLE: Thank you.
- 19 MS. GRABEL: Thank you. And if you wanted
- 20 to do an apples-to-apples comparison of what the
- 21 aboveground construction per mile would be compared to
- 22 the undergrounding contained in the Sargent & Lundy
- 23 report, what is the right, excuse me, overhead figure to
- 24 use?
- 25 So that is the overhead figure not

- 1 including right-of-way and the burying the
- 2 distribution -- existing distribution lines belowground?
- 3 MR. JOCHAM: Yeah. As TEP has prior
- 4 testified, that number is \$1.2 million per mile.
- 5 MS. GRABEL: Okay. So maybe it would
- 6 help -- do you have the ability to kind of do the math
- 7 for the Committee so that they can see it to see what the
- 8 corrections to Mr. Dempsey's exhibit are?
- 9 MR. JOCHAM: I do.
- 10 MS. GRABEL: Okay. If you could please do
- 11 that math for us.
- 12 Okay. So taking the overhead route -- oh,
- 13 go ahead.
- MR. JOCHAM: Okay.
- MS. GRABEL: Sorry.
- 16 MR. JOCHAM: All right. So we got it up.
- 17 I prewrote in Route 1. The 1.8 miles is
- 18 representative of the Gateway Corridor for Route 1.
- 19 So if we take -- sorry. I'm kind of
- 20 stretching myself here. If we take that 1.8 miles and
- 21 multiply it by the 2 point -- or 1.2 million per mile,
- 22 we're going to get a total cost of 2.16 million for that
- 23 1.8 mile section for just the overhead 138kV transmission
- 24 line, not including -- it does not include right-of-way,
- 25 it does not include the distribution underground costs.

- 1 MS. GRABEL: Okay. Thank you.
- 2 And now if you could please compare that to
- 3 the underground cost so that we can kind of figure out,
- 4 kind of reconcile the multiplier differences between
- 5 Mr. Dempsey's analysis as corrected today versus the
- 6 Sargent & Lundy analysis.
- 7 MR. JOCHAM: Sure. So if you take that
- 8 total cost of the 1.8 miles, which is 30.33 million, and
- 9 you divide it by the overhead cost, you're going to come
- 10 out with an approximate 14 times more expensive, a
- 11 multiplier of 14 which matches the Sargent & Lundy
- 12 report.
- 13 MEMBER LITTLE: Mr. Chairman.
- 14 CHMN STAFFORD: Yes, Member Little.
- 15 MEMBER LITTLE: I think I would prefer to
- 16 see a comparison including the underground distribution
- 17 when -- for the overhead cost of this 1.8 miles because
- 18 what I -- you know what we've been talking about is what
- 19 it's going to cost the utility to get from point A to
- 20 point B, 1.8 miles.
- 21 And I -- you know, yes, we need to
- 22 eliminate the right-of-way to be consistent with the --
- 23 or the right-of-way acquisition costs to be consistent
- 24 with the underground. But the utility TEP has committed
- 25 to putting that distribution underground, and so that

- 1 is -- but in the overhead version but not in the
- 2 underground version.
- 3 So in order to compare apples-to-apples, in
- 4 my opinion, we need to include the underground
- 5 distribution in that cost.
- 6 MS. GRABEL: Certainly.
- 7 CHMN STAFFORD: And, Member Little, I
- 8 believe that that comparison is what I asked for and what
- 9 the company provided in TEP-31.
- 10 MS. GRABEL: And we are just about to turn
- 11 here.
- 12 So, Member Little, what we were doing here
- 13 was reconciling the multiplier differences in response to
- 14 Member Richins's question.
- 15 I don't know if Member Richins has any
- 16 additional questions here before we turn to Exhibit 31.
- 17 MEMBER RICHINS: This was not where I was
- 18 headed.
- 19 So the cost estimates are the cost
- 20 estimates. I don't think we're disputing the cost
- 21 estimates.
- 22 What is most curious is Slide 21 of
- 23 Underground Arizona where it gives three examples of
- 24 230kV underground lines in three projects within the last
- 25 half decade, and it has their actual costs on there.

- 1 MS. GRABEL: Okay. Let's turn to --
- 2 MEMBER RICHINS: And the multipliers aren't
- 3 that, but they're also -- this is a unique project in
- 4 Tucson, and these are unique projects in their
- 5 jurisdiction.
- 6 MS. GRABEL: Certainly.
- 7 MEMBER RICHINS: So this here when you look
- 8 at the bottom three, which I'm going to use as probably
- 9 the most corollary to 69kV. 69kV is distribution.
- 10 Mr. Lindsey already talked about how distribution is
- 11 undergrounded much different than transmission, right?
- 12 So we all know that, you know, Sargent
- 13 & Lundy's estimates should be consistent in this
- 14 proceeding and in their report, of course. So I don't
- 15 think that's -- their estimates are in dispute.
- 16 But when you look at these numbers, these
- 17 are what I would like Mr. Dempsey or anybody else to kind
- 18 of reconcile through because when we look at the -- let's
- 19 look at the HPFF mitigation phase one.
- Is that a completed project by APS or not?
- MR. JOCHAM: May I?
- MS. GRABEL: It's by SRP. And we'll let
- 23 Mr. Jocham.
- MR. JOCHAM: May I?
- 25 So the APS project I don't think is

- 1 applicable here. That is definitely not an
- 2 apples-to-apples.
- 3 That project is a conductor replacement of
- 4 an already installed underground transmission line that
- 5 is over 40 years old.
- 6 MEMBER RICHINS: Okay.
- 7 MR. JOCHAM: So it is just a conductor
- 8 reconductor. They are -- the costs here are to
- 9 reconductor the line and assess the pipe that it's in,
- 10 not any pipe replacement if it's determined.
- 11 MEMBER RICHINS: Okay.
- MR. DEMPSEY: May I?
- 13 MEMBER RICHINS: Yeah, I mean --
- 14 CHMN STAFFORD: Mr. Dempsey.
- 15 MR. DEMPSEY: This is Mr. Dempsey.
- 16 So I did not use the -- that's why there's
- 17 an X. The HPFF mitigation is just there to show it's
- 18 illustrative. I did not use it in an average.
- 19 But I would correct Mr. Jocham in that I do
- 20 not believe the mitigation phase includes the new
- 21 conductoring. I assume we'll see that in the next FERC
- 22 filing. I think the conductors were only recently
- 23 installed. So this was -- this -- that line item X is
- 24 purely mitigation, and it is work that was done in 2023.
- 25 MEMBER RICHINS: Okay. So then let's look

- 1 at Intel and Price Road. Again, very unique
- 2 circumstances compared to what we're doing here.
- 3 But just trying to get an idea about their
- 4 costs appear to be, you know, 10 to 13 million.
- 5 Is that just wildly inaccurate because you
- 6 have huge rights-of-way down to Intel and not a lot of
- 7 built infrastructure?
- 8 MR. JOCHAM: Yeah.
- 9 MEMBER RICHINS: I'm just trying to get my
- 10 head around why the numbers are so disparate.
- 11 MR. JOCHAM: Sure. Yeah. Let me take a
- 12 crack at what you're looking for.
- 13 So, I guess, S & L has really no way of
- 14 validating SRP's numbers. I have no insight to what
- 15 those numbers are, where they came from other than the
- 16 final number provided.
- 17 But the projects aren't apples-to-apples.
- 18 They're different voltages. They have different cable
- 19 sizes. There's different quantities of duct. There's
- 20 different landscape, different terrain, different
- 21 obstructions.
- 22 There's -- in these scenarios because they
- 23 are 230 they're both nonstandard materials, so there is
- 24 that correlation.
- 25 But -- and then generally, you know, 2018

- 1 and 2021 there are some inflation costs to consider in
- 2 there.
- 3 MS. GRABEL: And, Mr. Jocham, if I may
- 4 interject momentarily.
- 5 This is -- these are figures compiled from
- 6 the FERC Form 1; correct?
- 7 MR. JOCHAM: Correct.
- 8 MS. GRABEL: And the numbers pictured here
- 9 actually differ from what SRP testified during the
- 10 hearing was the actual total cost of the project;
- 11 correct?
- 12 MR. JOCHAM: Absolutely.
- 13 MS. GRABEL: And we're looking for the
- 14 testimony that I believe is TEP Exhibit 34 where Zack
- 15 Heim walks through the total costs, which was something
- 16 like \$54 million that SRP contributed, \$30 million that
- 17 Intel contributed and another 30-some million dollars
- 18 that the City contributed; is that correct?
- MR. JOCHAM: Correct.
- 20 The total project cost identified in those
- 21 slide decks was \$123 million.
- 22 CHMN STAFFORD: And what is reported on the
- 23 FERC form?
- Is that merely the company's expenditures,
- 25 or is it total cost of the project?

- 1 Mr. Dempsey?
- 2 MR. DEMPSEY: It's the total cost of the
- 3 project.
- 4 CHMN STAFFORD: So FERC Form 1 is the total
- 5 cost?
- 6 MR. DEMPSEY: These are not from FERC Form
- 7 1. These are actually built from that testimony that
- 8 they're apparently going to refer to.
- 9 And I actually have slides that will walk
- 10 you through every step when we get there.
- 11 MEMBER RICHINS: So state again where these
- 12 numbers came from.
- 13 MR. DEMPSEY: They came from SRP's
- 14 testimony before the Line Siting Committee.
- 15 MEMBER RICHINS: Oh, okay.
- 16 MR. DEMPSEY: From their presentation as
- 17 well as their testimony.
- 18 MEMBER RICHINS: But were those estimates
- 19 at the time?
- 20 MR. DEMPSEY: They're the numbers that --
- 21 CHMN STAFFORD: Well, I would assume so.
- 22 MEMBER RICHINS: Oh, these are from the
- 23 line siting proceeding?
- 24 CHMN STAFFORD: They would have to be
- 25 estimates because they wouldn't have built the line yet.

- 1 MR. RICHINS: Yeah.
- 2 CHMN STAFFORD: Like, if they were numbers
- 3 before the Line Siting Committee, they would have to be
- 4 estimates because the line wouldn't exist unless it was
- 5 an amendment to an existing CEC.
- 6 MEMBER RICHINS: Yeah, you know, that's
- 7 exactly right.
- 8 And that's what I'm trying to find
- 9 somewhere here where we have a done, completed, built
- 10 project that is anywhere representative to the estimates
- 11 that you're providing.
- 12 And I'll go back. When I was on council,
- 13 we would do estimates on Park projects or acquiring
- 14 whatever. And I would ask my staff to go back and review
- 15 estimates versus, you know, final costs, and usually they
- 16 were off by a pretty good factor. Sometimes more
- 17 expensive, not always.
- 18 So that's just what we're trying to get
- 19 here is let's find a built project that has gone anywhere
- 20 close to similar conditions so we can get an
- 21 understanding of what that might look like.
- 22 CHMN STAFFORD: Now, the FERC Form 1, those
- 23 are actual costs, aren't they?
- MR. DEMPSEY: Yes. The FERC Form 1s, they
- 25 don't get included unless the project's complete.

- 1 MS. HILL: May I? I'm sorry. So the --
- 2 CHMN STAFFORD: Yes, member -- not Member
- 3 Hill, but Ms. Hill.
- 4 MS. HILL: So I just want to verify before
- 5 we take it as the gospel about the numbers that are
- 6 included into the FERC Form 1 that are paid by third
- 7 parties. And so if you can -- if we can table that piece
- 8 of that until I can verify that, hopefully it will take
- 9 me no more than 10 minutes. I just would like to caution
- 10 that because FERC Form 1 is kind of a little tricky.
- 11 CHMN STAFFORD: That's fair enough.
- MS. HILL: Okay. Thank you.
- 13 CHMN STAFFORD: Yeah. You can do your own
- 14 assessment and come back and let us know what you found,
- 15 but that seems fair.
- 16 MR. DEMPSEY: May I comment?
- 17 CHMN STAFFORD: Sure. Mr. Dempsey.
- 18 MR. DEMPSEY: So this table is not about
- 19 who paid or didn't pay. It's just about compiling best
- 20 cost based on publicly available data. So this isn't
- 21 about who paid.
- 22 CHMN STAFFORD: Well, I think -- I think
- 23 the point of contention here is that FERC Form 1, does it
- 24 reflect to entire cost of the project --
- MR. DEMPSEY: Yes.

- 1 CHMN STAFFORD: -- or just the costs
- 2 incurred by filer of the form?
- 3 And that's --
- 4 MR. DEMPSEY: So --
- 5 CHMN STAFFORD: And we've heard you said
- 6 includes the whole cost of the project. And now the
- 7 applicant would like to do its own checking to confirm
- 8 that that is indeed the case.
- 9 MR. DEMPSEY: I can prove that as well if
- 10 we need to.
- 11 CHMN STAFFORD: And, Member Richins, did
- 12 you have further questions or are they still or --
- MR. JOCHAM: May I?
- 14 CHMN STAFFORD: -- is Mr. Jocham going to
- 15 provide another answer?
- 16 MR. JOCHAM: Yeah. May I add?
- 17 So let's take Price Road for an example
- 18 here. So Price Road is two circuits, but it is a single
- 19 cable per phase. So you can consider that.
- 20 MR. DEMPSEY: That's not correct.
- 21 MR. JOCHAM: I'm looking at the riser
- 22 structures currently, and there's only one cable.
- Now, Intel is two cables per phase.
- MR. DEMPSEY: Oh, I thought you were
- 25 talking about Intel. Sorry.
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- 1 MR. JOCHAM: So Price Road is a double
- 2 circuit line, but it is one cable per phase. So cable
- 3 quantity-wise the same as our project because we have two
- 4 cables per phase. So they installed six cables. We're
- 5 installing six cables.
- 6 So if you take \$15.8 million and divide it
- 7 by 1.6 to make it a million dollars per mile, you get
- 8 \$26 million per mile.
- 9 CHMN STAFFORD: Which is in line with what
- 10 your numbers are on TEP-30?
- 11 MR. JOCHAM: So our numbers in TEP-17
- 12 are -- are less than that.
- 13 CHMN STAFFORD: Okay.
- 14 MR. JOCHAM: We're coming in at -- even
- 15 with the adders, the spare cable, our numbers per mile
- 16 for Route 1 as a mile-plus section of line, approximately
- 17 21.3 or 21.4 million dollars per mile with an installed
- 18 spare.
- MR. DEMPSEY: May I comment?
- 20 CHMN STAFFORD: Yes, Mr. Dempsey.
- MR. DEMPSEY: So unless you're going to
- 22 walk through that project, because, I mean, I could do
- 23 that if you want, I believe you're mistaken.
- 24 And I don't know what it physically looks
- 25 like to you in person, but I believe it was a double

- 1 circuit or whatever we have there.
- 2 If it's not, then what Zack Heim said in
- 3 his testimony of 10 to \$15 million per mile was way off,
- 4 and that doesn't make sense either.
- 5 So I think you're mistaken. I can look at
- 6 it again. I have no problem doing that. But --
- 7 MR. JOCHAM: I'm not disputing that it's a
- 8 double circuit line. I -- I agree with you it is.
- 9 MR. DEMPSEY: Okay.
- 10 MR. JOCHAM: But what you have represented
- 11 here is correct. It is a double circuit line.
- MR. DEMPSEY: Okay.
- 13 MR. JOCHAM: My statement is that double
- 14 circuit line is using one cable per phase. We are using
- 15 two cables per phase. Therefore, the cable quantity is
- 16 approximately the same or it is the same.
- 17 MR. DEMPSEY: And the Intel project there
- 18 was a two-cables-per-phase project; right?
- MR. JOCHAM: Yes. But I --
- MR. DEMPSEY: Okay.
- 21 MR. JOCHAM: Again, the numbers -- I can't
- 22 validate those numbers. I have -- I have not been -- I
- 23 have -- I am not privy to those numbers.
- 24 MEMBER GOLD: Mr. Chairman.
- 25 CHMN STAFFORD: Yes, Member Gold.

- 1 MEMBER GOLD: I don't know who to address
- 2 this to. It's either Mr. Jocham or Mr. Dempsey.
- 3 Can you explain to us laymen the difference
- 4 with circuits, cables per line, you know, in simple
- 5 terms?
- 6 MR. JOCHAM: Sure.
- 7 MEMBER GOLD: In apples-to-apples just
- 8 stick to the same what are we doing.
- 9 MR. JOCHAM: Yeah. Absolutely.
- 10 So a circuit is three phases of AC current,
- 11 so an A, a B, and a C phase.
- 12 So typical overhead lines you see three
- 13 conductors and a shield wire, right?
- 14 So the Price Road Corridor project or PRC
- 15 as SRP calls it is a double circuit line that runs from
- 16 Knox to Henshaw.
- 17 MEMBER GOLD: How many wires?
- 18 MR. JOCHAM: So that totals out to six
- 19 conductors total.
- 20 MEMBER GOLD: Okay.
- MR. JOCHAM: But they are separate
- 22 circuits.
- 23 MEMBER GOLD: Okay. What does that mean?
- MR. JOCHAM: So --
- 25 MEMBER GOLD: A circuit you said is three

- 1 lines?
- 2 MR. JOCHAM: Is three phases.
- 3 MEMBER GOLD: Are they three lines?
- 4 MR. JOCHAM: So in this situation, yes.
- 5 But a phase can have multiple conductors
- 6 per phase, which is what we're doing due to ampacity
- 7 reasons.
- 8 So to get the amount of current to flow
- 9 down the line that we need, we're running multiple
- 10 conductors in parallel to get the amount of power to flow
- 11 down.
- 12 MEMBER GOLD: Okay. So within the cable
- 13 you have two lines?
- 14 MR. JOCHAM: So we -- electrically what
- 15 happens is at the riser structure you will have a
- 16 connection to two terminations, and those cables will run
- 17 in parallel, not -- not twice the size, but in parallel
- 18 next to each other.
- 19 Power flows path of least resistance. So
- 20 it generally flows equal between the two conductors. And
- 21 then on the other side as it comes back up it will
- 22 reconnect aboveground.
- 23 MEMBER GOLD: All the cables that we saw
- 24 earlier in this presentation had one line in the middle
- 25 of the underground cable.

- 1 Are you saying that there are cables that
- 2 have two lines in them, or are you going to put two
- 3 cables side by side?
- 4 MR. JOCHAM: Can you bring up TEP-17,
- 5 please? And page 23 of TEP-17. Oh, sorry, 24 of the
- 6 PDF. Thank you. This works. Yep. Perfect. So what
- 7 I'm -- right is red; right?
- 8 Okay. So you have three cables, which are
- 9 let's say A, B, and C. And then you have another three
- 10 cables, which are A, B, and C. We're asking for two
- 11 cables per phase to meet the ampacity requirements of
- 12 this project.
- 13 And so this cable as A and this cable as A
- 14 are the same. They run in parallel next to each other.
- 15 And the same thing with B and B and C and C.
- 16 And then this would be an installed spare
- 17 also two cables per phase. So if we ever needed -- if
- 18 there was ever a reliability or a fault on the line, you
- 19 could switch to those grayed out positions and utilize
- 20 that in either -- for any position, A, B or C, once it's
- 21 energized.
- 22 MEMBER GOLD: So if I were looking at this
- 23 at an overhead transmission line, there would be six
- 24 wires plus a spare on each side?
- MR. JOCHAM: On the overhead we wouldn't

- 1 need the spare, but there would be six cables on the
- 2 structure.
- 3 MEMBER GOLD: Gotcha.
- 4 MR. JOCHAM: But they --
- 5 MEMBER GOLD: Gotcha.
- 6 MR. JOCHAM: -- on an overhead transmission
- 7 line they're much closer together. So we would basically
- 8 combine them on the same insulator, and they would be
- 9 inches apart from each other.
- 10 MEMBER GOLD: Gotcha.
- 11 MR. JOCHAM: So very common on higher
- 12 voltages. If you see a 345 line -- a good example is
- 13 TEP's 345 lines I think have three cables per phase -- or
- 14 just two, sorry, just two cables per phase. 500 lines
- 15 typically have three to four cables per phase.
- 16 MEMBER GOLD: Okay. So looking at this, we
- 17 have three lines, three wires for the three different
- 18 phases. Plus a spare because it's underground, and if it
- 19 was on a transmission pole, you would just have the three
- 20 lines for the three phases?
- MR. JOCHAM: Correct.
- 22 MEMBER GOLD: And when they said a double
- 23 circuit, they mean the same three phases but on six lines
- 24 with two spares underground?
- MR. JOCHAM: Correct. Because the circuits

- 1 don't go to the same transformer.
- 2 MEMBER GOLD: Gotcha. Okay. I understand
- 3 now. Thank you.
- 4 CHMN STAFFORD: Did you have more
- 5 questions, Member Richins?
- 6 MEMBER RICHINS: No. I think we're making
- 7 some good progress seeing, like, projects that actually
- 8 were, you know, paid for.
- 9 So I'm feeling a lot more comfortable with
- 10 the estimates. Thank you.
- 11 CHMN STAFFORD: All right.
- 12 MEMBER LITTLE: Mr. Chairman.
- 13 CHMN STAFFORD: Yes, Member Little.
- 14 MEMBER LITTLE: It could be that we're
- 15 headed -- or people that are sitting in the room there
- 16 are headed in this direction, but I think that a more
- 17 meaningful ratio comparison would be to use the numbers
- 18 that are given in TEP-31 for the total cost of the
- 19 circuits under the three different scenarios: Overhead,
- 20 underground, assuming that you go underground in the
- 21 Gateway Corridors, and the third scenario is the total --
- 22 is the undergrounding Gateway Corridor and University
- 23 Area Plan.
- 24 Those ratios I believe are much more
- 25 meaningful than the cost of undergrounding a mile of --

- of transmission for our purposes here today.
- 2 CHMN STAFFORD: Right.
- 3 And I think 31 doesn't have ratios. It
- 4 just has total costs for the --
- 5 MEMBER LITTLE: I know.
- 6 CHMN STAFFORD: -- circuits or line.
- 7 MEMBER LITTLE: I can get you those ratios
- 8 if you want them.
- 9 CHMN STAFFORD: Yeah. I didn't do the
- 10 math, but, yeah.
- 11 Okay. So is that what you want?
- 12 Do you want to give us those ratios so we
- 13 have a --
- 14 MEMBER LITTLE: Well, I would be glad to.
- 15 And assuming I did my math right, for A,
- 16 total cost as proposed for overhead to total cost
- 17 underground in gateway is 1 to 1. The same for B going
- 18 down the column. And the same for C.
- 19 For D, the ratio of total cost, assuming
- 20 you underground in the Gateway Corridor, compared to the
- 21 total cost of overhead is 2.44 times.
- 22 MS. GRABEL: So, Mr. Chairman, Member
- 23 Little, if I may interject momentarily.
- 24 MEMBER LITTLE: Yes.
- MS. GRABEL: So the total cost of the

- 1 project is not undergrounding the entire project. It's
- 2 only undergrounding the portion of the line that runs
- 3 through the Gateway Corridor and the University Area
- 4 Plan.
- 5 And so, for example, if you look at our
- 6 preferred route, the delta -- the delta between
- 7 \$9.5 million constructed belowground -- I mean,
- 8 aboveground versus \$33.2 million belowground is due to
- 9 1.19 miles of underground installation.
- 10 MEMBER LITTLE: I'm aware of that.
- MS. GRABEL: Okay.
- 12 MEMBER LITTLE: And that's why I believe
- 13 that this is a much more reasonable comparison.
- 14 If you go to the next column where we're
- 15 comparing the total cost to underground in both the
- 16 Gateway Corridors and the University Area Plan areas
- 17 compared to the total cost of overhead, it is 2.6 times.
- For B, it's 3.5 times.
- 19 For C it's 4.5 times.
- 20 And for D, it's 3.1 times.
- 21 Going down to the numbered routes. And now
- 22 I was looking at the total cost for undergrounding in
- 23 both the Gateway and the University Area Plan. It is 4.5
- 24 times as much as overhead.
- For 2, it's 4.1 times as much.

- For 3, it's 4.3 times as much.

 For 4, it's 4.1 times as much.
- For 5, it's 4.6 times as much.
- And for 6, it's 3.1 times as much.
- 5 And I didn't do the other ones yet.
- 6 So it kind of gives you a feel for we're
- 7 not talking about 14 times as much to construct Route A,
- 8 for example. It's because as Meghan explained, it is --
- 9 only part of it is undergrounded.
- 10 CHMN STAFFORD: Right. And the other
- 11 factors that the total cost as proposed includes the
- 12 undergrounding of the distribution lines that are
- 13 present.
- 14 MEMBER LITTLE: Right. And I believe that
- 15 from what I understand these are total estimated costs --
- 16 CHMN STAFFORD: Exactly.
- 17 MEMBER LITTLE: -- under the three
- 18 different scenarios of constructing each route.
- 19 CHMN STAFFORD: Right.
- 20 And I believe in the line siting statutes
- 21 that's the most appropriate basis of comparison.
- 22 MEMBER RICHINS: Mr. Chairman.
- 23 MEMBER LITTLE: Yes.
- 24 MEMBER RICHINS: I have a question --
- 25 CHMN STAFFORD: Certainly.

- 1 MEMBER RICHINS: -- for Mr. Lusk.
- 2 Can you confirm that there are portions of
- 3 this proposal that you will not be requiring to be
- 4 undergrounded nor require a variance to keep overhead?
- 5 Sorry. You have somebody. Yeah.
- 6 I'm going to redo that question. Sorry.
- 7 MR. LUSK: That's okay. Thank you.
- 8 MEMBER RICHINS: They were distracting me
- 9 too.
- 10 MR. LUSK: Sorry, Member Richins.
- 11 MEMBER RICHINS: Sure.
- MR. LUSK: Go ahead.
- 13 MEMBER RICHINS: I just wanted you to
- 14 confirm that -- and pick any route, so I think it was the
- 15 southernmost. Hold on -- I don't know where the actual
- 16 lines that we draw between is it a speedway?
- 17 MR. LUSK: For the Gateway Corridor?
- 18 MEMBER RICHINS: Yeah, the Gateway Corridor
- 19 and the --
- 20 MR. LUSK: Sure. So the Gateway Corridor
- 21 includes there's a crossing at Oracle, at Broadway, and
- 22 then the Gateway Corridor is Campbell.
- 23 MEMBER RICHINS: So south of there will you
- 24 be requiring the applicant to underground power lines, or
- 25 are they okay doing overhead?

- 1 MR. LUSK: South of?
- 2 MEMBER RICHINS: The beginning of the
- 3 Gateway Corridor.
- 4 MR. LUSK: So the beginning of the Gateway
- 5 Corridor on Campbell is down right around where the -- if
- 6 you see where the railroad lines are.
- 7 CHMN STAFFORD: There we go.
- 8 MR. LUSK: Yeah, there you go.
- 9 CHMN STAFFORD: We've got the map up now.
- 10 MR. LUSK: Sorry. It's a little bit
- 11 farther.
- 12 So the Arroyo Chico is the beginning of the
- 13 Gateway Corridor on Campbell. It's also on Kino. But
- 14 the route doesn't go that way.
- 15 MEMBER RICHINS: So are there -- are any of
- 16 the routes south of Broadway required to be underground?
- 17 MR. LUSK: South of Broadway, so only that
- 18 smallish portion of Route 1. And I guess I don't think 2
- 19 hits that. Between the Broadway and Arroyo Chico. And
- 20 then the other routes just cross over at Broadway except
- 21 for Route 2, which runs along Broadway for a portion.
- 22 MEMBER RICHINS: Okay. Very good. I had
- 23 one more question. Oh, I remember. Sorry.
- 24 The estimates for undergrounding, then, are
- 25 for everything north of Broadway, right?

- 1 MR. JOCHAM: So the cost estimate for
- 2 Route 1 starts at basically 14th and Kino Parkway. So
- 3 right as we enter this corridor.
- 4 MEMBER RICHINS: Okay.
- 5 MR. JOCHAM: So it does include the
- 6 underground in that section.
- 7 MEMBER RICHINS: Okay. And then any of the
- 8 other routes it's north of Broadway?
- 9 MR. JOCHAM: Correct.
- 10 MEMBER RICHINS: Okay. With the -- yeah,
- 11 except for, yeah, 1. Okay. Thanks.
- 12 MR. JOCHAM: Yeah. 2 includes the
- 13 underground along Broadway.
- 14 CHMN STAFFORD: All right. Are there any
- 15 other questions from members?
- 16 (No response.)
- 17 CHMN STAFFORD: I believe we have one more
- 18 factual issue to resolve. I believe that is the
- 19 applicant wanted --
- 20 MEMBER LITTLE: Mr. Chairman.
- 21 CHMN STAFFORD: Yes, Member Little.
- 22 MEMBER LITTLE: I'm sorry. I do have some
- 23 general questions that don't have specifically to do with
- 24 routes.
- 25 CHMN STAFFORD: Be my guest.

- 1 MEMBER LITTLE: Okay.
- 2 CHMN STAFFORD: Because once we finish the
- 3 questions here, we're going to move on to closing
- 4 arguments from the parties. And so --
- 5 MS. GRABEL: I also have a little bit more
- 6 testimony I would like to elicit.
- 7 CHMN STAFFORD: Okay. All right. So we
- 8 have a little bit more. We're almost to closing
- 9 arguments.
- 10 So ask your questions, Member Little,
- 11 please.
- 12 MEMBER LITTLE: Okay. We did not talk much
- 13 about the environmental study, but on page 329 of the
- 14 application, there's a letter, I believe, from Arizona
- 15 Game & Fish that says, "Analysis indicates that your
- 16 project is located in the vicinity of an identified
- 17 wildlife habitant connectivity feature, which surprises
- 18 me immensely. I don't know, maybe coyotes.
- 19 But I'm just wondering -- they make some
- 20 recommendations or, I guess, they say that the project
- 21 evaluation program should be consulted for a specific
- 22 project recommendation.
- 23 Has anything been done about that, or is
- 24 it -- I mean, driving through that area, I wouldn't
- 25 consider anything would necessarily need to be done, but

- 1 just curious.
- 2 CHMN STAFFORD: That sounds like a
- 3 Mr. Bryner question.
- 4 And I would venture to guess it has
- 5 something to do with the Arroyo Chico Wash.
- 6 MR. BRYNER: It's fun to break out the
- 7 application once in a while.
- 8 So I -- just to be completely honest, I
- 9 don't remember reading that before. So I know it wasn't
- 10 in our biological evaluation anything about that, so I
- 11 need to research that a little bit.
- 12 I would surmise as did the Chair it's
- 13 Arroyo Chico Wash because it's the only possible wildlife
- 14 connective corridor in the area. But I would like to
- 15 maybe take a look at it on our break.
- 16 CHMN STAFFORD: Okay.
- 17 MEMBER LITTLE: Thank you.
- 18 CHMN STAFFORD: All right. Then --
- 19 MEMBER LITTLE: I don't consider it's
- 20 particularly important, but it was there, so --
- 21 CHMN STAFFORD: Yes. Thank you. Thank you
- 22 for bringing our attention to that, Member Little.
- 23 MEMBER LITTLE: And I'm wondering whether
- 24 TEP has requested and been granted exceptions and/or
- 25 variances to the undergrounding requirement on -- I know

- 1 we talked about that one over in the -- what was it
- 2 called? -- the -- now I can't remember what it's
- 3 called -- over on the other side of Interstate 10.
- 4 MR. LUSK: That was the Silverbell --
- 5 MEMBER LITTLE: Thank you. Yes.
- 6 MR. LUSK: -- scenic corridor zone.
- 7 MEMBER LITTLE: Now I see it.
- And I'm just wondering whether there are
- 9 any others, and, if so, what the experience has been in
- 10 timing, you know, the resolution of those requests?
- 11 MS. GRABEL: Mr. Bryner, first of all,
- 12 perhaps clarify that TEP was not the applicant for the
- 13 Silverbell variance.
- 14 MR. BRYNER: That's correct. Yeah. For
- 15 Silverbell, that was -- again, that was the City, not
- 16 TEP, seeking that variance.
- 17 There hadn't been the special exception
- 18 process until recently that was developed, so the
- 19 variance would have been the only relief that would have
- 20 been possible. And to our knowledge, we've never sought
- 21 relief, nor have we ever been placed in a situation where
- 22 we've been denied the opportunity to build our
- 23 infrastructure either within a Gateway Corridor or within
- 24 the University Area Plan.
- MS. GRABEL: Until this Kino to DMP

- 1 project, correct, Mr. Bryner?
- 2 MR. BRYNER: Correct.
- 3 MS. GRABEL: Thank you.
- 4 MEMBER LITTLE: Have there been areas
- 5 where -- I mean, 46kV I know is subtransmission, but have
- 6 there been areas where TEP has been allowed to build the
- 7 lines overhead in the areas that -- areas similar to
- 8 those that are now being considered?
- 9 MR. BRYNER: So just to clarify, Member
- 10 Little, are you talking about any areas that are
- 11 designated as Gateway Corridors --
- 12 MEMBER LITTLE: Yes. Yes.
- 13 MR. BRYNER: -- and/or specific plans?
- 14 MEMBER LITTLE: Yes. Yes. Yep. Gateway
- 15 Corridors.
- 16 MR. BRYNER: So within Gateway Corridors
- 17 there's many instances we've been allowed to build
- 18 distribution 46kV and 138kV lines within those corridors.
- 19 MS. GRABEL: And, Mr. Bryner, specifically
- 20 the Irvington to Kino project line, which is first phase
- 21 of this process, was allowed to be built aboveground
- 22 without a special exception or a variance; correct?
- 23 MR. BRYNER: That's correct for about a
- 24 half a mile stretch on Benson Highway.
- 25 And the most recent example would have been

- 1 our Irvington to -- our Irvington to Patriot project that
- 2 was constructed just last summer within the Kolb Gateway
- 3 Corridor.
- 4 MR. LUSK: Member Little.
- 5 MEMBER LITTLE: Has there been any
- 6 discussion about what the differences is with this
- 7 project?
- 8 Why all of a sudden the game has changed?
- 9 MR. BRYNER: Is that a question for me?
- 10 MR. LUSK: Member Little, maybe I can
- 11 follow up a little bit to give some clarity.
- 12 Mr. Bryner, TEP participated in the
- 13 variance process for Silverbell; isn't that correct?
- 14 MR. BRYNER: To my knowledge, yes.
- 15 MR. LUSK: And they presented for the board
- 16 of adjustment?
- 17 MR. BRYNER: That I don't know. But I'll
- 18 take your word for if you're saying that.
- 19 MR. LUSK: Other than saying I was there,
- 20 you wouldn't disagree with me, I assume?
- MR. BRYNER: No.
- MR. LUSK: Okay. And you were provided
- 23 that variance as we heard in testimony.
- 24 The distribution poles that you're
- 25 describing that have been built in the Gateway Corridor

- 1 Zone, do you know if there were lines there previously
- 2 before the Gateway Corridor Zone?
- 3 MR. BRYNER: I have the records. In some
- 4 cases, yes, they're replacements. In other cases they're
- 5 new.
- 6 MR. LUSK: And do you have the approvals
- 7 for those new ones?
- 8 Zoning approvals I mean.
- 9 MR. BRYNER: I don't have them before me.
- 10 I'd have to dig in our records.
- 11 MR. LUSK: Okay. So that question came up
- 12 yesterday from Mr. Castro, and I tried to research it for
- 13 the Committee, and I couldn't find any.
- 14 Would that surprise you?
- MR. BRYNER: That there were no approvals?
- MR. LUSK: Zoning approvals.
- 17 MR. BRYNER: Zoning approvals?
- 18 So I know our process is we submit a
- 19 right-of-way use permit, and then we get our approval
- 20 that way.
- 21 MR. LUSK: And the right-of-way user permit
- 22 is submitted to the department of transportation and
- 23 mobility?
- MR. BRYNER: That's correct.
- MR. LUSK: So it's not a zoning approval

- 1 issued by the planning and development services
- 2 department?
- 3 MR. BRYNER: Correct.
- 4 MR. LUSK: Thank you.
- 5 MEMBER LITTLE: So I'm still confused about
- 6 what the difference is.
- 7 MR. LUSK: So what it appears to be from
- 8 Mr. Bryner's testimony is that they received right-of-way
- 9 permits, which are different than zoning approvals.
- 10 So a zoning approval is provided by
- 11 Mr. Castro's department stating that they're zoned for
- 12 that particular area and use.
- 13 What may be happening and has happened in
- 14 the past is that when TEP because of their franchise is
- 15 able to build within the right-of-way as is their right
- 16 under that franchise, they may not have participated in a
- 17 zoning approval for those activities and may have built
- 18 it without knowing that the Gateway Corridor Zone was
- 19 prohibitive of that activity.
- 20 MS. GRABEL: So, Mr. Bryner, will you
- 21 address the Irvington to Kino project in which the
- 22 City -- was the City given notice of the 138kV
- 23 transmission line being built along the Gateway Corridor.
- MR. BRYNER: Sure. In this we had a
- 25 similar outreach and stakeholder engagement process that

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- 1 we undertook as part of that project or similar to the
- 2 outreach we did on this project for that project. And so
- 3 the City did participate in discussions on multiple
- 4 occasions on that project.
- 5 MS. GRABEL: Thank you.
- 6 MR. LUSK: I'm sorry, Member Little. I
- 7 think you had a follow-up, Member Little.
- 8 MEMBER LITTLE: Yes. I'm just -- I'm very
- 9 perplexed as to why the game is played one way one time
- 10 and another way another time. I don't mean to belittle
- 11 the process by calling it a game.
- 12 MR. LUSK: That's understandable.
- 13 Member Little, if I can further clarify it.
- 14 There has been -- and this is -- there's
- 15 nothing not public about this particular issue, but there
- 16 have been some miscommunications and things have been
- 17 missed. And the City is willing to take the
- 18 responsibility for that and has in the litigation between
- 19 the two parties.
- 20 But that's not to say that we don't want to
- 21 enforce our code. And that's the reason why in the last
- 22 few years we've had these discussions with TEP is to
- 23 begin to enforce that code appropriately.
- MS. GRABEL: Mr. Bryner, if I may follow up
- 25 with that.

- 1 Was there any organized neighborhood
- 2 opposition to the construction of the 138kV line from
- 3 Irvington to Kino?
- 4 MR. BRYNER: I believe as Mr. Lindsey
- 5 testified there was not.
- 6 MS. GRABEL: Do you happen to know the
- 7 general -- whether or not the area from Irvington to Kino
- 8 is designated as a low-income community?
- 9 MR. BRYNER: It is.
- 10 MS. GRABEL: Thank you.
- 11 CHMN STAFFORD: All right. Any other
- 12 questions from members?
- Ms. Grabel, did you have another exhibit or
- 14 something you wanted to --
- 15 MS. GRABEL: No. I just wanted to have a
- 16 little bit of a dialogue with Mr. Lindsey before the
- 17 Committee listens to closing arguments and enters into
- 18 its deliberations.
- 19 MR. DEMPSEY: Am I allowed to talk about
- 20 after she's done I guess retestify just to clean up a few
- 21 things?
- 22 CHMN STAFFORD: There's some -- there's
- 23 some misconceptions you need to clarify? Is that what
- 24 you're saying?
- MR. DEMPSEY: Yeah.

- 1 CHMN STAFFORD: Okay. Certainly. Let's --
- 2 MS. GRABEL: We can do that first.
- 3 CHMN STAFFORD: Do you want to do that?
- 4 MS. GRABEL: If it's relative to the
- construction stuff. 5
- 6 MR. DEMPSEY: Is that not what you're going
- to finish talking about? 7
- 8 MS. GRABEL: Not really, no.
- 9 MR. DEMPSEY: How about you finish and then
- 10 I'll go?
- 11 CHMN STAFFORD: Well, we're talking about
- 12 construction costs right now, so if it's -- if it's about
- the construction costs, it's probably better for you to 13
- 14 do it now.
- 15 MR. DEMPSEY: All right. Sure. Yeah,
- 16 that's fine.
- 17 Okay. So let's see here.
- 18 Can you guys bring up my slides from
- 19 yesterday? I'm sorry I didn't prepare you.
- 20 MS. GRABEL: So I guess I just want to
- 21 clarify, Mr. Dempsey. You're just going to continue to
- respond to the information that Member Richins was asking 22
- 23 about?
- 24 MR. DEMPSEY: Yeah. Some of the statements
- 25 that were made. Yes.
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- 1 MS. GRABEL: Okay. As long as it doesn't
- 2 deviate from the discussion today.
- MR. DEMPSEY: I can't imagine why it would.
- 4 CHMN STAFFORD: All right. So you're
- 5 pulling up your -- this is your exhibit number -- can you
- 6 identify what you're putting on the screen, please,
- 7 Mr. Dempsey.
- 8 MR. DEMPSEY: Have we -- did you put that
- 9 up just now?
- 10 MS. GRABEL: It's Exhibit 62, UAZ-62.
- 11 CHMN STAFFORD: Is that what you're looking
- 12 for, your 62 that's in your slide show?
- 13 MR. DEMPSEY: I can work with this. I can
- 14 work with this Slide 37 from Exhibit 62.
- 15 CHMN STAFFORD: Okay. Perfect.
- 16 MR. DEMPSEY: So I certainly did not know
- 17 that you guys had screwed up your numbers. I wasn't
- 18 intentionally doing that.
- 19 I just want to point out that even if you
- 20 assume \$2.9 million instead of \$4.1 million or you change
- 21 this a little bit or that little bit, it doesn't change
- 22 my overall point, which is that you're talking about a
- 23 little over \$20 million difference assuming the low end
- 24 which is more in line with recent experience in Arizona,
- 25 and I wasn't trying to give you here's exactly what it's

- 1 going to cost.
- I'm just trying to give you guys, you know,
- 3 a ballpark based on looking at comparables. And honestly
- 4 looking at comparables, the numbers, these numbers are
- 5 high. I would expect it to be closer to \$15 million.
- I would not expect it to cost -- I mean, it
- 7 should not cost more than the Intel project cost. It
- 8 just shouldn't. I know there's been some inflation. I
- 9 can show some things related to that real quickly.
- 10 Could we go to Slide 64 of my presentation?
- 11 Okay. So this is the copper spot price over the last
- 12 20 years. And I don't have a pointer. But as you can
- 13 see over the year 2021 in the year 2021 the price of
- 14 copper shot up.
- 15 The Intel HIP project went before the Line
- 16 Siting Committee in late 2021. I believe it was
- 17 November. So you would expect them to largely have these
- 18 price increases baked into their numbers. Maybe not
- 19 completely, but they should be, like, oh, my gosh, you
- 20 know, we -- the price of copper just went up.
- 21 So I would not say that inflation is not
- 22 included in those numbers. And then as you can see, it's
- 23 basically flat. It's actually been coming down. I
- 24 haven't looked at it in the last week because we've been
- 25 busy, but it's relatively flat since 2021.

- 1 So and surface producer price index, we
- 2 were looking at inflation numbers. Inflation -- again,
- 3 PI inflation has only been 2 and a half percent since
- 4 then. So there's going to be some inflation, but it's
- 5 not -- it certainly shouldn't be 200 percent inflation or
- 6 300 percent inflation.
- Give me just a second, please. And, I
- 8 mean, I could walk you guys through how I calculated my
- 9 numbers if you want me to. I just checked them again. I
- 10 don't see any errors in how I came up with my
- 11 calculations. I don't know if it's worth our time to go
- 12 through them all, but that's really up to you guys.
- 13 CHMN STAFFORD: Well, I don't know that it
- 14 would require additional testimony. I think it's
- 15 something that you could probably address in your
- 16 closing.
- 17 MR. DEMPSEY: Okay. Sure.
- 18 MR. LUSK: Mr. Chair, just briefly can we
- 19 go back to the previous slide? I just had a quick --
- 20 CHMN STAFFORD: Mr. Lusk.
- 21 MR. LUSK: And Member Richins and I
- 22 discussed this a little bit yesterday, and I just wanted
- 23 to jump in so I don't need to take too much time if
- 24 that's possible.
- 25 So the numbers from revision -- and this is

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- 1 probably for Mr. Jocham, the revision 0 -- 1, you took
- 2 out what you said was the jack and bore?
- 3 MR. JOCHAM: Trenchless installation, yes.
- 4 MR. LUSK: Through the intersections?
- 5 MR. JOCHAM: Yes.
- 6 MR. LUSK: So am I right in saying that's
- 7 \$850,000 of the amount?
- 8 MR. JOCHAM: Yeah. That's multiple jack
- 9 and bores, but, yes.
- 10 MR. LUSK: Was it the multiple jack --
- 11 well, I guess it's just that 1.5 mile area?
- 12 MR. JOCHAM: Correct.
- 13 MR. LUSK: Do you know about how many
- 14 intersections that was?
- 15 MR. JOCHAM: I think we assumed three, but
- 16 I would have to go back to the report and validate it.
- 17 MR. LUSK: Okay. So assuming it is three,
- 18 it would -- it's a fair number to say \$850,000 for three
- 19 intersections to jack and bore if you had to underground
- 20 them?
- MR. JOCHAM: I would have to validate, but
- 22 the math makes sense to me.
- 23 MR. LUSK: It's a reasonable assumption?
- MR. JOCHAM: Yeah, if it is three, correct.
- MR. LUSK: Okay. Thank you. That's all I

- 1 have.
- 2 MR. DEMPSEY: I just have one more comment
- 3 on this slide. And it was kind of presented as I was
- 4 walking through the numbers as though they compared to
- 5 today. That's not what I was doing. I was just showing
- 6 you what the numbers were in those estimates. It wasn't
- 7 suggesting that it's \$8 million today. Just clearing
- 8 that up.
- 9 That's it. Thank you.
- 10 CHMN STAFFORD: Thank you.
- 11 MEMBER GOLD: Mr. Chairman.
- 12 CHMN STAFFORD: Yes, Member Gold.
- 13 MEMBER GOLD: So did I hear you to say the
- 14 term jack and bore?
- 15 I'm guessing you use that to go under
- 16 roadways?
- 17 MR. JOCHAM: Mr. Gold, that'll be a term
- 18 that I can describe. Yeah. So basically what a jack and
- 19 bore is is you excavate basically large trenches on
- 20 either side, and you put specialized equipment down into
- 21 those holes.
- They're typically probably 30 feet wide by
- 23 at least a sand pit is 30 feet wide by 50 feet long and
- 24 probably about 20 feet deep. And you basically have a
- 25 pipe rammer that rams a large diameter pipe through the

- 1 ground. And you excavate the dirt out of that. And then
- 2 you have special spacers that you then run your conduit
- 3 through.
- 4 And so basically the intent is that it
- 5 doesn't disturb anything above it. So jack and bores are
- 6 used for shorter distances. The max length of a jack and
- 7 bore especially at that diameter is probably somewhere in
- 8 the 6- to 800-foot range, which is well within the
- 9 parameters of the intersections that we're trying to
- 10 cross and basically allows you not to disturb anything
- 11 above it.
- 12 So it wouldn't disrupt the actual
- 13 intersection itself. It would just affect maybe a lane
- 14 or two on either side.
- 15 So basically if we were to cross Speedway
- 16 as an example along Campbell, we could set it up in such
- 17 a manner not to affect Speedway significantly, but it
- 18 would still have impacts on Campbell.
- 19 MEMBER GOLD: Okay. So do you need a --
- 20 are you allowed to do a jack and bore in these areas, or
- 21 do you need the permission, or is that in your contract
- 22 with the City?
- I mean, what's legally required to do a
- 24 jack and bore?
- MR. JOCHAM: Yeah, I don't know about the

- 1 requirement aspect.
- In our most current cost analysis, we
- 3 assumed a -- we assumed the jack and bores in the adder
- 4 cost just to be transparent at low cost or base cost. So
- 5 those jack and bores are trenchless installations and are
- 6 part of the adder side of that final report.
- 7 But you would use them to minimize the
- 8 impact of major thoroughfares through the city. And so I
- 9 can -- from experience and from our company's experience
- 10 when we hit major intersections, it's typically a
- 11 requirement by the City because they -- and I'm not
- 12 speaking for Tucson. I'm saying this is in a generality.
- 13 It's typically required by a city because of the amount
- 14 of disturbance that trenching through the intersection
- 15 would create.
- 16 MEMBER GOLD: That part I understand.
- 17 MR. JOCHAM: Yeah.
- 18 MEMBER GOLD: It sounds like a great way to
- 19 get from one side of the road to the other if you're
- 20 moving cable.
- 21 My question is do you need any special
- 22 permitting?
- Is that covered by your agreement with the
- 24 City, the franchise agreement?
- 25 What do you need to say, okay, we can do

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- 1 the jack and bore against this corridor?
- 2 Do you need any special permission?
- 3 MR. JOCHAM: I'll maybe refer to TEP for
- 4 that one or may be the City can answer that question.
- 5 MR. LUSK: Member Gold, if it would help, I
- 6 can -- I think I can answer that generally.
- 7 MEMBER GOLD: Please.
- 8 MR. LUSK: Which is, yeah, that I think the
- 9 right-of-way use permit that Mr. Bryner was talking about
- 10 earlier, that would cover that kind of activity.
- 11 MEMBER GOLD: So pretty much that's not
- 12 going to be an issue, a constraint on any project that
- 13 they take?
- 14 MR. LUSK: No. As long as they follow the
- 15 procedure and the code, yes.
- 16 MEMBER GOLD: So it's the right what did
- 17 you call it?
- 18 MR. LUSK: Right-of-way use permit.
- 19 MEMBER GOLD: Right-of-way use permit.
- 20 Okay. So I'm looking at some of these
- 21 options. And at the most they have three times when
- 22 they'll have to use this to cross major corridors.
- What was that price you gave again for each
- 24 jack and bore?
- 25 MR. JOCHAM: So I'll refer you to TEP-17

- 1 for that. Our price for the jack and bore is very
- 2 clearly stated in the appendices along with all of our
- 3 other pricing. It is very transparent.
- 4 MEMBER GOLD: How much is it for a jack and
- 5 bore?
- 6 MR. JOCHAM: So it's broken out in
- 7 sections, but the actual jack and bore effort --
- 8 MEMBER GOLD: Per intersection. Just give
- 9 me a price per intersection, please.
- 10 MR. JOCHAM: Give me one second.
- 11 MR. LUSK: Is it page nine through 12? Is
- 12 that right, Mr. Jocham?
- 13 MR. JOCHAM: Sorry. So the -- our
- 14 spreadsheet, which provides prices in the PDF, is on A-4,
- 15 which clearly breaks it out.
- 16 But, yeah, the summary of the jack and bore
- 17 adder would be in the Table 5, Table 6, and Table 7
- 18 summary.
- 19 So I believe Route 3 in our report or
- 20 Table 7 is a single jack and bore. And that cost base
- 21 for a single jack and bore is \$934,000. So it's about a
- 22 million dollars to go across the intersection.
- 23 MEMBER GOLD: So one million dollars per --
- 24 CHMN STAFFORD: One intersection?
- MR. JOCHAM: Correct.

- 1 CHMN STAFFORD: Okay.
- 2 MEMBER GOLD: One million per intersection.
- 3 And it's covered under the right-of-way use
- 4 permits, so you don't really have any difficulties
- 5 getting that permission to do?
- 6 MR. BRYNER: No, we don't.
- 7 MEMBER GOLD: Thank you.
- And the most I saw was three.
- 9 MR. JOCHAM: So there -- on Route 1 there
- 10 would be three jack and bores.
- 11 MEMBER GOLD: All right. You don't have to
- 12 go further. Just clarifying. Thank you.
- 13 MEMBER LITTLE: Mr. Chairman.
- 14 CHMN STAFFORD: Yes, Member Little.
- 15 MEMBER LITTLE: I'm just curious on shorter
- 16 sections of undergrounding transmission lines, for
- 17 example, through a neighborhood, for example, down Vine
- 18 is it ever considered to just put in the vaults and jack
- 19 and bore between them to decrease the amount of
- 20 disruption?
- 21 MR. JOCHAM: From a cost perspective, I
- 22 guess we've never been asked to do that before because
- 23 jack and bores are typically significantly more expensive
- 24 than an open trench.
- 25 But at that point, I would probably play to

- 1 a different trenchless installation, which would be
- 2 called an HDD, or a horizontal directional drill, which
- 3 you could go longer distances, which, again, much more
- 4 expensive, but it provides you that option.
- 5 MEMBER LITTLE: All right. Thank you.
- Just my engineering curiosity.
- 7 CHMN STAFFORD: All right. Well, we're
- 8 coming up on the 90-minute mark.
- 9 Are we -- is it a good time to take a
- 10 break?
- 11 Can we -- I guess let me rephrase.
- 12 How far away from -- how far away are we
- 13 from have having closing arguments?
- 14 I remember, Ms. Grabel, you had something
- 15 else you needed to add?
- 16 MS. GRABEL: Probably five or ten minutes
- 17 with Mr. Lindsey.
- 18 And then we do have the information on the
- 19 FERC Form 1.
- 20 CHMN STAFFORD: Okay.
- 21 MS. GRABEL: I think she wants a break.
- MR. LUSK: I heard "please," Chairman.
- 23 CHMN STAFFORD: Okay. Yes. I wasn't sure
- 24 if she said "please" or "proceed." So I was -- that's
- 25 why I had the look of confusion on my face.

- So, yes, let's take a brief recess,
- 2 approximately 10 to 15 minutes and come back. And we'll
- 3 wrap that up. And then we can get to closings. With
- 4 that we stand in recess.
- 5 (Recess from 2:58 p.m. to 3:25 p.m.)
- 6 CHMN STAFFORD: Let's go back on the
- 7 record.
- 8 Ms. Grabel, Ms. Hill, I believe you had
- 9 some final testimony to get on the record?
- 10 MS. GRABEL: Yes, thank you, Mr. Chairman.
- 11 I think first Ms. Hill will give the information
- 12 regarding the FERC Form 1.
- 13 MS. HILL: Okay. Thank you. So the FERC
- 14 Form 1 is a very long document, but there are -- they are
- 15 available online. But essentially -- so work under
- 16 construction, I want to preface this, which is probably
- 17 not a surprise to anybody, but work under construction is
- 18 reported in a different area than completed transmission
- 19 lines.
- 20 So work under construction is reported on
- 21 what is currently page 216 of that form.
- 22 But completed projects are reported on
- 23 pages 422 to 423, which is transmission line statistics.
- 24 The cost reported is only the cost on the
- 25 utility's books net of any contributions. We do not

- 1 include or report those third-party contributions on the
- 2 cost of the line.
- 3 The form's instructions specify to use book
- 4 cost. And book cost is the actual cost because they're
- 5 following general accounting principles according to the
- 6 FERC Form 1 instructions.
- 7 Book cost at the actual cost incurred under
- 8 the capital construction process net of any
- 9 contributions.
- 10 And then if you look at page 422 to 423,
- 11 instruction -- depending upon the year of the form, it's
- 12 Instruction 9 or 10 which tells you to do that. And in
- 13 the very beginning of FERC Form 1 in the instructions, it
- 14 tells you which accounting principles you must use in
- 15 reporting.
- 16 So that's the information I can give the
- 17 Committee.
- 18 CHMN STAFFORD: Thank you.
- 19 MR. DEMPSEY: And may I respond?
- 20 CHMN STAFFORD: Yes, Mr. Dempsey.
- MR. DEMPSEY: So I did not use those
- 22 figures, I used figure that are from a section called
- 23 "Transmission Lines Added During the Year." And those
- 24 figures are not, at least surface APS goes, net of
- 25 third-party funds. They are the cost.

- 1 And the way you can verify that is by
- 2 looking at what the business district in Scottsdale was
- 3 charged which I believe was \$3 million and then what's on
- 4 the form which is also \$3 million. So if it was net it
- 5 would only be \$1 million.
- 6 MS. HILL: I believe we're actually talking
- 7 about the same section, it's just different pages
- 8 different years.
- 9 MR. DEMPSEY: You're talking about
- 10 transmission line statistics, that's a different page
- 11 than transmission lines added during the year.
- 12 MS. HILL: I am. If you look at the
- 13 transmission line statistics it says the same thing.
- 14 "Base the plant cost figures called for in columns J to L
- 15 on the book cost at the end of the year."
- 16 So even if you look at the transmission
- 17 line statistics or if you go to the transmission lines
- 18 added, that includes that.
- 19 MR. DEMPSEY: So we can -- I can prove to
- 20 you that what I've done is correct. I just -- let's do
- 21 it, I guess. Is there a way to --
- 22 CHMN STAFFORD: Well, do we have the FERC
- 23 Form 1 in question?
- MS. HILL: So we do not have the entirety
- 25 of it, and the sections that Mr. Dempsey has don't

- 1 necessarily have the precise page numbers on them.
- 2 CHMN STAFFORD: Is it an exhibit?
- 3 MS. HILL: Yes, they are. They're
- 4 exhibits.
- 5 CHMN STAFFORD: Can we please pull that
- 6 exhibit up? Which one is it?
- 7 MR. DEMPSEY: I'm figuring out which one is
- 8 the best one to use. Hold on a sec, please.
- 9 MS. HILL: So I'm looking at UAZ-39, which
- 10 is the 2020 APS FERC Form 1.
- 11 MEMBER HILL: Mr. Chair.
- 12 CHMN STAFFORD: Yes, Member Hill.
- 13 MEMBER HILL: Ms. Hill, is it possible that
- 14 from utility to utility how they calculate a book value
- 15 might be different?
- 16 Is -- I mean, I know you haven't worked for
- 17 a lot of utilities but I am just kind of wondering if
- 18 it's a discrepancy with how they manage their books and
- 19 whether -- whether they're a public utility or a
- 20 regulated utility, do you have -- do you have any
- 21 knowledge of that? And if you don't, I understand. But
- 22 that was my first thought.
- MS. HILL: So the very first thing that I
- 24 can say is that we can only speak from what we
- 25 understand. We are audited on a regular basis as is APS.

- 1 I cannot say why APS may or may not report something. We
- 2 also do not have the figures for each of these projects
- 3 in a definitive way of what contributions were there or
- 4 were not there.
- 5 My statement is simply the same as
- 6 Mr. Dempsey's has been for us, which is a cautionary tale
- 7 about assuming what might be present and what might not.
- 8 MEMBER HILL: So it is possible that you
- 9 guys are both correct? It's just nuances about how a
- 10 utility interprets the instructions in the FERC form?
- 11 MR. DEMPSEY: And may I clarify? The part
- 12 she's referring to does not say book value for the part
- 13 I'm referring to.
- 14 She's referring to a completely different
- 15 section that I didn't use. So I'm not even clear that
- 16 that's -- there is a disagreement. She's using a
- 17 different section. I pulled it from the -- a different
- 18 section that has nothing about book values. And surface
- 19 I can tell looking at Scottsdale, the public records from
- 20 Scottsdale city council and everything else, comparing it
- 21 to the APS FERC Form 1, they're the same number so they
- 22 certainly can't be net.
- MS. HILL: So I'm just going to note, too,
- 24 when you talk about Scottsdale there are a couple of
- 25 things.

- 1 Number one is that there is a public
- 2 utility district, I believe, in the Scottsdale -- that he
- 3 is talking about an undergrounding district unless I'm
- 4 mistaken, and he's talking about a different Scottsdale.
- 5 I couldn't even begin to tell you how that might be
- 6 reported.
- But ideally, all that I am saying -- I
- 8 mean, really and truly and that's why I wanted to drill
- 9 down on this a little more, is that without -- and these
- 10 are exhibits that were added very quickly as many are in
- 11 these types of scenarios. So, but without depositions or
- 12 intensive discovery I would suggest that the cautionary
- 13 tale that Mr. Dempsey tells for the numbers that we
- 14 provided be applied here as well.
- 15 CHMN STAFFORD: Member Richins.
- 16 MEMBER RICHINS: Chairman, in an effort to
- 17 kind of maybe settle this out a little bit is I think the
- 18 TEP exhibit -- sorry -- Exhibit 31 gave good, probably
- 19 the best estimate; right? Of what the cost multiplier
- 20 looks like.
- 21 And I think based on what I heard from
- 22 Underground Arizona and from Mr. Jocham was that there's
- 23 a wide variety of costs that could be expected when going
- 24 underground. And it just really depends contextually
- 25 about where you're doing it and what the conditions are.

- 1 So I feel satisfied that we really have
- 2 taken the best guess at numbers for this project. And
- 3 what we've tried to compare in the past has illustrated
- 4 that it's just really a wide variety based on those
- 5 conditions.
- 6 So I'm comfortable moving forward past
- 7 this.
- 8 CHMN STAFFORD: I'd agree with you,
- 9 Mr. Richins.
- 10 So I -- Ms. Grabel, you had some, what
- 11 other additional testimony did you want to provide?
- 12 MS. GRABEL: Thank you, Mr. Chairman.
- 13 We'll be quick. I just -- as the hearing has gone on,
- 14 there have been several times where the back and forth
- 15 between the Committee or the lawyers and the witnesses
- 16 have seemed to assume that TEP will be undergoing
- 17 underground construction of a portion of this line, and
- 18 so I would like to ask Mr. Lindsey.
- 19 Mr. Lindsey, if this Committee declines to
- 20 make the findings of fact we've asked them to make, and
- 21 we go to the City of Tucson and the City of Tucson
- 22 declines to grant us a special exception, whether just
- 23 over the Gateway Corridor or the University Area Plan,
- 24 whatever's applicable, will TEP pay -- will TEP basically
- 25 build this transmission line underground?

- 1 MR. LINDSEY: So as we've been discussing
- 2 and this isn't anything new; right, through our public
- 3 outreach, through the development of this project,
- 4 without funding from some outside source, no, we would
- 5 not be building the project underground.
- And I know we've looked at a lot of numbers
- 7 and we've gotten into the details which has been great
- 8 for me, too, because I wasn't paying attention to that as
- 9 closely as others.
- 10 Those dollars are significant. So
- 11 depending on the routes of this project, those numbers
- 12 add up quickly to underground. But what we're looking at
- 13 isn't just this project. So this is an important
- 14 project, but there's projects on the horizon, there's
- 15 projects that we know we need to build in our Ten-Year
- 16 Plan that's public. There's going to be projects beyond
- 17 those, of course, to support reliability for the TEP
- 18 system on a transmission side of things.
- 19 And so while we're talking this project,
- 20 we're talking big dollars to underground here today, you
- 21 multiply that out, extrapolate it out to what we have in
- 22 front of us, and those numbers get even bigger.
- 23 And so it's not -- while it's important and
- 24 critical to this project, it's also a huge significant
- 25 cost impact to us looking down the road, not just here

- 1 today.
- MS. GRABEL: And Mr. Lindsey, do you recall
- 3 Mr. Bakken's testimony if you didn't even include the
- 4 cost to underground transmission lines, TEP is facing a
- 5 \$3.5 billion construction budget?
- 6 MR. LINDSEY: Yes, I do, Ms. Grabel. And I
- 7 think it's important to note that's over the next five
- 8 years. So that is -- it's kind of our budget or business
- 9 plan cycle is a five-year look.
- I can guarantee you where I sit in the
- 11 world looking at how we support the clean energy
- 12 transition, what we have to do from a transmission and
- 13 generation perspective just to do that, that takes us way
- 14 down the road past five years, and so that three and a
- 15 half billion is the five-year spend we're looking at.
- 16 And so those numbers continue into the
- 17 future as we look to continue to expand our system,
- 18 support our customers' goals, support our company goals,
- 19 and that includes safety and reliability and everything
- 20 we've been talking about.
- MS. GRABEL: And Mr. Lindsey, how many --
- 22 do you know what percentage of TEP's customers are
- 23 low-income customers?
- 24 MR. LINDSEY: So from what we've been
- 25 talking about and what I understand, roughly 20 percent.

- 1 MS. GRABEL: Thank you. So if we don't
- 2 construct this project belowground, what are we going to
- 3 do? Because there are reliability challenges that this
- 4 Committee seems to fully understand.
- 5 MR. LINDSEY: Correct. So that's a concern
- 6 of ours as we've been talking about. And as we talked
- 7 some last week, we're going to be in front of -- in front
- 8 of y'all in a hurry, so as fast as we can move we'll be
- 9 looking at another transmission project to connect Kino.
- 10 That's a big issue for us. We've talked about that, a
- 11 radial to Kino is a problem. We need to get that loop
- 12 closed. So there's a project guaranteed.
- 13 We foresee, we know there's issues outside
- 14 of DMP in the future. This project solves that problem
- 15 from a system reliability and compliance perspective
- 16 without it. We've got another transmission project. And
- 17 like we got into the details last week, we're going to be
- 18 investing in the 46kV system, investing in our old
- 19 substations that we really want to retire. We really
- 20 want to get out of those little neighborhood subs that we
- 21 all saw on the tour.
- 22 And we'll be spending more and more money
- 23 on those facilities, ultimately without the benefit of a
- 24 looped system of additional technology at the Vine
- 25 Substation supporting our customers' integration of

- 1 technology.
- 2 So we'll be spending money and really not
- 3 getting the value out of what we need to do with that
- 4 project.
- 5 MS. GRABEL: And rebuilding the 46kV system
- 6 will not solve the issues raised in the saturation study,
- 7 will it?
- 8 MR. LINDSEY: That's also correct,
- 9 Ms. Grabel. So it will not support what we foresee in
- 10 the future for Midtown in any way. So it would require a
- 11 wholesale significant rebuild of the 46 to even get close
- 12 to what this project brings.
- MS. GRABEL: Thank you. Nothing further.
- 14 CHMN STAFFORD: All right.
- MR. LUSK: Mr. Chairman.
- 16 CHMN STAFFORD: Hang on a second.
- 17 MR. LUSK: Go ahead.
- 18 CHMN STAFFORD: I was going to -- since you
- 19 provided testimony, now I think it's only fair to allow
- 20 the party to cross-examine the catch-all panel, what were
- 21 we calling it, not -- cleanup panel, yes. So with that
- 22 we'll move to --
- 23 MR. BRYNER: Chairman Stafford --
- 24 CHMN STAFFORD: Yes, Mr. Bryner.
- MR. BRYNER: Before we open up to cross,

- 1 can I do one last cleanup for Member Little's question
- 2 about the biological evaluation?
- 3 CHMN STAFFORD: Oh, excellent. Please.
- 4 MR. BRYNER: So over the break I was able
- 5 to look into the issue and I apologize for not being
- 6 prepared on that.
- 7 So our biological evaluation does report
- 8 there's no wildlife connectivity linkages in the area.
- 9 So that's why I was kind of caught off guard and I
- 10 clearly scanned the report from the Game and Fish a
- 11 little too quickly.
- 12 So what's going on there, and I'm referring
- 13 to TEP's application, our Exhibit C-2, and it's page 316.
- 14 It's the Arizona Environmental online review tool. It's
- 15 the report that comes out of that.
- 16 So this is a tool that you go in and you
- 17 put your project in there. You draw in the boundaries of
- 18 it and then it buffers off of that. It's an automatic
- 19 review tool and it kicks out and says you've got these
- 20 various special status species within the vicinity of
- 21 your project or other things.
- 22 And so one of the things that it looks for
- 23 are wildlife connectivities, but it's a very vast buffer.
- 24 And so it pushed out and did find one of those
- 25 connectivity linkages on the west side of I-19. It's the

- 1 Coyote-Ironwood-Tucson linkage. And so it's not anywhere
- 2 in the vicinity of our project.
- 3 And so that's why when the wildlife
- 4 biologist looked at it, not even on the map. When the
- 5 wildlife biologist looked at it, he said we don't have
- 6 any wildlife connectivity linkages here.
- 7 So that would be my response.
- 8 CHMN STAFFORD: Excellent.
- 9 MEMBER LITTLE: Thank you very much,
- 10 Mr. Bryner.
- 11 MS. HILL: And I have one more cleanup
- 12 question.
- 13 CHMN STAFFORD: I actually have a couple
- 14 myself, but please go ahead.
- 15 MS. HILL: Mr. Lindsey, I just want to
- 16 follow up on the statement about the wholesale rebuild of
- 17 the 46kV system to even come close to being able to meet
- 18 the saturation. You recall that immediate testimony that
- 19 you gave?
- MR. LINDSEY: Yes.
- 21 MS. HILL: Would that wholesale -- so I
- 22 want to be very clear -- that wholesale rebuild, would
- 23 that result in additional overhead 46kV and distribution
- 24 lines within people's viewsheds that this Committee
- 25 doesn't have any jurisdiction over?

- 1 MR. LINDSEY: So, Ms. Hill, maybe I'll
- 2 start from a distribution perspective. This concept that
- 3 has not been studied in any detail like this project,
- 4 would still support our 4 to 14kV conversion we've been
- 5 talking a lot about. And so likely from a distribution
- 6 perspective, those lines that you see today would get
- 7 upgraded to the higher voltage.
- And, again, from a high level, I wouldn't
- 9 anticipate -- to meet saturation -- maybe I'll step
- 10 back -- to meet saturation, distribution-wise, yes, you
- 11 could anticipate additional distribution lines.
- But, again, as we talked, undergrounding
- 13 those facilities is much more -- is a much easier
- 14 endeavor. So from a viewshed perspective I think our
- 15 optionality is available to us. And so from a
- 16 distribution perspective I wouldn't be too concerned
- 17 about impacting viewshed because we can -- we work with
- 18 the technology we have.
- 19 From a 46kV perspective, absolutely.
- 20 Anticipate line upgrades that would look similar to what
- 21 we see on the 138kV side, the larger poles, the larger
- 22 conductor to get the capacity up. But a rough rule of
- 23 thumb we are talking about here from a capacity
- 24 perspective, 46 is only good for about a third of what
- 25 the 138 can do. It's just the math.

- 1 So a rough answer would be we'd need three
- 2 times this line. But that's a little bit of an
- 3 exaggeration. You would anticipate us to upgrade what
- 4 you see today and likely add several additional lines to
- 5 get there.
- 6 And talking saturation is a hard concept
- 7 because it's really that future full buildout state.
- 8 That state also encompasses the transmission system. And
- 9 so when we talk saturation for Midtown we can focus on
- 10 these what-ifs about the 46, about the distribution. But
- 11 the transmission also has to support that load.
- 12 And so as we continue to peel that back and
- 13 step up the system, we're going to have to add additional
- 14 transmission without this project like I mentioned,
- 15 because of the configuration.
- MS. HILL: Thank you. So I just want to be
- 17 clear, what I think I heard you say is a wholesale
- 18 rebuild of the 46kV system requires both additional
- 19 transmission, even though it's not this project, to meet
- 20 saturation, and it also would require additional 46kV
- 21 lines being placed in Midtown Tucson. Am I correct?
- MR. LINDSEY: That's correct.
- MS. HILL: Thank you.
- 24 CHMN STAFFORD: All right. Ms. Grabel, I
- 25 believe you had an additional, Exhibit TEP-36, which is

- 1 the amended or revised proposed CEC.
- MS. GRABEL: Yes, that's correct,
- 3 Mr. Chairman.
- 4 CHMN STAFFORD: I'll admit that.
- 5 (Exhibit TEP-36 was admitted.)
- 6 CHMN STAFFORD: Do you have anything else
- 7 you need to get from the panel?
- 8 MS. GRABEL: Nope. We're set.
- 9 CHMN STAFFORD: All right. With that
- 10 let's -- Ms. De Blasi, do you have any questions from
- 11 this witness?
- 12 MS. DE BLASI: Mr. Chair, we do not have
- 13 any questions.
- 14 CHMN STAFFORD: Mr. Lusk.
- 15 MR. LUSK: Thank you, Mr. Chair.
- 16 Mr. Lindsey, I just want to go back to your
- 17 previous testimony just a second ago. You heard
- 18 Mr. Jocham discuss sort of the -- actually can we get
- 19 TEP-26 up again, please?
- 20 And while they're doing that, you heard
- 21 Mr. Jocham talk about sort of the cost of undergrounding
- 22 through an intersection. Does that seem -- do those
- 23 numbers that he mentioned seem reasonable? I think about
- 24 a million dollars an intersection.
- MR. LINDSEY: So Mr. Lusk, I don't have as

- 1 much experience as Mr. Jocham, but I can tell you my only
- 2 experience with jack and bore is one specific TEP project
- 3 under I-19.
- 4 And the cost estimates and time line that
- 5 it took us to complete that work were -- how do I want to
- 6 say this -- we estimated the cost and time to be
- 7 drastically lower than the actual. So we spent a
- 8 significant amount more time and cost to get that jack
- 9 and bore done underneath the freeway.
- 10 So I can't speak specifically to the cost
- 11 but I guess I could say it doesn't surprise me based on
- 12 previous experience.
- 13 MR. LUSK: The amount that Mr. Jocham
- 14 stated doesn't surprise you?
- MR. LINDSEY: Doesn't surprise me, yes.
- 16 MR. LUSK: So a million dollars per
- 17 intersection seems like a reasonable number based on your
- 18 experience with the I-19 project?
- 19 MR. LINDSEY: That's how I would answer
- 20 that, yes.
- 21 MR. LUSK: Okay. Looking at your preferred
- 22 route is B-4?
- MR. LINDSEY: Yes.
- 24 MR. LUSK: Am I correct in stating that you
- 25 would have -- and this is worst-case scenario, as I think

- 1 Ms. Grabel discussed -- where you weren't able to get any
- 2 special exception for any intersection in the areas of
- 3 your route. Is there three intersections that you'd have
- 4 to do?
- 5 MR. LINDSEY: From a Gateway Corridor
- 6 perspective, yes.
- 7 MR. LUSK: Yes, for Gateway Corridor. I'm
- 8 sorry, I didn't mean -- I should have clarified that.
- 9 You're right, just for the Gateway Corridor section.
- 10 So there are three intersections that would
- 11 pass through the Gateway Corridor, which if everything
- 12 went not your way, you would have to go underground
- 13 through those intersections?
- MR. LINDSEY: So --
- 15 MR. LUSK: Just as it relates to the
- 16 Gateway Corridor.
- 17 MR. LINDSEY: Yes. Because everything not
- 18 going our way is more than the Gateway.
- 19 MR. LUSK: Sure. But for that regulation
- 20 itself I'm just speaking of.
- 21 MR. JOCHAM: Mr. Lusk, I'd like to maybe
- 22 clarify one thing. So the jack and bore cost, that
- 23 million dollars is just the jack and bore. That does not
- 24 include the cable. That does not include the
- 25 installation. It is just the physical construction of

- 1 the jack and bore itself because it is a specialty
- 2 contractor, it is a broken-out line item.
- 3 MR. LUSK: Do you want to revise your
- 4 number?
- 5 MR. JOCHAM: So I don't know if I can -- I
- 6 don't think I can quickly calculate how much just
- 7 200 feet of underground installation is. I guess what is
- 8 represented in our report and in the jack and bore
- 9 section is purely the civil work required for the jack
- 10 and bore because it is a specialty contractor.
- 11 MR. LUSK: So if I remember from your
- 12 testimony earlier, it was about \$245 per foot?
- 13 MR. JOCHAM: That's the cable cost;
- 14 correct.
- 15 MR. LUSK: So the cabling, that's another
- 16 \$50,000 per cable; is that right? I'm doing pretty good
- 17 for a lawyer you got to admit.
- 18 3: 45 times six times -- what did we say,
- 19 200 feet approximately.
- 20 MR. LUSK: Yeah, 200 feet I think is what
- 21 you said, yeah.
- 22 MR. JOCHAM: So 245 times six cables times
- 23 200 feet is about \$300,000.
- MR. LUSK: Okay. Which is about 5,000 a
- 25 cable?

- 1 MR. JOCHAM: Sure.
- 2 MR. LUSK: And you would include the spares
- 3 as well?
- 4 MR. JOCHAM: Correct.
- 5 MR. LUSK: So that would be eight cables?
- 6 MR. JOCHAM: Correct.
- 7 MR. LUSK: So another \$400,000?
- 8 MR. JOCHAM: Correct. But that --
- 9 MR. LUSK: Then -- oh, go ahead, please.
- 10 MR. JOCHAM: That doesn't include the
- 11 mobilization, that doesn't include the riser structures
- 12 on either side. That doesn't include testing and
- 13 commissioning, that doesn't include a lot of other line
- 14 items that are clearly identified in the appendix A of
- 15 our report.
- 16 MR. LUSK: Can we double the number,
- 17 \$2 million per intersection? Would that be reasonable?
- 18 MR. JOCHAM: I don't know pulling the
- 19 numbers together. I don't want to speculate.
- 20 MR. LUSK: So --
- 21 MR. LINDSEY: Mr. Jocham, we also missed
- 22 the cable to get up the riser.
- 23 MR. JOCHAM: Up the riser. Fair enough.
- MR. LINDSEY: So, I mean we're talking
- 25 about a lot of detail to dead end overhead, dip

- 1 underground for a roadway, and then also riser back up to
- 2 an overhead line.
- 3 And so we don't know if that would have to
- 4 be done and how far those dead end structures would need
- 5 to be located based on other underground conflicts where
- 6 the structure -- because, again, these dead end
- 7 structures have large foundations associated with them,
- 8 and so they can't just be put wherever.
- 9 There is a lot that goes into what we're
- 10 talking about here, Mr. Lusk.
- 11 MR. LUSK: I totally understand,
- 12 Mr. Lindsey. Thank you.
- 13 MR. LINDSEY: It is going to take, you
- 14 know, this is something you'd ask your civil engineer to
- 15 work on for a few weeks.
- 16 MR. LUSK: Well, and I'm not trying to nail
- 17 you down to a number. I guess what I'm trying to be
- 18 considerate of is the Committee has to make a
- 19 determination that the Gateway Corridor Zone itself,
- 20 specifically the Gateway Corridor Zone, is unreasonable
- 21 to comply with; right, given technology available.
- 22 So you have focused very much on cost. I
- 23 don't think anybody up there has ever said you couldn't
- 24 do it physically; correct? Is that -- am I right?
- 25 MR. JOCHAM: Just undergrounding through

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- 1 the Gateway Corridor?
- 2 MR. LUSK: Through the intersections. Just
- 3 through the intersections; right? For your preferred
- 4 route you only have to underground through the
- 5 intersection.
- 6 MR. JOCHAM: Constructible, yes.
- 7 MR. LUSK: And, in fact, you've also said
- 8 it's possible; correct?
- 9 MR. JOCHAM: Yes.
- MR. LUSK: Thank you.
- MS. GRABEL: If --
- 12 MR. LUSK: So I just want to make sure that
- 13 the Committee has enough information that they can make
- 14 that determination. So when we're talking about whether
- 15 or not you can, for the route you have chosen, whether
- 16 you can proceed with that route even if you didn't get
- 17 the special exception process, which I think Mr. Bryner
- 18 feels pretty comfortable with, that they would get, I
- 19 want to understand sort of that differential for you
- 20 because you mentioned that you wouldn't construct it if
- 21 you -- if it were cost prohibitive.
- Does that make sense, Mr. Lindsey?
- MS. GRABEL: First I'm going to object to
- 24 that, Chairman Stafford. I think that Mr. Lusk put words
- 25 in Mr. Bryner's mouth. And I think he clarified his

- 1 testimony earlier today.
- 2 CHMN STAFFORD: What was the question?
- 3 MS. GRABEL: Whether or not he was
- 4 comfortable that we would get the special exception if we
- 5 applied for it.
- 6 CHMN STAFFORD: He previously testified
- 7 that -- I think initially he testified that he was pretty
- 8 comfortable, then I think over the course of the hearing
- 9 he became less comfortable with at least one of the three
- 10 intersections, and I believe that was the one where it
- 11 crosses -- you go along Euclid and you cross Broadway
- 12 because it's also in the University --
- MS. GRABEL: Area Plan.
- 14 CHMN STAFFORD: -- Area Plan. So there was
- 15 a concern it would not be granted because of that
- 16 additional factor, so that -- so he was less confident in
- 17 that, one of the three intersections, that was my
- 18 understanding of his testimony.
- 19 Is that correct, Mr. Bryner?
- MR. BRYNER: Yes, I would agree with that.
- 21 CHMN STAFFORD: Okay. I think that's your
- 22 answer, Mr. Lusk?
- 23 MR. LUSK: I think so. And Mr. Bryner,
- 24 please feel free to correct me if I mischaracterize
- 25 anything you've said. I just want to be clear in terms

- 1 of sort of, again, what the Committee is looking to
- 2 decide is whether that particular regulation prevents you
- 3 from completing the line that you want to complete, which
- 4 is B-4.
- 5 So, and I don't think anybody's testified
- 6 that you can't do it physically or technologically. Is
- 7 that correct?
- 8 MR. BRYNER: Correct.
- 9 MS. GRABEL: And I guess Mr. Bryner can't
- 10 really answer what the City would allow in terms of the
- 11 special exception and that's how I'm hearing it.
- 12 MR. LUSK: I'm not asking -
- 13 MS. GRABEL: That's my question. That's
- 14 how I'm hearing it.
- 15 MR. LUSK: Yeah, I'm not asking -- I'm not
- 16 asking Mr. Bryner to determine whether a special
- 17 exception would be granted. In fact, I'm asking both
- 18 Mr. Lindsey and Mr. Bryner to assume that it's not. That
- 19 it's not granted.
- 20 CHMN STAFFORD: Which then would require
- 21 them to underground under the roads just as he described
- 22 with the risers and then the --
- 23 MR. LUSK: That's right. Okay. Does that
- 24 make sense, Mr. Lindsey? Mr. Bryner?
- 25 CHMN STAFFORD: I seem to recall testimony

- 1 earlier if they have to do that they would not be
- 2 building this line, they would be spending a bunch of
- 3 money band-aiding up their 46kV system. That was the
- 4 answer to that that I heard, testimony that I heard
- 5 previously. Is that correct?
- 6 MR. LINDSEY: Mr. Chair, yes, that's
- 7 correct.
- 8 MR. LUSK: Well, and so that's what I want
- 9 to dig into just a little bit, Mr. Lindsey, because I
- 10 think at this point what I would think is a conservative
- 11 estimate to go, just to underground an intersection, if I
- 12 double the numbers that we just discussed it's \$3
- 13 million, which would be \$9 million total to do that.
- 14 I am just going to ask you if my math is
- 15 right. Let's just say that.
- MR. LINDSEY: What --
- 17 MR. LUSK: So for --
- 18 MR. LINDSEY: For three? Yes, I would
- 19 agree with that.
- 20 MR. LUSK: Okay. I got one. Okay. Thank
- 21 you.
- 22 CHMN STAFFORD: So the testimony that,
- 23 because it's kind of -- it's getting late and everyone's
- 24 starting to kind of speak over one another. I would just
- 25 remind everybody to please speak one at a time, wait till

- 1 the person asking the question is finished speaking
- 2 before you start your answer, and wait until they finish
- 3 their answer before you start your next question.
- But it seems, Mr. Lusk, that the point
- 5 you're trying to make and -- is that if TEP has to
- 6 underground one crossing, the marginal cost of that is
- 7 going to be approximately \$9 million and not tens of
- 8 millions of dollars that undergrounding large chunks of
- 9 the line would cost. Is that -- is that the point you're
- 10 trying to make, Mr. Lusk?
- 11 MR. LUSK: I think the marginal cost is
- 12 \$3 million times three intersections for \$9 million.
- 13 MR. JOCHAM: And that's speculation until
- 14 we can actually calculate the cost.
- 15 MR. LUSK: And you don't have any
- 16 additional evidence on that?
- 17 MR. JOCHAM: I have not calculated the cost
- 18 of just crossing the intersection. But --
- 19 MS. HILL: And I have a follow-up if I may,
- 20 Mr. Chairman.
- 21 CHMN STAFFORD: One second. Let Mr. Lusk
- 22 finish.
- 23 MR. LUSK: If I could just get to the --
- 24 I'm trying to get to the end here.
- 25 So Mr. Lindsey, I think you testified --

- 1 was it you what testified earlier that the band-aid
- 2 solution was for -- to get you from -- I can't remember
- 3 if it's from here to '27 or from '27 to '30 was
- 4 \$10 million.
- 5 MR. LINDSEY: Roughly. So we have invested
- 6 just over 10.
- 7 MR. LUSK: To get to --
- 8 MR. LINDSEY: To get -- to bridge us to 27,
- 9 so that's existing investment. And we're looking at
- 10 another close to 10. So it's just shy of 10 million if
- 11 we slide past the '27 time frame, yes.
- 12 MR. LUSK: And that would be, I assume -- I
- 13 think -- well, I don't assume. You testified earlier I
- 14 think that would be recovered in rates, that \$10 million?
- 15 MR. LINDSEY: Yes, sir. That would be our
- 16 intent.
- 17 MR. LUSK: So my understanding, again, with
- 18 the math is that you would rather spend \$10 million to
- 19 band-aid to 2030 than underground three intersections at
- 20 \$9 million?
- 21 MR. LINDSEY: That's not what I said, no.
- MR. LUSK: Then please clarify for me.
- MR. LINDSEY: Clarify that we would need to
- 24 spend 10 million roughly, just less than, if we miss the
- 25 '27 date. Yeah. We would need to specifically make

- 1 upgrades at Olson substation.
- MR. LUSK: Well, no, what I'm asking for --
- 3 MS. GRABEL: Mr. Lusk, I can help.
- 4 MR. LUSK: Wait, wait.
- 5 MS. GRABEL: Excuse me.
- 6 CHMN STAFFORD: Is there an objection
- 7 there?
- 8 MS. GRABEL: It's a clarification.
- 9 CHMN STAFFORD: Let him ask his question.
- 10 MS. GRABEL: That I think will help him.
- 11 MR. LUSK: I'm think I'm -- I'm trying
- 12 to -- I'm trying to get there. So I'm just asking, you
- 13 said -- you just testified that you would not build the
- 14 line if you couldn't get the special exceptions. Am I
- 15 wrong in that?
- MR. LINDSEY: No.
- 17 MR. LUSK: Okay. Then please clarify for
- 18 the Committee what you meant by what you said earlier.
- 19 MR. LINDSEY: No, you're not wrong.
- 20 MR. LUSK: Oh, I'm not -- I'm sorry.
- 21 Sorry. It is getting late.
- 22 So you're saying that you would not build a
- 23 line if you had to get the special exceptions even though
- 24 it could possibly cost less and you would have the line.
- MR. LINDSEY: I did not say that.

- 1 MR. LUSK: Okay. Then clarify then, I
- 2 guess, for the Committee.
- 3 MR. LINDSEY: Clarify what?
- 4 MR. LUSK: I think what I heard you say was
- 5 in response to Ms. Grabel's question you would not build
- 6 the line if you didn't get the relief you sought here.
- 7 Is that right?
- 8 MR. LINDSEY: That's correct, yes.
- 9 MR. LUSK: Now, is that related to the
- 10 Gateway Corridor Zone or both?
- 11 MS. GRABEL: Mr. Chairman, I'm going to
- 12 object that misstates Mr. Lindsey's testimony.
- 13 MR. LINDSEY: So I can repeat the context
- 14 of that statement.
- MR. LUSK: Sure.
- MR. LINDSEY: So we have --
- 17 CHMN STAFFORD: Let's do that, then. So I
- 18 guess the objection was that he misstated the testimony.
- 19 Well, the remedy I guess is to allow him to restate his
- 20 testimony so there's no misconception or misstatement of
- 21 it.
- 22 MR. LINDSEY: Again as -- thank you,
- 23 Mr. Chair. So as I spoke just a few minutes ago, our
- 24 concern is more about the future spend of transmission.
- 25 So we have a number of projects in our

- 1 Ten-Year Plan that are all over our service area. So to
- 2 the west of here, straight through the city of Tucson
- 3 upgrades required, Oro Valley, Marana, Sahuarita, so we
- 4 can talk about those projects in detail if you'd like.
- 5 And our concern is that undergrounding in
- 6 this project will require undergrounding in future
- 7 projects. And so if we're going to look at an
- 8 alternatives analysis on a bunch of what-ifs, I can't
- 9 answer that. So that's part of our engineering process.
- 10 So the questions that you're asking me
- 11 specific to this project don't really apply to the
- 12 context that I was speaking to.
- 13 So we're more concerned about future
- 14 transmission projects from an underground perspective as
- 15 much as we are here. So just know the underground
- 16 numbers we were looking at previously are significant
- 17 compared to overhead costs.
- 18 MR. LUSK: And I understand that,
- 19 Mr. Lindsey, and I'm not trying to get you to design from
- 20 the dais here today.
- 21 All I'm trying to understand and again
- 22 trying to make clear for the Committee is they have to
- 23 make a specific decision on a specific regulation and
- 24 whether or not you can comply with it or whether it's not
- 25 feasible with the technology available.

- Now, you have cited -- TEP has cited that
- 2 it's not feasible because of the cost.
- 3 So if the testimony today is that the cost
- 4 is a particular number, whatever the number, is then they
- 5 need to know the information in terms of the alternatives
- 6 for them, not necessarily based on what you will do in
- 7 the future.
- 8 Does that make sense?
- 9 CHMN STAFFORD: Well, I guess that's your
- 10 position but I don't think the witness can take a
- 11 position on that.
- MR. LUSK: Well --
- 13 CHMN STAFFORD: It's not his call to decide
- 14 what TEP's going to do necessarily, I think. So
- 15 Mr. Lindsey, was there --
- 16 MEMBER MERCER: Mr. Chairman.
- 17 CHMN STAFFORD: Yes, Member Mercer.
- 18 MEMBER MERCER: I know this back and forth
- 19 a very interesting, but if I remember correctly,
- 20 Mr. Lindsey talked about, okay, let's do the -- if we
- 21 don't do this we are going to do the band-aid approach.
- 22 The band-aid approach to me is like what are you talking
- 23 about? What about reliability? I mean, I don't care if
- 24 it's 10 million or 20 million, if you are putting a
- 25 band-aid approach, what's the point?

- 1 MS. GRABEL: And Mr. Lindsey, if I may ask
- 2 some clarifying questions now, because I think it will
- 3 help.
- 4 CHMN STAFFORD: Are you done, Mr. Lusk?
- 5 MR. LUSK: Along that line of questioning
- 6 I'm fine with her clarifying at this point. I just want
- 7 to make sure we got to the end of it.
- 8 CHMN STAFFORD: Okay. Please -- and then
- 9 before you do I -- make sure we're trying to close the
- 10 loops here before we get done. And at this point it's
- 11 looking less likely that we're going to get through
- 12 closings today.
- 13 But I remember there was a discussion about
- 14 the other neighborhood plan overlays and whether they
- 15 would require undergrounding. There's a list of them in
- 16 the application that were potentially implicated by this
- 17 project.
- 18 The City witness didn't have an answer
- 19 whether or not they would require -- they themselves
- 20 would require any undergrounding. And it's my
- 21 understanding that someone was going to clarify that
- 22 point and address which ones were specifically would be
- 23 implicated. Has that happened? Is someone prepared to
- 24 tell us?
- 25 MS. GRABEL: Mr. Bryner, are you prepared

- 1 to answer the Chairman's question?
- MR. BRYNER: Sorry. Just ate a bite of
- 3 cookie.
- 4 CHMN STAFFORD: You thought it was all on
- 5 Mr. Lindsey. Now all of a sudden they're asking you
- 6 questions.
- 7 MR. BRYNER: That's what I thought.
- 8 So I believe I answered that question
- 9 earlier. It's really the University Area Plan and the
- 10 Gateway Corridor Zone that are implicated with respect to
- 11 location of underground utilities.
- 12 The Sam Hughes Neighborhood Plan is for
- 13 Route 2, but Route 2 only. I think there was a question
- 14 about the historic and neighborhood preservation zones,
- 15 but my testimony was that there is no nexus, no tie that
- 16 would require underground because they are focused on
- 17 design guidelines with respect to the structures, the
- 18 buildings within those zones.
- 19 CHMN STAFFORD: Okay. So the focus is then
- 20 on the Gateway Corridor and the University Area Plan.
- 21 MS. GRABEL: That would be subject,
- 22 Mr. Chairman, to the City's confirmation that TEP's
- 23 interpretation is correct.
- 24 CHMN STAFFORD: Okay. Yes. And is that
- 25 forthcoming?

- 1 MR. LUSK: I'm sorry, we were having a side
- 2 conversation. I apologize, Chairman.
- 3 CHMN STAFFORD: No problem. Did you hear
- 4 the question?
- 5 MR. LUSK: I didn't. I apologize.
- 6 CHMN STAFFORD: Ms. Grabel, what was the --
- 7 MS. GRABEL: Certainly. So TEP's position
- 8 is that what are the districts, Mr. Bryner? Can you
- 9 please repeat them.
- 10 MR. BRYNER: The neighborhood preservation
- 11 zone and the historic preservation zone.
- 12 MS. GRABEL: And our position is that those
- 13 zones do not require that any portion of the project
- 14 within those areas be undergrounded, and we just wanted
- 15 the City's confirmation that our interpretation is
- 16 correct.
- 17 MR. LUSK: So without looking at them
- 18 directly I can't speak to that, but my understanding is
- 19 there's no specific regulation in those zones, in those
- 20 overlays as relates to undergrounding.
- 21 CHMN STAFFORD: Okay. Thank you. That was
- 22 one of the loose ends that I wanted to make sure I tied
- 23 up before we wrapped on the presentation of evidence.
- 24 All right. Ms. Grabel, did you have
- 25 another clarifying question for the -- I guess you were

- 1 about to ask Mr. Bryner before I highjacked it.
- 2 MEMBER GOLD: Mr. Chairman.
- 3 CHMN STAFFORD: Yes, Member Gold.
- 4 MEMBER GOLD: Before we get off this topic
- 5 just a quick question about the jack and bores.
- 6 When you do a jack and bore you have to
- 7 have towers on both sides?
- 8 MR. JOCHAM: Riser structures, correct.
- 9 MEMBER GOLD: Riser structures. How tall
- 10 are they?
- 11 MR. JOCHAM: They would be similar to the
- 12 138kV, so 75 to 85 feet.
- 13 MEMBER GOLD: So on either side the Gateway
- 14 Corridors, you would put up towers, poles, towers that
- 15 are 75 to 80 feet tall.
- MR. JOCHAM: Yeah. Yes.
- 17 MEMBER GOLD: On either side instead of
- 18 just the line going over it if you did not do a jack and
- 19 bore; is that correct?
- 20 MR. JOCHAM: Correct. And those structures
- 21 would be dead end structures, so they would be much
- 22 larger. They would have large terminations standing off
- 23 on arms, those terminations would be a couple feet tall
- 24 and pretty big in diameter.
- 25 So they would be visually impactful.

- 1 MEMBER GOLD: Very visually impactful. So
- 2 from a visual perspective, and this is for Mr. Lusk, it
- 3 appears to be that the jack and bore would not visually
- 4 improve the Gateway Corridor. As a matter of fact, it
- 5 would detract from it because of the two towers they'd
- 6 have to put on either side that are right -- would be
- 7 adjacent to the Gateway Corridor and I just wanted to
- 8 make sure if that is correct.
- 9 CHMN STAFFORD: I think you're almost
- 10 there. I think the jack and bore is a construction
- 11 technique. It's the undergrounding under the roadway
- 12 which is the additional cost they're talking about and
- 13 the structures that are required for that, whether
- 14 trenched across the road or jack and bore.
- 15 That's my understanding. Is that correct?
- 16 Because the jack and bore is a construction technique.
- 17 It doesn't have anything to do with the structures. I
- 18 mean, you have to have the structures there regardless of
- 19 whether you trenched it or whether you jacked and bore.
- 20 MEMBER GOLD: But if you didn't have to put
- 21 it underground, if you just did an overhead line.
- 22 CHMN STAFFORD: You avoid all that.
- 23 MEMBER GOLD: They could be hundreds of
- 24 feet away from the corridor.
- 25 CHMN STAFFORD: Right. Exactly. Because

- 1 the structures they're talking about, the dead end
- 2 structures, they had -- that's where it goes underground
- 3 to cross.
- 4 MEMBER GOLD: Yes.
- 5 CHMN STAFFORD: That's the transition from
- 6 the overhead line to the belowground line; correct?
- 7 That's -- I'm seeing nods in agreement. Yes.
- 8 MR. JOCHAM: Correct.
- 9 CHMN STAFFORD: That's a jack and bore,
- 10 yeah, that's --
- 11 MEMBER GOLD: I understand. I'm just
- 12 saying to get across the Gateway Corridor, if we are
- 13 concerned about a Gateway Corridor, which means you want
- 14 it to look good when people come in and out, whereas I
- 15 thought the jack and bore would be great, nobody sees
- 16 anything, that was not a correct assumption.
- 17 The assumption would be you would have
- 18 gigantic towers on either side of your Gateway Corridor,
- 19 pretty much adjacent to it, and that would be an eyesore,
- 20 in my opinion. What is your opinion, Mr. Lusk?
- 21 MR. LUSK: My opinion? Well, I think we
- 22 actually have a picture of it. Mr. Bryner, do you have
- 23 that available for us?
- MR. BRYNER: Yeah, it's in --
- 25 MR. LUSK: Mr. Jocham's report. Is that

- 1 right?
- MR. JOCHAM: It's in my presentation.
- 3 MR. BRYNER: It's in his presentation.
- 4 TEP-16? Page 3 or 4.
- 5 MR. JOCHAM: Page 4.
- 6 CHMN STAFFORD: Let's pull that up and see
- 7 what we're talking about. And then, Ms. Grabel, for
- 8 clarification, is that structure listed in the
- 9 application as one of the potential structures for the
- 10 line that typically get approved with these type of --
- 11 any kind of transmission line, or is that -- or is it
- 12 incorporated by reference from the report?
- 13 MS. GRABEL: Chairman Stafford, it is not
- 14 included as a typical structure, because it would be
- 15 associated only with an underground transmission line,
- 16 and we don't need approval to build an underground
- 17 transmission line. We're seeking the construction of an
- 18 overhead transmission line. But we do see one depicted
- 19 on Mr. Jocham's slide.
- 20 MR. LUSK: So it's the one on the right,
- 21 Mr. Jocham? Is that right?
- MR. JOCHAM: Yeah, so this would be a riser
- 23 structure. This is during active construction, so you
- 24 can see the crane hook here. They're actually pulling
- 25 the cable through the conduits and up into the riser. So

- 1 this is an incomplete riser, but it is a representation
- 2 of what the structure would look like. This is a 138kV
- 3 riser.
- 4 So you can see the arms here and there's
- 5 one right at the top of the picture here for the third
- 6 phase. This particular riser is a single cable per
- 7 phase.
- 8 So you would actually have, you can kind of
- 9 see this angled platform at the end of the arm. That is
- 10 where your termination sits. You would have two of those
- 11 on each arm for the two cables per phase.
- 12 You would have all of the cables running up
- 13 the face of the pole here, and then after installation
- 14 you would install a large shroud around those cables to
- 15 protect the cables from any vandalism. And that would go
- 16 around this porch, what's called a porch here where you
- 17 see all these conduits coming up out of the surface of
- 18 the ground.
- 19 And so that con -- or excuse me -- that
- 20 shroud would wrap around all of these conduits and go
- 21 about 20 feet up in the air on average.
- MR. LUSK: Than you, Mr. Jocham. That's
- 23 very helpful. Oh, and just to -- you said where they're
- 24 pulling the line, those protuberances from the pole, do
- 25 those get removed?

- 1 MR. JOCHAM: Sorry. Do these get removed?
- 2 MR. LUSK: No, go up the pole. Those.
- 3 MR. JOCHAM: No, those are used to hold the
- 4 cables as they go up the pole.
- 5 MR. LUSK: So they stay there.
- 6 MR. JOCHAM: Yeah, you basically have
- 7 clamps that attach to that and the cables attach to the
- 8 clamps so those large angles are used to support the
- 9 cables as they run up the pole face.
- 10 MR. LUSK: So it doesn't go through the
- 11 cable or through the pole.
- 12 MR. JOCHAM: No, no. It is on the outside.
- MR. LUCK: Gotcha.
- 14 MR. JOCHAM: I think TEP does have
- 15 distribution risers where the cable goes inside the pole,
- 16 but that would not be the case for transmission.
- 17 MR. LUSK: Gotcha. Thank you.
- 18 MEMBER GOLD: So as I was -- just learned,
- 19 this would not enhance the appearance of a Gateway
- 20 Corridor?
- MR. LUSK: Well --
- 22 MEMBER GOLD: At least not in my opinion.
- MR. LUSK: And not -- not in your opinion,
- 24 I agree, Member Gold, that this would not likely be, I
- 25 would agree that any pole in the Gateway Corridor Zone

- 1 does not enhance its visual appeal.
- 2 MEMBER GOLD: Mr. Lusk, thank you.
- 3 MR. LUSK: You're welcome.
- 4 MEMBER GOLD: Mr. Jocham, thank you. I had
- 5 no idea what a jack and bore was nor did I have any idea
- 6 what goes alongside of it.
- 7 I can see this use of this if you're trying
- 8 to get across an interstate. But I cannot see the use of
- 9 this when you're trying to just get across a gateway.
- 10 Thank you.
- 11 MR. LUSK: So if I can -- I'm sorry,
- 12 Ms. Grabel, do you have any further clarification?
- MS. GRABEL: I have some, yes.
- MR. LUSK: Go ahead, please.
- 15 MS. GRABEL: Okay. So Mr. Lindsey,
- 16 Mr. Lusk asked you some questions about just spending
- 17 \$10 million on the existing system to get reliability
- 18 benefits and tried to compare it to the cost of crossing
- 19 perpendicularly underground.
- 20 That \$10 million spend you referred to,
- 21 that gets us only to the year 2030; is that correct?
- MR. LINDSEY: That's correct.
- 23 MS. GRABEL: And so to maintain safety and
- 24 reliability beyond the year 2030, how much will TEP need
- 25 to invest in its 46kV system?

- 1 MR. LINDSEY: So as we discussed last week,
- 2 that approximation is north of 50 million.
- 3 MS. GRABEL: Okay. Thank you. And you'll
- 4 also then have to have come up with a transmission
- 5 solution; correct?
- 6 MR. LINDSEY: That's correct.
- 7 MS. GRABEL: And that would also likely be
- 8 in the millions of dollars range?
- 9 MR. LINDSEY: Yes.
- 10 MS. GRABEL: Okay. Thank you.
- 11 Can we pull the TEP exhibit that was just
- 12 up? Was that Exhibit 26, I believe?
- 13 MR. LUSK: Yes, for the Gateway Corridors.
- 14 MS. GRABEL: For the Gateway Corridors.
- 15 And I just want to clarify for the Committee why the
- 16 University Area Plan is such a concern for us. It's not
- 17 simply the crossing of Broadway along Euclid.
- 18 Mr. Bryner, I'm going to ask you this
- 19 question. I believe we mentioned that in order to get a
- 20 special exception, the fact finder in the special
- 21 exception process has to make a finding that the route is
- 22 consistent with the University Area Plan. Is that your
- 23 understanding?
- MR. BRYNER: That's correct.
- MS. GRABEL: And so is it a possibility, I

- 1 hope the Committee can see that the University Area Plan
- 2 does -- it looks like goes through Broadway. And so
- 3 there's a portion of that crossing that implicates the
- 4 University Area Plan.
- 5 Is it TEP's concern that there's a
- 6 possibility that the City of Tucson in the special
- 7 exception process will approve our special exceptions
- 8 only if it finds that -- only if we also construct the
- 9 University Plan area underground?
- 10 MR. BRYNER: Yes, that is a concern.
- 11 MR. LUSK: I'm sorry, Ms. Grabel. Can you
- 12 clarify what -- I don't -- I didn't understand your
- 13 question.
- MS. GRABEL: Certainly.
- 15 MR. LUSK: What length are you talking
- 16 about?
- 17 MS. GRABEL: The entirety of the route that
- 18 runs through the University Area Plan.
- 19 Because the -- because the fact finder will
- 20 need to, in order to approve the project, find that its
- 21 decision is consistent with the applicable University
- 22 Area Plan. And if that fact finder decides that the
- 23 University Area Plan requires undergrounding, it could as
- 24 a condition to approving the special exception require
- 25 the underground construction of the line throughout the

- 1 entire route that runs through the University Area Plan.
- Is that TEP's concern?
- 3 MR. BRYNER: Yes, that is a concern.
- 4 CHMN STAFFORD: So we're talking from the
- 5 Vine Substation down Route 4 to Broadway, that it would
- 6 go aboveground south of Broadway?
- 7 MS. GRABEL: I think it's actually the
- 8 portion of the line that runs down Park into Vine and
- 9 then from Vine south until it crosses Broadway.
- 10 CHMN STAFFORD: Yeah, I said from the Vine
- 11 Substation.
- 12 MS. GRABEL: Oh, my apologies, yes.
- 13 CHMN STAFFORD: Till it gets south of
- 14 Broadway would be -- it looks like the University Area
- 15 Plan if it does indeed require undergrounding would
- 16 require undergrounding all way from the substation until
- 17 it got south of Broadway Road based on this map.
- 18 MS. GRABEL: Yes, but there's also the
- 19 segment in Route B that runs from the Vine Substation up
- 20 to Grant. And that's the second portion that we'd be
- 21 worried about.
- 22 CHMN STAFFORD: Oh, yes. I'm just looking
- 23 at the numbered sections here, not the lettered sections.
- Okay. Yeah.
- 25 MEMBER GOLD: Mr. Chairman.

- 1 CHMN STAFFORD: Yes, Member Gold.
- 2 MEMBER GOLD: I'm trying to figure out the
- 3 University Area Plan. Isn't the proposed Vine Substation
- 4 right in the middle of it?
- 5 MS. GRABEL: Yes, it is, Member Gold.
- 6 MEMBER GOLD: So you're going to have to go
- 7 through the -- what was the terminology, the guy that
- 8 makes the decision?
- 9 MS. GRABEL: Special exception process.
- 10 MEMBER GOLD: So he's got to make a special
- 11 exception for the Vine plan just for starters; is that
- 12 correct?
- 13 MS. GRABEL: The substation, yes. That's
- 14 correct. I don't know if it's the same individual.
- 15 Perhaps Mr. Bryner knows.
- 16 MR. BRYNER: It would go through the zoning
- 17 examiner, both. We'd need a special exception for the
- 18 substation. We need a special exception for the
- 19 perpendicular crossings of the Gateway Corridor.
- 20 MEMBER GOLD: But aren't these the people
- 21 in the University Area Plan who need the power?
- MS. GRABEL: Mr. Bryner, do you want to
- 23 answer that question?
- MR. BRYNER: Yes.
- 25 CHMN STAFFORD: That's yes, you can answer

- 1 the question and yes, they need the power?
- 2 MR. BRYNER: Yes to both.
- 3 MEMBER GOLD: Thank you.
- 4 MEMBER MERCER: Mr. Chairman.
- 5 CHMN STAFFORD: Yes, Member Mercer.
- 6 MEMBER MERCER: So I just need a little bit
- 7 of clarification. Ms. Grabel just asked the question, if
- 8 they do the repair or the band-aid approach as I call it,
- 9 of -- for the reliability of the existing lines that we
- 10 have, you said it was 10 years?
- 11 MS. GRABEL: \$10 million will get us to the
- 12 year 2030.
- 13 MEMBER MERCER: 2030. Okay. So it's six
- 14 years.
- 15 What about if you do the brand-new, this
- 16 new project that you're asking for, how many years before
- 17 you have to upgrade it?
- 18 MR. LINDSEY: Member Mercer, we're
- 19 anticipating this project to support Midtown really for
- 20 the life of the facilities.
- 21 And so one of -- that's a really hard thing
- 22 to say in normal circumstances. But one of the
- 23 advantages that we in having a lot of confidence in that
- 24 statement is we conducted a saturation study a number of
- 25 years ago in 2018, and that looked at what the loading of

- 1 our -- of this area would be at full buildout, meaning
- 2 every lot built, everything anticipated that could be
- 3 built was built.
- 4 And this line and substation, specifically
- 5 the line supported that growth. And so it's hard to give
- 6 you a specific year of it's going to be ten years,
- 7 20 years, it's going to be well past that time frame.
- 8 And you're looking at a system that we're looking at
- 9 replacing that's 50 to 70 years old. This new
- 10 transmission line and substation will support the area
- 11 that long.
- 12 MEMBER MERCER: So I was trying to get to
- 13 it's going to be more than six years.
- 14 MR. LINDSEY: Absolutely, yes.
- 15 MEMBER MERCER: Thank you.
- 16 MEMBER LITTLE: Mr. Chairman.
- 17 CHMN STAFFORD: Yes, Member Little.
- 18 MEMBER LITTLE: Perhaps I missed something,
- 19 but this is the first time that I have become aware of
- 20 the fact that the substation requires a special
- 21 exception. I know that we have jurisdiction over the
- 22 substation, but because the line, no substation, no line.
- 23 I'm curious what the status is of TEP
- 24 getting the authorizations that they need to allow them
- 25 to build the substation in that location.

- 1 MS. GRABEL: Member Little, I can address
- 2 that real quickly. This is the exhibit that I went
- 3 through with the City yesterday. We have applied for the
- 4 special exception for the Vine Substation.
- 5 But the zoning administrator issued an
- 6 order that said that we would not get that determination
- 7 until we had a route for this project.
- 8 CHMN STAFFORD: And that was Exhibit TEP --
- 9 MS. HILL: UAZ, I believe it's 23. It
- 10 might be 22.
- 11 CHMN STAFFORD: Let's look and see.
- 12 MEMBER GOLD: So by implication --
- 13 Mr. Chairman -- so by implication if you get a route you
- 14 can get permission to do it, of course he would have just
- 15 said no, I'm not giving you permission whether you have a
- 16 route or not.
- 17 MS. GRABEL: That is true, yes, Member
- 18 Gold.
- 19 MEMBER GOLD: The intimation is yes, once
- 20 we give them a route they'll get this because they
- 21 realize they need the power.
- MS. HILL: Member Gold, I think we can't
- 23 read anything into anything, I think the City has made
- 24 that abundantly clear, but we can agree that he didn't
- 25 just say no, and that it's very clear and it is

- 1 Exhibit UAZ Exhibit 22, the line -- I mean, it actually
- 2 says until we know where the line is this is premature,
- 3 something to that effect.
- 4 MEMBER GOLD: Thank you. Mr. Chairman,
- 5 just a question.
- 6 What is our status in the hierarchy when we
- 7 make a recommendation that differs from -- what is that
- 8 guy called again?
- 9 MS. HILL: Zoning examiner.
- 10 MEMBER GOLD: The zoning guy, we make a
- 11 recommendation, can he overrule it and say no, or can we
- 12 overrule him and say yes?
- 13 CHMN STAFFORD: We -- the Line Siting
- 14 Committee does not site substations.
- 15 MEMBER GOLD: We have no jurisdiction over
- 16 substations.
- 17 CHMN STAFFORD: No, the statute exempts
- 18 substations from approval from this Committee and the
- 19 Commission, CECs are required for plants, transmission
- 20 lines, and switchyard, but substations are specifically
- 21 excluded in the statutory definition.
- 22 MEMBER GOLD: So who has authority over
- 23 the --
- 24 CHMN STAFFORD: The City.
- 25 MEMBER GOLD: The City of Tucson. Now I

- 1 understand the boondoggle. Thank you.
- 2 CHMN STAFFORD: I wanted to make sure I get
- 3 this nailed down. The University Area Plan does require
- 4 undergrounding for all routes?
- 5 MS. HILL: Where possible.
- 6 CHMN STAFFORD: It says where possible?
- 7 MS. HILL: It says if possible or where
- 8 possible.
- 9 MR. LUSK: So it does, Chair.
- 10 CHMN STAFFORD: Okay. All right. So if
- 11 possible. That's a little ambiguous, don't you think?
- MS. GRABEL: Chairman Stafford, we think
- 13 so. We just want the City to confirm as much and we
- 14 haven't been able to get the commitment out of the City.
- 15 CHMN STAFFORD: Okay. So that's why you're
- 16 asking for the special -- for the determination of
- 17 unreasonably restrictive for that specific regulation
- 18 then, the university plan.
- 19 MS. GRABEL: Correct, as well as the
- 20 Gateway Corridor Zone.
- 21 CHMN STAFFORD: Okay. All right. I just
- 22 want to make sure, because I had notes that said if, and
- 23 it's kind of a big if, and so I hadn't heard a definitive
- 24 answer either way whether it was going to require or not
- 25 require underground. So I had to make sure I had the

- 1 correct understanding of that before we ended testimony.
- 2 MR. LUSK: Can I follow up on that --
- 3 CHMN STAFFORD: Sure.
- 4 MR. LUSK: -- Mr. Chair?
- 5 So Mr. Bryner, just so I understand your
- 6 position which I think you've represented well, your
- 7 concern is how in what way or relationship the University
- 8 Area Plan applies within the Gateway Corridor Zone at the
- 9 crossings?
- 10 MR. BRYNER: So it's -- well, it would be,
- 11 that would be the --
- 12 MR. LUSK: For the proposed route. Sorry.
- 13 I'm sorry. Go ahead.
- 14 MR. BRYNER: So, yeah, the tie that we
- 15 would have that would implicate the zoning examiner
- 16 getting involved would be at the Gateway Corridors, the
- 17 special exceptions.
- 18 And to the extent that they then -- well,
- 19 one, whether or not they decide to grant the special
- 20 exception; but two, would be how far they may decide that
- 21 determination may go. And some of the language we've
- 22 seen in the special exception for the Vine Substation
- 23 give us pause to think they may try to extend beyond the
- 24 affected area.
- MR. LUSK: And that's within the Exhibit 22

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- 1 you --
- 2 MR. BRYNER: I think it was UAZ-23.
- 3 MR. LUSK: UAZ-22. Mr. Dempsey is saying
- 4 is it's 22. I don't -- I won't quibble.
- 5 CHMN STAFFORD: I have the exhibit list
- 6 here, and it says UAZ-22 is the zoning examiner's
- 7 decision on TEP special exception permit dated May 2021.
- 8 MR. LUSK: What's the specific language
- 9 that you're talking about? Sure. Take your time.
- 10 While you're doing that, Mr. Bryner, I'm
- 11 going to ask Mr. Lindsey if -- just to sort of tie off
- 12 our previous discussion.
- 13 Is it my understanding that you have -- you
- 14 do not wish to compare the costs of complying with the
- 15 Gateway Corridor Zone just at the perpendicular crossings
- 16 with having to proceed without the route entirely? Is
- 17 that -- are you comfortable with that? That position?
- 18 MR. LINDSEY: Mr. Lusk, can you restate
- 19 that question?
- 20 MR. LUSK: Sure. I think what I heard from
- 21 you is that you're not comfortable comparing the costs of
- 22 complying with the Gateway Corridor Zone at its
- 23 perpendicular crossings for your preferred route with the
- 24 costs of moving forward without the route entirely? Is
- 25 that your position?

- 1 MR. LINDSEY: Comparing the costs to
- 2 underground the gateway --
- 3 MS. GRABEL: Can you ask them to clarify
- 4 the question? I didn't understand it and I don't think
- 5 my witness does either.
- 6 CHMN STAFFORD: I think I get what Mr. Lusk
- 7 is getting at. Because when you're looking at the cost
- 8 comparison we're talking about, let's see, I think, is it
- 9 addressed in TEP? For example -- let's see here. No.
- 10 Okay. I see. Okay.
- 11 So I think the question I think Mr. Lusk is
- 12 trying to make is that we're looking at the costs of
- 13 undergrounding large sections of the line as compared to
- 14 overheading the entire section of the line. But I think
- 15 what he wants to see is a comparison between total
- 16 overhead and then overhead with only undergrounding at
- 17 the Gateway Corridors.
- 18 MR. LUSK: Correct.
- 19 CHMN STAFFORD: Without -- without special,
- 20 if they -- if they do not get the special exception.
- 21 MR. LUSK: That's correct. I think that
- 22 was the concern.
- 23 CHMN STAFFORD: Okay. That's -- to my
- 24 recollection TEP did not present specific testimony on
- 25 the costs of three below grade crossings, undergroundings

- 1 at just the three intersections implicated by the Gateway
- 2 Corridor Zone. Is that the case? Is that -- or did
- 3 you -- I mean, what I've been hearing is Mr. Jocham and
- 4 Mr. Lusk kind of ballparking it based on what the costs
- 5 are to do an undergrounding at an intersection in
- 6 addition to -- so what that additional costs would be if
- 7 the rest of the project was constructed overhead.
- 8 So, but I don't think the applicant
- 9 prepared specific testimony on just what it would cost to
- 10 underground at three roads.
- Is that correct, Ms. Grabel?
- 12 MS. GRABEL: Mr. Chairman, that is correct.
- 13 I think Mr. Jocham has a rough estimate that he's
- 14 calculated sitting here today, although I will suggest,
- 15 again, that is not the worst-case scenario that we're
- 16 preparing for with our interactions with the City because
- 17 we do think the University Area Plan is implicated.
- 18 CHMN STAFFORD: Right.
- 19 MS. GRABEL: So --
- 20 CHMN STAFFORD: But see -- okay, the issue
- 21 with -- okay. Let me make sure I understand this. Now,
- 22 assuming that there was no University Area Plan, the
- 23 under -- under the Gateway Corridor Zone would require,
- 24 unless you got a special exception, TEP to underground
- 25 the three crossings, the one at -- from -- and we're

- 1 talking here -- we're talking about Route B-4.
- 2 Specifically, I guess it's -- oh, no, yes. No. In
- 3 Route B, actually all the routes that they'd cross, what
- 4 is that, the upper one here that's not labeled? I'm
- 5 looking at --
- 6 MR. BRYNER: Oracle.
- 7 CHMN STAFFORD: Oracle. Okay. Right. So
- 8 there would be Oracle, there would be Broadway, and Kino
- 9 Parkway. Ignoring the University Area Plan, the
- 10 Gateway -- the Gateway Corridor would require
- 11 undergrounding for that -- for the line to cross under
- 12 those intersections.
- Is that correct, Mr. Bryner? Mr. Lindsey?
- MR. BRYNER: Yes.
- 15 CHMN STAFFORD: Okay. All right. Now, you
- 16 were pretty confident that you could get two of those.
- 17 But the big one I believe was the crossing of Broadway
- 18 and the University Area Plan; correct?
- MR. BRYNER: Correct.
- 20 CHMN STAFFORD: Now, is the concern that
- 21 the City would require undergrounding for that crossing,
- 22 or that it would require -- okay. We were just talking
- 23 about just -- so it would just be that one crossing that
- 24 you would have to do -- say that you're less likely to
- 25 get a special exception for.

- 1 MR. BRYNER: That's the one that causes us
- 2 concern.
- 3 CHMN STAFFORD: Okay. And if the
- 4 University Area Plan was found to be unduly burdensome,
- 5 then there would not be the basis to deny the special
- 6 exception, would there? I guess it's more of a legal
- 7 question for Ms. Grabel.
- 8 MS. GRABEL: Will you repeat the question,
- 9 Chairman Stafford?
- 10 CHMN STAFFORD: Okay. So you guys are
- 11 confident that you can get -- that the City would grant a
- 12 special exception for the Gateway Corridor for the
- 13 perpendicular crossings except for the one at Broadway,
- 14 because of the concern that the University Area Plan
- 15 would be interpreted to interpret -- to require
- 16 undergrounding and they would deny it on that basis.
- 17 MS. GRABEL: I'm not sure I would say we're
- 18 confident. I know that's Mr. Bryner's testimony. I
- 19 think he may be confident. I think TEP may be less so,
- 20 but yes, generally that is accurate.
- 21 CHMN STAFFORD: Well, let's define
- 22 confidence more likely than not. As opposed to beyond a
- 23 reasonable doubt or 80 percent, 75 percent. We're saying
- 24 it's more likely than not. That's -- that's the level of
- 25 confidence, or is it higher than that, Mr. Bryner?

- 1 MS. GRABEL: Let's put it this -- oh,
- 2 sorry. Go ahead.
- 3 MR. BRYNER: I've never been through it
- 4 before. But I'd like to think that reason will prevail
- 5 and that when we apply they would see some of the logic
- 6 that we've talked about that having two large structures
- 7 on either side of the road is more obtrusive than a
- 8 single crossing.
- 9 CHMN STAFFORD: Yeah, and like -- I think
- 10 Member Gold and I are inclined to agree with you.
- 11 Because if you're spanning it with the aboveground
- 12 structure the structures could be way further conceivably
- 13 300 feet away from the road on the other side as opposed
- 14 to having something that's there.
- 15 But -- so I mean -- but, okay. So my --
- 16 that's the -- that's the one that I was concerned about.
- 17 So, again, since City did help work with you to develop
- 18 that special exception process, it would seem -- I don't
- 19 want to say silly -- but it would seem counterproductive
- 20 to have a process and then just deny, deny you a special
- 21 exception through that process for the very thing it was
- 22 designed to address.
- So there's that.
- 24 But so, I guess what I'm getting to now is
- 25 that if the Committee were to find that the University

- 1 Area Plan was unduly burdensome, but not the Gateway
- 2 Corridor restriction, would that make you feel more
- 3 confident about getting the special exception for the
- 4 Broadway Boulevard crossing?
- 5 MR. BRYNER: So again, I think that's
- 6 probably a legal question. If you want my thoughts I can
- 7 give them, but I think they'd be better to respond.
- 8 CHMN STAFFORD: Right. And that was -- I
- 9 guess that was the question that I was rephrasing to you,
- 10 Ms. Grabel.
- 11 MS. GRABEL: Yes. Thank you, Chairman
- 12 Stafford. I definitely think that would give TEP greater
- 13 comfort that we would not have to build the line
- 14 belowground in the University Area Plan.
- 15 CHMN STAFFORD: Okay. And that -- because
- 16 if that is the case, then you get to -- you have to
- 17 underground everything from north of Broadway Road and
- 18 south of Grant Road.
- 19 You're -- I guess depending on where the
- 20 border of that is on Grant Road, if you put it on -- it
- 21 would vary depending -- was it -- did they extend all the
- 22 way to the southern edge right-of-way of Grant Road or
- 23 stop short of that, or did it go to the middle of the
- 24 road or the far side? And that's -- that seems to be a
- 25 fact issue that is still in doubt; correct?

- 1 MS. GRABEL: Yes, Chairman Stafford, that's
- 2 correct. So, I mean -- I'm going to let Mr. Bryner
- 3 address your question with respect to where the line
- 4 would likely go.
- 5 CHMN STAFFORD: Okay.
- 6 MR. BRYNER: So no -- well, let me answer
- 7 the one question, though, because Mr. Lusk did look into
- 8 that, and it sounds like the University Area Plan would
- 9 go to essentially the center line of the roads around it,
- 10 so the center line of Grant, center line of Broadway.
- 11 Now I forget the question I was supposed to
- 12 address. Sorry.
- 13 CHMN STAFFORD: I think that was it.
- 14 MS. GRABEL: That was it.
- 15 CHMN STAFFORD: It was what was the edges
- 16 of the University Area Plan.
- 17 Okay. All right. Well, I think that
- 18 addresses my questions. Mr. Lusk, did you have any
- 19 further questions?
- 20 MR. LUSK: Yeah, I just wanted to wrap it
- 21 up. So if I understand, Mr. Bryner, the main issue that
- 22 you have in terms of the regulations that we discussed is
- 23 with the University Area Plan.
- MR. BRYNER: Yes.
- 25 MR. LUSK: And in terms of complying with

- 1 the Gateway Corridor Zone irrespective of the University
- 2 Area Plan, you're confident you're able to do that?
- 3 MS. GRABEL: I'm going to object again to
- 4 that. We're using the word "confident," and I don't
- 5 think that's what Mr. Bryner has said.
- 6 CHMN STAFFORD: Right. I think confidence.
- 7 MR. LUSK: Let me rephrase.
- 8 CHMN STAFFORD: Yes. Thank you.
- 9 MR. LUSK: You're able to -- TEP's able to
- 10 participate in the process for a special exception
- 11 process for those within the Gateway Corridor Zone for
- 12 your preferred route?
- MR. BRYNER: Yes, we would.
- 14 MR. LUSK: And, in fact, I'll reiterate it.
- 15 I know we've already talked about it, but you
- 16 participated in the crafting of that special exception
- 17 process?
- 18 MR. BRYNER: Myself personally, no, but
- 19 TEP.
- 20 MR. LUSK: TEP. Yes. As an entity. Thank
- 21 you.
- 22 CHMN STAFFORD: Does that conclude your
- 23 questions?
- MR. LUSK: I think it does.
- 25 CHMN STAFFORD: All right.

- 1 MS. GRABEL: Mr. Chairman, one quick thing.
- 2 Sorry. I know you hate this. The Committee did ask
- 3 yesterday for information regarding the amounts that TEP
- 4 has paid the City in franchise fees over the past few
- 5 years, and we do have that information available for you.
- 6 CHMN STAFFORD: All right. Please provide
- 7 that. Is it coming from Mr. Bryner?
- 8 MS. GRABEL: I think it's coming from
- 9 Mr. Lindsey.
- 10 CHMN STAFFORD: Mr. Lindsey. Okay.
- 11 MS. GRABEL: This is actually both the
- 12 franchise fee and payments of utility taxes.
- 13 CHMN STAFFORD: Okay.
- 14 MR. LINDSEY: So Chairman Stafford, walking
- 15 through these numbers for 2022, the utility tax -- are we
- 16 giving specifics?
- 17 MS. GRABEL: Yes.
- 18 MR. LINDSEY: \$13,912,586.65. Did I get
- 19 that right? Okay.
- The Tucson franchise, it's not the same but
- 21 it's close. So \$13,947,374.84.
- 22 CHMN STAFFORD: So all told, approximately
- 23 27, 28 million. Closer to 28 million.
- MR. LINDSEY: Yes, sir.
- 25 CHMN STAFFORD: That's me doing math in my

- 1 head, so that's some significant rounding going on.
- MR. LINDSEY: Mr. Chairman, you're there.
- 3 CHMN STAFFORD: Okay.
- 4 MR. LINDSEY: So we've got '21 as well if
- 5 you'd like it.
- 6 MS. GRABEL: We have '20 through year to
- 7 date.
- 8 CHMN STAFFORD: Okay. What was -- you just
- 9 gave '20 before?
- 10 MR. LINDSEY: That was 2022.
- 11 CHMN STAFFORD: Okay. And that's the most
- 12 recent year?
- 13 MR. LINDSEY: We -- most recent full year
- 14 is last year, so I do have 2023. But Mr. Bakken
- 15 testified to the approximates, which are pretty well spot
- 16 on at 15 million apiece. So 15 million for utility tax
- 17 and another 15 for Tucson franchise.
- 18 CHMN STAFFORD: About 30 million last year.
- 19 MR. LINDSEY: Correct.
- 20 CHMN STAFFORD: 28 the prior year. And
- 21 then --
- 22 MR. LINDSEY: I'll give -- Mr. Chair, I'll
- 23 give you a general for '21. So we're right around 13
- 24 million for both. So 26 million total for '21.
- MS. GRABEL: And how about for 2020? I'm

- 1 sorry, not 2020. '24 year to date.
- 2 MR. LINDSEY: Okay. So I've got '24 year
- 3 to date, we are -- which ones are we going with, Clark --
- 4 okay.
- 5 So the tax is roughly 5.6 million. And the
- 6 franchise is roughly 3.3 million. And we're calling this
- 7 year to date, but I know there's a difference. The
- 8 reason these numbers aren't spot on like -- or very
- 9 similar, like previous years is we collect or we're
- 10 reporting in the spreadsheet taxes on a monthly basis.
- 11 And franchise fee, we've got a collection
- 12 that's identified in March. So if we were to -- this
- 13 only gets us through May of the year, so if we were to
- 14 look at this in another month and had updated data, I
- 15 would assume they're tracking similar to previous years.
- 16 CHMN STAFFORD: Right. Because, again,
- 17 math is not my specialty, but just ballparking, if you
- 18 paid 30 million the previous year I'd expect you to be
- 19 about 7 and a half million deep on each of them in July
- 20 of this year.
- 21 MR. LINDSEY: I would agree and we only
- 22 have data through May --
- 23 CHMN STAFFORD: Okay.
- MR. LINDSEY: -- of this year.
- 25 CHMN STAFFORD: All right. I think

- 1 that's -- whose question was that? From the Committee?
- 2 MEMBER HILL: I have a different question
- 3 but I did not ask that question.
- 4 CHMN STAFFORD: And that money goes to the
- 5 City to spend as they see fit. They may have some
- 6 restrictions on how they do it, but that's moneys paid to
- 7 the City that it uses for what it decides to.
- 8 MEMBER HILL: I was going to ask a question
- 9 along the lines, Ms. Hill indicated that the TEP doesn't
- 10 take issue, but she wasn't under oath so I was going to
- 11 ask the panel.
- 12 Do you take issue with how the City spends
- 13 those franchise fees around public services, public
- 14 safety, those kinds of things? Like that's -- the TEP
- 15 doesn't have an issue with how those are expended?
- 16 MR. LINDSEY: Member Hill, I believe
- 17 Mr. Bakken spoke to that very briefly. I would defer to
- 18 his testimony especially since he's my boss. But, yes, I
- 19 agree with you, we do not take issue.
- 20 MEMBER HILL: Thank you. I only ask the
- 21 question because Ms. Hill had mentioned the position of
- 22 the City but wasn't under oath, so.
- 23 CHMN STAFFORD: All right. Mr. Dempsey.
- MR. DEMPSEY: Yes, I have a couple of
- 25 questions. Mr. Lindsey, I just want to clean a few

- 1 things up here, things that are confusing me.
- 2 Mr. Robinson -- is that right?
- 3 Mr. Robinson. I -- you testified just I guess a couple
- 4 of hours ago now about distribution being only
- 5 one-inch-wide -- or one-foot-wide trench. I don't
- 6 remember him saying anything that small.
- 7 These are my notes, I apologize, but I have
- 8 here minimum width is two feet and the minimum depth is
- 9 42 inches. Was he incorrect?
- 10 MR. LINDSEY: So Mr. Dempsey, I pulled
- 11 information from our service requirements for single
- 12 six-inch conduit installation.
- 13 So that would be one foot width minimum,
- 14 48 inches bottom of trench. So I don't think that's very
- 15 inconsistent with what Mr. Robinson mentioned. I
- 16 believe, I'm going back in memory here, he was talking
- 17 about typically we're looking to put spare conduits in
- 18 when we can. That's going to expand the trench. And top
- 19 of conduit minimum would be 42 inches. That's the
- 20 six-inch difference between 48 and 42, so I think we're
- 21 very similar.
- I was attempting to compare minimums to
- 23 minimums.
- MR. DEMPSEY: Okay. So does the same
- 25 reference material you were just looking at say what the

- 1 width is for? Because it sounded to me, like
- 2 Mr. Robinson said, you'd put in two, it's not going to be
- 3 one. It's going to be two. Is that -- and he also
- 4 mentioned concrete backfill, so I guess you're -- there's
- 5 another standard that you're not mentioning.
- 6 MR. LINDSEY: So real -- Mr. Dempsey, what
- 7 I was speaking to was a minimum-to-minimum comparison.
- 8 What we show here in our service requirement 215 are
- 9 those figures.
- 10 MR. DEMPSEY: So what -- could you tell me
- 11 what it says for the maximum?
- 12 MR. LINDSEY: There's no reference to
- 13 maximum on the trench.
- 14 MR. DEMPSEY: Is this public record?
- MR. LINDSEY: Yes, sir.
- 16 CHMN STAFFORD: What exhibit are we talking
- 17 about?
- 18 MR. LINDSEY: I don't -- Mr. Chair, I don't
- 19 believe this is an exhibit. It's just a reference to an
- 20 online service requirements for TEP.
- 21 CHMN STAFFORD: Oh, okay.
- MR. DEMPSEY: Okay. So, all right, so it's
- 23 the minimum, there's a maximum, there's potentially
- 24 concrete backfill, there's wider trench, deeper trench,
- 25 potentially if there's lots of communication lines; is

- 1 that correct?
- MR. LINDSEY: Yes, I would agree with that.
- MR. DEMPSEY: Okay. Thanks.
- 4 MEMBER KRYDER: Mr. Chairman.
- 5 CHMN STAFFORD: Yes, Member Kryder.
- 6 MEMBER KRYDER: Having worked many, many
- 7 years ago in some trenching, there's also the trench box
- 8 that is necessary and I think that's part of what
- 9 Mr. Robinson spoke to the other day. That there was a
- 10 one-foot-wide trench that has to be used, but then a
- 11 trench box that sits inside of it to keep cave-ins and
- 12 safety and such as that.
- 13 I certainly don't mean to change the
- 14 testimony here at all. But it's something I believe that
- 15 the Committee might want to remember.
- 16 MR. DEMPSEY: Thanks. I guess this is for
- 17 Mr. Jocham, or any of you can answer. It's -- and this
- 18 may have been stated and I apologize if I just missed it,
- 19 it just made me think of it. Will the overhead line have
- 20 two cables per phase?
- 21 MR. JOCHAM: I know the answer but I'll
- 22 have TEP answer because I was not involved in the
- 23 overhead.
- MR. BRYNER: I've just got to say this
- 25 because I want to. So we build overhead and that's all

- 1 we do. So we're the experts at the overhead.
- But -- so the overhead line will be one
- 3 cable, one -- one conductor per phase, we call it
- 4 conductor --
- 5 MR. DEMPSEY: Right. Right.
- 6 MR. BRYNER: -- versus cable underground.
- 7 MR. DEMPSEY: Now, even if you have to go
- 8 underneath, jack and bore?
- 9 MR. JOCHAM: Even if you would have a
- 10 trenchless installation --
- 11 MR. DEMPSEY: Right.
- 12 MR. JOCHAM: -- so if you have to go
- 13 underground it would still have to be two cables per
- 14 phase for the underground.
- 15 MR. DEMPSEY: So then you just go two to
- 16 one at the riser or whatever?
- 17 MR. JOCHAM: You marry the cables at the
- 18 riser; correct.
- 19 MR. DEMPSEY: All right. Thank you. All
- 20 right. So Mr. Lindsey, I want to -- I wasn't here under
- 21 all the testimony so I just want to be clear here. You
- 22 said if this project is not done by 2027 it is another 10
- 23 million, if it's not done by 2030 it is another
- 24 \$50 million or so. Is that what I heard?
- 25 MR. LINDSEY: Roughly, Mr. Dempsey. So as

- 1 we spoke last week and again today, we are approximating
- 2 9.6 million post-'27. And when we talk post-2030 that's
- 3 where the 50-plus million comes in. Just know -- yeah,
- 4 that's the 50 for us to look at upgrades to the
- 5 existing --
- 6 MR. DEMPSEY: So it's fair to say that if
- 7 this fight -- if there's a legal fight past 2030 it's
- 8 going to cost \$60 million to TEP and ratepayers?
- 9 If this project's not done, I mean to say
- 10 if this project is not done by 2030, it's going to cost
- 11 \$60 million to ratepayers?
- 12 MR. LINDSEY: So if this project's never
- 13 built, that's the scope of cost we're looking at, yes.
- 14 So specifically when the 50-plus million spend is
- 15 anticipated, we have not looked at it in that detail.
- 16 It's post-2030.
- 17 MR. DEMPSEY: Okay. So \$50 million
- 18 post-2030, not right at 2030?
- 19 MR. LINDSEY: Correct.
- 20 MR. DEMPSEY: Okay. So it could be maybe
- 21 less than that or --
- MR. LINDSEY: I wouldn't anticipate that
- 23 before 2030.
- MR. DEMPSEY: Okay. Thank you.
- 25 CHMN STAFFORD: I got to think you'd have

- 1 the try to file this application again between now and
- 2 then, I mean, this is this second time, second run at
- 3 this one so I think you'd have to, you know, third time
- 4 be the charm; right?
- 5 MR. LINDSEY: Mr. Chairman, we do not want
- 6 to spend that 30 million on the old system. So we would,
- 7 if it doesn't get approved, yeah, that is not our wish.
- 8 We want to build this project. We put a
- 9 tremendous amount of effort. We see so much value for
- 10 the community here. We want to build this thing.
- 11 MR. DEMPSEY: And we want you to. We just
- 12 want you to build it a different way. But that's -- so
- 13 the last question. I don't know if -- who to direct this
- 14 question at, but in reviewing the revised CEC you did not
- 15 insert a condition about undergrounding distribution
- 16 lines. Is that forthcoming?
- 17 MS. GRABEL: Mr. Chairman, so we have not
- 18 asserted a condition about undergrounding, but that's
- 19 certainly a commitment of this project, and if the
- 20 Committee wanted to insert that as a condition, we
- 21 wouldn't object.
- MR. DEMPSEY: Well --
- 23 CHMN STAFFORD: It very well -- if they
- 24 file what they file, and they're not going to file it
- 25 between now and the time they give their closing, but I

- 1 do have a note about the conditions they listed on one of
- 2 the specific slides.
- 3 And I can assure you that's something that
- 4 the Committee will have a discussion of when we discuss
- 5 conditions.
- 6 MS. GRABEL: And actually, Chairman
- 7 Stafford, now that I'm thinking about it, in the finding
- 8 of facts that we've asked you to consider, we do include
- 9 a finding of fact about the net reduction in utility
- 10 poles that will result from this project. So a net
- 11 reduction of 32, and so that would by implication commit
- 12 TEP to, you know, undergrounding the existing
- 13 distribution infrastructure.
- 14 MR. DEMPSEY: Would you object to having a
- 15 condition on undergrounding distribution lines?
- MS. GRABEL: No.
- 17 MR. DEMPSEY: In a CEC. No?
- 18 MS. GRABEL: No.
- 19 MR. DEMPSEY: Thank you. That's it.
- 20 MEMBER KRYDER: And Ms. Grabel, just for
- 21 confirmation, that was over the next ten years following
- 22 the project, not in the immediate; correct?
- 23 MS. GRABEL: A portion of it will happen in
- 24 the immediate future, and then the second will be as the
- 25 rest of the system is retired.

- 1 CHMN STAFFORD: All right. Does that
- 2 conclude your questions? Ms. Grabel, Ms. Hill, any
- 3 reredirect here? Because I think we're --
- 4 MS. GRABEL: I think we're tired.
- 5 CHMN STAFFORD: Yeah, I think so, too. I
- 6 think we're -- I don't think we're going to begin with
- 7 closings today. I think it's a good place to pick up
- 8 tomorrow morning. What is the anticipated duration of
- 9 your closing, Ms. Grabel?
- 10 MS. GRABEL: I would say roughly 25 minutes
- 11 at max.
- 12 CHMN STAFFORD: Oh, okay. I was expecting
- 13 30 to 60 minutes. But, yeah, okay, that's even better.
- Ms. De Blasi, same question.
- 15 MS. DE BLASI: I anticipate about maybe
- 16 10 minutes.
- 17 CHMN STAFFORD: Okay. Mr. Lusk?
- 18 MR. LUSK: About 20.
- 19 CHMN STAFFORD: And Mr. Dempsey.
- 20 MR. DEMPSEY: Just -- I would say just over
- 21 three hours. I would say 10 to 15 minutes.
- 22 CHMN STAFFORD: Okay. Thank you. All
- 23 right. Well, that will be it for today, and we will be
- 24 back in the morning at nine, and we'll start with closing
- 25 arguments from the applicant. I guess we'll -- in the

- 1 morning if we realize there's any preliminary issues to
- 2 address or resolve prior to the commencement of closing
- 3 arguments, we'll deal with that. I don't anticipate any
- 4 right now. But tomorrow's a new day, and we may wake to
- 5 find circumstances that we had not anticipated today so
- 6 with that.
- 7 MR. LUSK: Mr. Chairman, just real quickly.
- 8 CHMN STAFFORD: Oh, wow, that was close,
- 9 Mr. Lusk.
- 10 MR. LUSK: You were very close. We'll have
- 11 the opportunity to file proposed CECs tomorrow morning as
- 12 well?
- 13 CHMN STAFFORD: Yes, because we haven't
- 14 started closing yet.
- 15 MR. LUSK: That's what I figured.
- 16 CHMN STAFFORD: I think if the City had --
- 17 you don't have to do an entire CEC, if you had -- you
- 18 could come with exhibits for proposed conditions that you
- 19 would like to see or amendments to what the applicant has
- 20 proposed, so you don't have to come in with a -- I don't
- 21 know, how many page document is the CEC now, Ms. Grabel?
- 22 MS. GRABEL: Oh, I don't know. It's long.
- 23 CHMN STAFFORD: Yeah. You don't need to
- 24 produce the whole thing. You can just -- if you have
- 25 specific language you would like to see adopted as part

- 1 of it, and potentially where you'd want to see it
- 2 inserted or where you would like to see it replaced, you
- 3 can bring, and that goes to the other parties as well,
- 4 Ms. De Blasi, Mr. Dempsey.
- 5 Oh, yeah, Mr. Dempsey, your hard copies of
- 6 exhibits, have I gotten them all yet? I see one binder.
- 7 MR. DEMPSEY: You have them except for the
- 8 slides which I'm going to print tonight that had the
- 9 extra slide. I'll add them.
- 10 CHMN STAFFORD: The binder I have is 31 to
- 11 62.
- 12 MR. DEMPSEY: I have the other one over
- 13 here.
- 14 CHMN STAFFORD: Okay. All right. Thank
- 15 you.
- 16 With that, we stand in recess until nine
- 17 a.m. tomorrow.
- 18 (Proceedings recessed at 4:51 p.m.)
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- 25

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